THE

ELEMENTS

OF

THE SCIENCE OF MONEY,

FOUNDED ON

Principles

OF

THE LAW OF NATURE.

BY JOHN PRINCE SMITH, Esq.
OF GRAY'S INN, BARRISTER AT LAW.

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TO

THE MOST NOBLE

HENRY, MARQUISS OF LANSDOWNE,

&c. &c.

My Lord,

The name of Petty stands foremost amongst the fathers of the Science of political economy, and your Lordship is by descent, as it were, a patron of financial knowledge. In your own character you have displayed an attention to these and other subjects of state importance, which adds dignity to your rank, and renders your career a source of public utility. It is to noblemen such as your Lordship, who combine eloquence, talents, virtue, and patriotism, with the independence of high birth and fortune, that the nation must turn in all the most difficult states of pub-

lic emergency. Permit me, therefore, to dedicate to you, as an humble token of my respect, a work which, whatever may be the defects of its execution, is the result of much labour and a studious desire to render my own life useful in some degree, however small, to the country to which I belong.

I have the honour to be

Your Lordship's most humble Servant,

JOHN PRINCE SMITH.

No. 24, Chancery-lane,
Nov. 1st, 1812.

PREFACE.

THREE powers may be said to rule the world: money, arts, and arms; or wealth, knowledge, and force.

It ought not, therefore, to excite surprize that the circumstances of the present time have occasioned extensive inquiry and various opinion. A nation, populous, mighty in arms, rich in commerce, profound in science, skilful in arts, is arrived at a new era in political economy. Burthened with debt and taxation, it is absolutely without money. Its debts are estimated at more than eight hundred millions,* the average revenue is 63,763,746; the annual loans are 12,673,548, and the total expenditure 82,205,066, taking the estimate of the year 1811; while the income tax, upon the private revenue of all persons having 60l. a year, amounts to

* The sum paid, as it is called, by the operation of the sinking fund is here neglected. It amounts to 240,000,000l.

11,000,000l. and the total of such revenue to about 110,000,000l. Yet is all this revenue and expenditure managed with much facility. The different amounts are settled by the exchange of certain pieces of paper, with a quantity of dollar-tokens, and bad shillings from which every stamp of authority is effaced.

This is a phenomenon that cannot fail to impress a thoughtful mind with astonishment; and it has justly afforded matter of argument to pamphlets innumerable. A committee of the House of Commons has investigated the subject, and pronounced a judgment which has been overruled by an opinion declared by the whole house. By some it is pronounced that money *in specie* is necessary to the existence of the state; by others that it is an incumbrance; that paper, being cheaper is more useful, facilitates commerce better, and gives stronger and broader wings to trade. Amidst a general discordancy of opinion, there is, however, a general sense of alarm; and the most powerful antagonists of the money system, who are the principal leaders in the House of Commons, profess to think that the paper is but a temporary supply.

To collect the truth, if possible, from the jarring discord of party, it should seem, that the sense of value, as it has been called, would preponderate in favour of gold: but, that the sense of danger far outweighs it, and makes the supporters of ministry, the bank, and all those who are concerned in trade, together with the timid who dread confusion and love repose, unanimous in upholding that system of public and private credit, which is the basis of paper money.

CREDIT, said the apostle of revolution, the celebrated *Paine*, is suspicion asleep. Paper credit, he might now say, is maintained at its highest point by the awakening of terror. Never was the alarm against paper more violent, never was its circulation more extensive or more increasing. It is fear only which now gives a currency to paper so universal that, at its lowest estimate, it will be impossible to convert it into coin at its true standard, and, therefore, impossible to pay it, in any legitimate sense. It is fear alone which will sustain it, till the hour when its evils shall so outweigh its benefits, that the whole nation will cry aloud for its destruction.

How near or how distant may be that period,

it is not for any one to pronounce; but it seems a reasonable opinion, that there are certain elements in the composition of public credit which must finally lead to its overthrow. And that nations, having for above a century involved themselves in debt, will, like individuals, find the burthen insupportable and endeavour to shake it off.

Hume pronounced, that either the nation must destroy public credit, or public credit must destroy the nation. By nation, he understands, of course, the state; since the only means of destroying a people are by the mortality of war and desolation, by plague, pestilence, and famine: and we have seen one nation of Europe rise like *Antæus*, as a giant refreshed, from having fallen with the ruin of her finances.

We have seen *France* stripped of all her gold, unsheath the sword of conquest, bring wealth in abundance to her treasury, by the plunder of surrounding states, and maintain a circulation of coin, unparalleled in purity and extent by any of her neighbours. Whether a similar fate is reserved for England no one can venture to surmise. But there are many amongst us, who look to a national bankruptcy as to a state of regeneration: as the

era from which to date a new career of glory and of grandeur to the British name and the British constitution.

By others, however, it is thought that the discovery of the sinking fund is like a new power in mechanics, and will enable the state to roll on, with the everlasting course of the planetary system, through a splendid zodiac of debt and taxation, revenue and expenditure, bank notes, and exchequer bills, annual loans and quarterly accumulations of interest, repurchases of old debts, and immediate integrations of new ones. To such visionaries the bank and the tax office appear the sources of political light and vitality, as necessary to the preservation of liberty and commerce, as the sun and moon to the ruling of the day and night.

A friend to truth and to his country may, however, be permitted to stand between these antagonists in opinion, and holding that debt cannot be perpetual, pronounce, that, while he fears the sinking fund will be discovered, in the end, to have more of deception in it than is generally supposed, yet there are terrors in a national bankruptcy, which may well give us pause,

before we declare an act of insolvency to deliver the state from its present enthralment.

An impartial observer may speak his opinions, or rather confess his fears explicitly. Of the two parties in the House of Commons, one has pronounced, that the state is in danger from the extension of paper credit. That it is absolutely necessary to restore coin into circulation, and for this purpose, to compel the bank of England to pay all its notes within two years. While the opposite side agree in the necessity of restoring the currency of coin, but declare that the time is not arrived at which it can be effected. The latter enumerate the various *items* of taxation, revenue and expenditure, and the amount of bank notes, omitting to notice those of country bankers; and declare, that it is quite impossible to support the circulation requisite for these purposes with a smaller number of notes. They propose, therefore, to delay the time of payment till the arrival of peace; when the bank of England will, by the present statute law of the realm, be compelled to pay all its notes on demand, after six months from the signing of a definitive treaty.

To this opinion the House of Com-

mons have subscribed their assent, by passing the resolutions moved by Mr. *Vansittart*; and, by no means agreeing with any of the doctrines there insinuated rather than expressed, the author cannot but concur in the conclusion, nearly upon the principles expressed in two admirable speeches delivered by the Right Honourable *George Canning*.

That accomplished orator, in language most forcible, and with eloquence most convincing, has pronounced, what the author thinks to be the real sense of the majority both in and out of the House of Commons; namely, that the times will not admit of immediate payment by the bank; but, that it is the duty of the legislature, while it departs from the true system of money and coin so necessary to all states, to declare expressly the cause of the departure, and its intention to return, when the necessity shall cease or the opportunity of return occur; and to pronounce also, that it will adopt the speediest means to remove the necessity and to seize the opportunity.

When and how these are to arrive, it is of immediate importance to enquire.

Mr. *Horner*, (no mean authority) and his associates of the committee, whose talents are as conspicuous as their patriotism is undoubted, are of opinion that in two years the means may be prepared for opening the bank. Mr. *Vansittart* and the majority declare, that it cannot be expected till six months after a treaty of peace. Mr. *Randle Jackson*, in the name of the bank proprietors, but probably without any delegation of authority, declares that if Government would pay its debt to the bank, the bank would pay all its debts to the public instantly.

Allow them two months or three, and it may be conceded to Mr. *Jackson* that the bank may pay every note outstanding in guineas.

Mr. *Huskisson* indeed says that, the debt meant is the original capital, which having been advanced on loan to the state, at 3l. per cent. interest during the existence of the charter, cannot now be repaid, and on account of that debt the bank can claim no aid from government. Notwithstanding which, it still seems obvious, that the bank might accede to the challenge, and faithfully redeem its pledge, in the strictest terms. Yet would not

the state of the country be in the smallest degree improved by it.

The actual money in circulation is always equal to the demand for money: the demand for money is affected by the state of prices and the number of exchanges: the state of prices is, at all times, raised to a height below which it cannot easily subside, without affecting the revenue: and the demand for money is increased by demand for the payment of revenue, of loans, and of state expenditure.

On the arrival of peace, the demand for payments on revenue will in some measure increase; but the extraordinary expenditure of government will be diminished. Prices, however, will not immediately subside, probably they will keep rising; and the increased demands for new speculations in commerce will either equal the demand of money for the extraordinary expenditure of the state, or trade must decay and revenue fail. The currency requisite in the first twelve months of peace will, therefore, not fall short of that which is requisite at present.

Unless the whole tendency of Mr. *Vansittart's*

Resolutions is now misunderstood, it may be collected from them, that the reason why the bank notes are not deemed excessive is, because it is thought they are necessary to support a currency equal to the demand in the above items; and bank notes cannot be paid till that currency is reduced. But, if the above principles are just, and they appear to be admitted by Mr. *Vansittart*, to be denied by no one, and to be absolutely indisputable, peace will afford no opportunity for the reduction of currency; and, of course, no relief to the bank in the payment of its notes. The nature of the demand for currency on a peace, will be changed, therefore, but not its extent.

Bank notes are issued in advances to government, and to the merchants. The advances to government will be diminished, and the notes to an equal amount destroyed. Either prices and revenue must then fall, or the vacuity be filled up with new bank notes, country bank notes, or guineas.

But it is easy to see, that the supply will be formed by the increase of country bank notes, or a larger issue by the bank in discounts; and, precisely in the same degree that the bank diminishes its issues on discount, will the country

bankers increase their issue of notes: unless, taking alarm at the threatened opening of the bank, and fearing a run upon them, they also shall think proper, as in prudence they will, to withhold their discounts, and restrain their issues.

If the bank prepares to pay, it will previously ascertain the quantity of coin and bullion in its coffers; it will anticipate a run, to be occasioned merely by the desire of the country bankers to pay all their notes in specie; and a run, or extraordinary demand for guineas, will, of course, take place. But the bank will assuredly pay all its notes in guineas, rather than again break its faith with the public. To effect this payment it has only to reduce its discounts daily, and in two months its outstanding notes may not exceed 500,000*l*. But till the alarm is over, it will be cautious of re-issuing its notes: and, guineas being in circulation, an equal demand will arise against the country bankers, who must proceed exactly as the bank did. They must calculate how many bank notes they possess capable of being converted into coin, at the Bank of England, and proportion their issues exactly to this amount: for, in the general alarm, nothing but guineas, or bank notes convertible into guineas, will assist them.

And by a similar process their issues may be reduced to any assignable limit. This restraint upon discounts, however, will diminish currency; and, upon every principle of the true science of money, cause prices to fall rapidly.

In the mean time, how is the currency to be supplied? How is the revenue to be raised? How is bullion to be procured to be coined into guineas at the original standard?

To the author, to all who shall be impressed with the facts and principles stated in this work, and to all who will fairly explain the nature of currency and demand, prices and taxation, it must appear impossible.

Either, therefore, paper must be continued in use, or prices and revenue fall and demand for currency be diminished, or the restoration of the coin at its present standard is impossible, without great distress, whenever the Bank shall be re-opened for the payment in specie. Whether that shall take place in six months, or not till six years, before, or after the restoration of peace, the difficulty will remain: neither would any change of ministry, new form of government, increase of territory, or acquisition of conquest, except the importation of treasure gained in war,

by the state, and delivered to the bank in payment of its debts, facilitate the payment and conversion into specie of the now existing paper currency.

But the state is pledged, and the law enacts, that in six months after the restoration of peace, the bank shall pay its notes in coin of the old standard value, according to its repeated promises.

The bank will be ready to keep its faith: but, will the state and the people suffer it; is a question now proposed for the most serious consideration of all who have influence or voices in parliament; and who regard the state and the revenue as worthy of preservation.

A long and serious reflection on this subject has produced complete conviction in the mind of the author, founded upon arguments which it is not necessary now to detail, because they are clearly deducible from the following pages, that, on the restoration of coin at its present standard, the fall of paper and of the revenue of the state, will be the certain result of adherence to the bank restriction act; which requires that payment shall be made in coin at six months after the restoration of peace.

What alteration of the standard will enable us to restore coin, it is impossible to anticipate; but the destruction of the standard will of course be a change of value, and the demand for bullion and its influx, will be attended with distress to trade and to the creditors of the state, which no one can venture to depict.

In this difficulty should the destruction of the funds be decreed in any proportion, or altogether, as is predicted by *Hume*, and most calmly, not to say with utter contempt of consequences, anticipated by *Cobbett*, and many of the writers in the *Political Register*; what can save the state from destruction, and that absolute chaos of anarchy which convulsed all *France*, during the turbulent periods of the Revolution!!

To the needy and the daring this may afford a prospect of felicitous adventure; but what a scene does it open to the fears of those, whose families depend for support upon the public funds! And who is there without friends or relations, parents, aged widows, and helpless orphans,* who by the fall of funded property,

* The property in the hands of the receiver-general of the court of Chancery, chiefly in settlements, amounts to nearly 27,000,000*l.*; this is all vested in the public funds.

must be driven upon the world, abject and forlorn, helpless and without bread!

The income from funded property is one-fifth of the whole taxable income of the country; that is, of all persons not living upon manual labour, and earning more than 60*l.* a-year. One-fifth of the people, of the middle class, must therefore be ruined by the destruction of the funding system; and the number of these may be about one-twentieth part of the population.

If other causes were wanting at any time for the destruction of a state, the instantaneous reduction of one-fifth of its most useful, most virtuous, and most intelligent subjects to ill-persuasive penury and want,* would tend to produce a revolution the most violent and destructive.

* Many views have been given of the predisposing causes to tumult during the French revolution; but is it not sufficient to account for the madness of partizans, the fury of democratic violence, and all the horrors of the reign of terror; that by the fall of the finances, and of the assignats, men well educated, bred to luxury, subtle of contrivance, and daring in adventure, were reduced on a sudden to want and desperation.

Tranquillity was never restored to France till the Emperor

In such an emergency, how to provide for the evil, and prevent it, is amongst the first enquiries that a mind possessed with feeling, or with patriotism, will institute. Accordingly, the author has patiently investigated the means of the state; and imagines, that he has discovered the true and only remedy; and that its application is just, speedy, and secure. It consists simply

Napoleon regulated the finances, and secured to his subjects the due payment of the interest on the remnant of the national funds.

Had the ministers of Louis the XVIth known how to meet the difficulties of the state by proper regulations of finance, the furious storms of the revolution might have been avoided, and a complete reform have saved the throne of France to the family of the Bourbons.

Individuals may be ruined by insolvency; but he who can command the resources of a whole nation, is weak and ignorant, if he cannot provide for the security of the state, while he new-models her revenue and expenditure. It is one of the objects of this work to examine in what consists the true power of a nation, and how best to provide for the regular supply of the funds, which administered with economy and wisdom, may contribute to its preservation, to its happiness and its glory.

In this inquiry an endeavour is made to avoid all consideration of the form of government. The power of the state must be vested somewhere, and where that power is, there are the means of wealth.

in the equitable division of the land and property of the nation among its present possessors and the mortgagees or public creditors. A measure of the facility of which he entertains no doubt

It may be said, that these apprehensions are vain; that the failure of revenue, and the fall of the paper system, and the state is a chimera which will have no existence in reality.

Be it so, and let him be censured for his vain fears! But still, if the event be only possible, there is no danger in preparing, prospectively, a remedy; and it is well to have an insurance, and an escape, though a fire should never happen.

But is it so certain that the paper system must endure for ever? Are those who are most strenuous in its praise, most confident in their hopes; and is not some latent fear to be descried amidst all their clamorous boasting?

If paper is wholly good, why not establish it wholly, and let it pass current unmixed with baser metal. If it is desirable for its excellence, why not perpetuate the bank restriction, and

destroy the establishment at the Mint, which is become a sinecure of 16,000l. * a-year, while the establishment at the Bank supplies us with so large a sum as 20 millions, at the trifling expence of 1,000,000l. for interest and 500,000l. for management, annually.

Be the event distant or near, probable or improbable, the contemplation of it is at least natural; and it has led to the composition of the present work; for which the author offers an apology to his profession as well as his friends. For he is well aware that the study of such subjects is deemed wholly derogatory to the interest of those whose dependence is upon professional support.

It was hardly possible to be insensible to the clamour raised on all sides by the report of the Bullion Committee, or to the difficulty experienced by the people for want of change. In common with others, he read the pamphlets; and found that the subject was in general very little understood, for want of elementary knowledge; and ill discussed for want of examining it systematically; that the speculations of most

* It appears we have paid 200,000l. for the establishment of the Mint, since the Bank has stopped payment, and the Mint ceased to coin money.

writers were founded upon imperfect data, and almost a total disregard of the extent of the paper system; which owes its increase to the absolute freedom which has been given to paper credit.

It is this which has distributed paper money so universally, and which has effected for the pound notes of *England*, what no force could do for the *assignats* of *France*, or the paper money of any other country. But at the same time, it has only increased the evil, and rendered a paper system less advantageous to the government, than if all the notes were issued upon the security of the state.

It is shewn hereafter, see *Elements*, Book II. Chap. V., how paper has wrested from the state the power over the standard of currency, and placed the sceptre and the royal authority as to money almost entirely in the hands of the bank corporation, and the scattered body of private bankers. And whether power so delegated and dispersed, is justly committed to them, will be seen also by the perusal of these Elements of the Science of Money.

In compiling this book the author has raised his views above the present times, and avoided allusions to temporary matter, except when absolutely necessary to the present subject. He has dis-

cussed it fully, patiently, and without party-spirit. Would those who hold that a paper system in currency is necessary to the support of commerce and the prosperity of states, attempt the same thing, instead of declaiming in general terms, they would either reason themselves out of their mistakes, or establish their doctrines upon a sure and irrefragable basis: they would be either intelligible, or palpably inconsistent.

In this work will be found the substance of numerous pamphlets; and much apparent learning might have been displayed by the citation of many authorities of nobler size. One advantage of a general treatise is, that it avoids party strife and personal censure; but on this occasion there is no immediate cause for violent abuse, and truth will make a progress not the less rapid for the dignity of her demeanour, and the gentleness of her carriage.

As to the present ministers, the error of the paper system does not belong exclusively to them. It is a disease of inheritance derived to the nation by several descents, through every reign of the last century; and ultimately to be traced to the glorious king William and the revolution. It is an error into which the whole nation, together with all the nations of Europe,

have fallen; and like other nations; *Britain* must also work out her salvation with fear and trembling. The hope of our safety is in the course of nature, which in the midst of disease produces the crisis by which it terminates. The principle to which she points in all cases of public distress is plain and visible in the common career of life. When an individual is bankrupt, his effects must be sold to liquidate his debts. When a nation is bankrupt, the lands must be divided to satisfy the lawful creditors, or ruin and anarchy ensue, and violence ultimately divides the spoil.

It has been often said, that the funds are good security, because the faith of the nation is pledged, and the proprietors of stock have a mortgage upon the land; to which it may be added, that, whenever the interest on a mortgaged estate cannot be paid, it is time to foreclose.

It will be proved, accordingly, in these Elements, that the creditors of the state are not duly paid, while the money which they receive is daily and rapidly diminished in value. It will appear also that the claims of all pensioners, all charities, all incumbents of small livings, all curates, and all officers serving by sea and

land, as well as the humble servants of the state, employed in the excise and customs, cry aloud for immediate aid. For these numerous classes of persons are all rapidly descending into absolute poverty, through the effect of the funding system; which is intimately connected with the paper system and which must stand or fall by it.

With a view to public safety, a plan is given by which the funds may be destroyed without injuring the fund-holders, who will, it is expected, by no means, be averse to the conversion of all their funded stock into landed property, and real estate. Neither will the great landed proprietors, it is hoped, refuse to accede to a plan which would leave them also in the same relative rank in society as at present; with the same permanence of heritable property, and an effective revenue, not diminished, but increasing. The Agrarian law here proposed, is not a law of equality, but of equity; not an act for the subversion, but for the preservation of the existing orders in society.

To the Bank directors no apology need be offered for any occasional notice of the nature of their establishment; calculation, and not censure, is the business of this work: and indeed the Bank directors are liable to no censure; they have acted during the whole period since the bank restriction, with great honour and much forbearance.

Under all circumstances, it is probable that had they attended to exchanges, and the price of bullion, as it was their interest formerly to do, they would have ill discharged their duty to the public, and to the merchants of *London*, who would have been compelled to seek in loans from the country bankers, the aid which was refused to them by the Bank directors, or else the *London* merchants must have yielded to the traders of *Bristol*, *Hull*, *Liverpool*, and other outports, in the fair competition of commerce. That the extent of the Bank discounts has, however, encouraged speculation, cannot be denied; but that evil was not to be avoided, without immediate prejudice to trade and the revenue.

In fine, the Bank directors are become persons of the first influence in the state, and their command of wealth by the allowance of discounts to their friends and connexions, is greater than any possessed by the most powerful minister of the most powerful nation. Yet have these gentlemen conducted themselves

with great moderation and decorum. And when the talents of a *Baring* and others, are considered, as they have been displayed upon the very question of the depreciation of money, including, in great part, the paper of the Bank, *London* may proudly boast of the intelligence and integrity of her citizens.

One consideration which will impress the reader of this work most forcibly, and which has not probably been noticed by others, is the moral effect of a money continually and rapidly decreasing in value. It is briefly treated in the following elements; but it might afford matter for volumes of political and moral essays.

"The necessity of the times," is a phrase of constant occurrence, but it has never yet been explained. Necessity is sometimes a salutary principle, and adversity in her milder form is a moral teacher of unrivalled power, who is at once the touchstone of wit, and the spur of industry. Not so, however, when necessity, as in the present period, assumes the form of want, and frowns despair on every labour; not so when every man, haunted by the evil genius of *Sisyphus*, moves forward with unceasing struggles, the wheel of his adverse fortune; and at every expected station of his hope, beholds

it roll back with perverse malignity. Not so, when exhausted labour, instead of tranquillity finds nothing but keen anxious penury in retirement; and when the cares of a parent to place a child in the moderate independence of a permanent estate, prove at last that incessant labour or absolute want must be the lot of all men.

In such times there can be no influence of the middle class, no prevailing sentiment of calm dignity, and refined philosophy: all is contention, struggle, heat, anxiety, desperation, giddy vanity, idle dissipation, and gloomy want.

The state of society has undergone an alarming change; luxury increases amongst all classes; and it is unavoidable in a state of arts and manufactures rapidly progressive. Speculation proceeds with various success, notorious in the splendour of its rise, and forgotten in the obscurity of its fall. Money daily decreases fast in value; the wants of every man increase, as his income grows more unequal to their supply: the poor are driven to despair, the rich are goaded by their necessities. Political corruption and a train of innumerable vices rise in pestilential exhalations from the sordid mixture of pining want, overheated speculation,

and loose extravagance. Whence, if not from these causes, arise the encreasing thirst of lucre, and that devotion to parliamentary influence, which has banished from the country the independence of the lesser gentry! Whence the restlessness of all classes in their actual situation, and the ceaseless desire of change! Whence the decrease of the moral influence of the virtuous, but poor and disregarded clergyman! Whence the cupidity of office! Whence the contempt of all virtuous indifference to the acquisition of money! Whence the repeated failures of so many collectors and distributors of the public revenue; who become peculators and defaulters amidst splendour and with the countenance of the great; when all are obliged to confess, that while their emoluments seem adequate to every fair expence, all settled expence becomes ruinous, without a nominal revenue daily increasing!

The ordinary thirst for money, and its necessary depreciation, will in some degree account for these facts so fully acknowledged. But, add to the temptations of lucre the increasing pressure of the times, occasioned by the daily and rapid decrease of the value of money, a new power of manifold attraction is immediately given to this natural passion, and innumerable victims, who would else escape, are brought within the vortex of its most destructive influence.

Let the virtuous amongst our legislators reflect deeply on this single topic, and discover that these are the infallible effects of a debased currency, which converts apparent wealth into real poverty, and loudly will they demand a reform in this anomalous and unnatural system of money: which may bring us back to settled rates of exchange, and settled habits of economy; and with the uniformity of the coin, and the equality of paper, restore to us the more uniform practice of virtue and moderation.

Amongst other topics of some novelty introduced into this work, are the estimated dangers of the sinking fund; and if this universal panacea of state insolvency, this nostrum of duplicate proportion, be not founded on an erroneous principle, in which the numerical powers of calculation are mistaken for the physical powers of money, let it remain. But if its real theory is of questionable efficacy let it be examined through the medium of the press with adequate caution; let it be discussed with

freedom and philosophy; and, if in the end necessity demands it, * let it be destroyed.

But to innovate or to destroy without examination, is odious and rash; and the minister that shall touch it before the press has prepared the nation for its removal, will risk the contempt of the liberal, and the detestation of a disappointed people.

By the press, then, let the sinking fund, and its operation be previously examined, and let not, as on some recent occasions, disguised and indirect censures be insinuated against the freedom of public inquiry into existing institutions,† and the abuses of ill delegated power;

* The author is not singular in his opinion: the Earl of Lauderdale in his Treatise on the Sources of National Wealth has exposed the erroneous principles of the sinking fund, and shewn the ruinous effects of its operation in setting loose vast sums of money. Although his lordship has not advanced to the full developement of the intricacy and deception of the sinking fund, he justly claims the merit of an early discoverer, in pointing out the fallacy of its basis.

†It has been said that a memorial to the proper authorities, as they are called, that is, the ministers, is the proper vehicle of all plans for reform. Our answer is, that it may be so in Turkey, where reforms are hopeless, but not in England, where the law professes to support a free press.

for it is a right, without which freedom has no security, virtue no honour, baseness no infamy, and truth and science no air or nutriment.

Happy is the author of this work to have been, in any the most humble degree, the advocate of the equal and mutual rights of religious toleration and a free press; and never may it escape the recollection of his fellow Britons, that the press is the safest oracle of public opinion, to inform, to controul, and to direct, even the faithful delegates of a people, truly represented by honest election, in the legislative assembly of the nation; while the free unbiassed opinion of an enlightened, liberal, uncorrupted, unbewildered, and undeluded people, is the true support of free government, the basis of legitimate authority, and the spring and source of all that is pure and illustrious in the dignity of rightful thrones.

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EMENDATIONS AND ADDITIONS.

THE greater part of this work was composed as it went through the press, the author having entirely changed and greatly enlarged his plan after the first sheet was printed. This will account for such defects of style or arrangement as are most obvious. But the materials were previously prepared, and the principles frequently revolved and examined. They constitute the intrinsic merit or demerit of the work, and experience will in due time pronounce upon his theory. He has referred to the law of nature, because the laws of most nations, and of England in particular, concerning money, are built upon unsound principles.

The following passages seem to require alteration to render them explicit and correct.

For Book I. Chap. IV. § 1. p. 38, read as follows:

1. "*A common measure* is a quantity which will measure any two numbers or quantities equally without a remainder. The *unit*, or one of its multiples, is the common measure of all equal numbers, integrals, and fractions; and the *unit* repeatedly applied to unequals ascertains their difference. Hence the *unit* may be called the measure of all numbers."

In the next section No. 2, for '*common measure*' read '*measure.*'

In the same chapter, p. 44, § 23, alter the whole section thus:

23. "A degree is only imaginary when it is used as a generical name or an abstract term, and gives no definite idea. It means the 360th part of any actual circle. A degree in latitude is that space of the earth, taken north and south, which must be passed over to obtain one degree of angular elevation or depression of the pole star, or other fixed point near the pole. This degree of depression or elevation is measured, like all angles, upon any given or definite circle whatsoever. A degree in longitude is the 360th part of the earth's circumference, east and west, in a similar straight line, going directly round the globe; which is most conveniently ascertained by the apparent course of the heavenly bodies. Each of these is an actual portion of the earth's circumference in different directions, at right angles to each other. The circles in the heavens are actually measured by definite quadrants on the earth.

At the end of the same Chapter IV. Book I. make the following additions.

Further Considerations concerning Money as a Measure of Value.

28. In considering money as a measure of value we have noticed its uniform and invariable quality, pure gold and silver being identically of the same nature in all times and places, absolutely unchangeable and indestructible. It is even said that great part of the gold and silver used by the patriarchs

before *Abraham*, is supposed still to exist. But there is a further quality of the precious metals, which renders them of all articles the best adapted for a measure of value of any other in nature: this is, the facility with which they are transported from place to place, and the little cost of their transit compared with their value.

29. All dealers frequent the cheapest market, and the difference in the real price of all commodities at different places, is governed by the difficulty or facility of transporting them from market to market. Thus iron being a bulky commodity, and of low price, will not bear the carriage from a distant country, unless the difference in the price will allow a profit after deducting a great expence of carriage. A ton of iron would bear a very small proportion in value to a ton of gold; yet the ton of gold would be conveyed from India to England with much greater facility. A hundred head of cattle in South America, would be of small value compared with the like number in Smithfield market; but the difficulty and expence of carriage would be so great, as to exceed the difference in price; and they are never therefore brought to this country, notwithstanding the great demand for cattle in the one place, and the comparative cheapness in the other.

30. If there were a perfect facility of transit from all the markets in the world to every other market; if the cost of conveyance were either reduced to nothing, or very small compared to the value of the commodity; and if there were the utmost conceivable rapidity in shifting the goods from market to market, there would be very little, if any, difference in the price of similar commodities in the various nations of the world. For setting aside the expence of carriage, risk, and loss of time, from the going to any particular market, all markets would be alike, or as one market; and, all the

world being competitors, buyers, or sellers in that universal market, prices would be alike, at any given time, throughout the world, for the same reason that the price of any one article, of uniform quality, is, at any given time, equal throughout any given market.

31. It is the peculiar excellence of the precious metals to possess almost in perfection, this quality of being in every market, nearly at the same time. This they derive from their universal demand, their uniform quality, great divisibility, ready transit, and small comparative cost of conveyance. The latter, indeed, by the practice of foreign exchange, and the other arts of banking, is rendered almost a nullity, and the ubiquity of the universal market for the precious metals, is so complete, that it is inconceivable what a small variation between the price of one of the precious metals, as compared with the other, will cause it to be attracted from the place where it is, for a time, cheap, to the other markets where it is a little dearer. It is exemplified in the facility with which money, notwithstanding many absurd restrictions, finds its way from *New Spain* immediately to every other commercial mart in the world.

32. In this sense, the course of foreign exchange is the bullion market, which keeps a very regular supply all over the world, and may be said to give to the mass of money existing in it, a sort of omnipresence, as to market, which constitutes it, in a general sense, the commodity, by way of excellence, above all others; renders it nearly a complete standard of comparative value for different nations, at any given time; and the best measure of value that can be devised. It owes this character to its natural qualities; which, as they are independent of all accidental circumstances, neither to be given nor taken away by the art or power of man, and to be controuled only in part by the violence of state authority, warring against the consent and interest of all mankind; so, by the common sense of all nations, in all ages, by the customary law of nature, it has been considered the universal measure of value, and medium of exchange.

EMENDATIONS AND ADDITIONS.

In page 6, for "taming of the ferocity of a carnivorous nature," read "a taming of their ferocity, and an expulsion of the unconquerable violence of a carnivorous nature."

In page 31, § 5, for "almost to infinity," read "to great minuteness."

In page 40, § 9, for "cannot exist," read "is inapplicable in reality."

In page 41, § 13, for "it has ceased," read "it has in practice ceased."

In page 45, line 4, for "is," read "are."

In page 69, § 4, line 4, for "found," read "said." To that section add the following note: "See on the contrary the low price of provisions in the *East Indies*. But consider also the low rate of wages and high value of money. Commodities are in truth dear there, as respects the mass of the people, who are very poorly fed, clothed, and lodged."

In page 72, § 14, line 5, for "increases," read "decreases."

In page 81, § 26, line 3, for "wil," read "will;" and in 28, for "levell," read "level."

In page 91, § 11, line 6, for "four," read "five."

In page 95, § 17, line 10, for "its," read "it."

In page 97, § 20, for "one," read "two shillings."

In page 102, at the end add, "32. Allowing for the difference in the standard of the silver a guinea is equal to 1l. 6s. 9d. in bank money; a pound note to 15s. 8¼d. sterling; and a bank three shilling token to 2s. 4¼d. and a bank shilling to 9½d. sterling. Mr. *Monck* now states that out of 12 current shillings the total weighed 28dwts. 12gr. = 684gr. and their mean weight was 57gr. that the heaviest weighed 62gr. and the lightest only 42gr. the mean of which is 52gr. of silver, instead of the true weight of 93gr. This is below even the value of the commercial tokens lately issued, the average of which are from 9d. to 10d. intrinsic value.

In page 187, § 13. line 1, dele "which."

In page 256, § 2, line ult. Add the following note, "Money is capital in the same sense only as machinery. It is a principal engine of commerce, and its object as a machine is to facilitate the exchange and circulation of commodities, or real wealth. Whatsoever is absolutely necessary for this purpose, is perhaps useful and profitable fixed capital to the nation. The excess is so much money ill employed in useless and unprofitable dead stock, or over expensive machinery. If a mill that costs 1000l. works to the same effect precisely as one that costs 2000l. there is a waste of 1000l. capital in the latter. On the same principle, every addition to the mass of money is wasteful, and no real addition to the capital of the nation; because any given sum will effectuate the exchange of an increased quantity of commodities by reducing their individual price, in the same proportion as

the commodities are increased; just as well as if the stock of money were proportionably augmented. If, from the nature of commercial exchange, a paper money could serve equally as well as the precious metals, for a just measure of value, it would be in many respects preferable. It is the object of this work to examine and decide that important quesion.

In page 294, l. 1, for "imports," read "imposts."

In page 316, § 13, l. 6. for "elevenths," read "fifths."

In page 355. § 12, l. penult. after "their," insert "real."

In page 377, § 13, l. 2, after the word "law," insert "similar to the forbearance of money, which is."

In page 407, in the table, on the left hand division, insert, "5 . 108," and for "6 . 152," read "6 . 162."

In page 411, § 21, l. 21, for "credit ends," read "credit tends."

In page 430, § 3, l. 2, state the debt at 266,725,097 12 10 for 1786, including a valuation of the terminable annuities.

In page 432, § 4, l. ult. for "are reduced," read "are increased, or the rapidity of the circulation reduced also."

In page 444, § 12, line 8, for "one twentieth," read "one tenth."

In page 463, l. 10, after "whole amount," insert "per cent."

In page 464, n. l. 1, for "produce," read "produces."

The following statements respecting financial and statistical points discussed in this work, have been collected since it was printed, and are hereby added by way of illustration.

NATIONAL DEBT AND FINANCES.

The statement of the national debt and other financial items in the body of the work and the preface, is given for the years 1810 and 1811. The following statement is from the latest public accounts up to the end of the year 1812.

	£.	s.	d.
Capital of the funded debt of Great Britain and Ireland	817,101,745	5	8½
Unfunded for Great Britain, on the 5th Jan. 1812	59,454,166	15	8
Ireland	1,843,012	10	0
Amount of the Sinking Fund, Feb. 1st, 1812	236,993,237	0	0
Produce in the quarter, June, 1812	3,584,477	17	5¼
The total of money raised in the year, ending 5th Jan. 1812, was	81,241,697	7	7¼
The amount of exchequer bills outstanding on the 5th of April, 1812	43,406,800	0	0
The stamped dollars issued by the bank, from 19th Feb. 1811 to 13th April, 1812, amount in nominal value, to	1,447,469	4	6
Mr. Manning stated in the House of Commons, 8th Dec. 1812, that in 15 months the Bank had issued in silver	1,800,000	0	0

EMENDATIONS AND ADDITIONS.

On the 17th June, 1812, Mr. VANSITTART, the Chancellor of the Exchequer, brought forward the budget for the year, which contained the following items:

	£.
The expences of the Navy	19,702,399
The Army	17,756,160
Army extraordinaries	5,200,000
The Ordnance	5,279,897
Extraordinary Services	10,250,000
Sundry charges	4,187,892
Total expences of Warlike Establishments	62,376,348
The charges of the interest of the debt and civil list, are	36,356,000
Total for the year	£98,732,348

The supplies were as follows:

The Consolidated Fund, or permanent Taxes, producing	39,750,000
The War Taxes	20,500,000
The Loan	20,000,000
The New Taxes	1,900,000

The balance is made up by three millions of annual duties; by subscription to exchequer bills seven millions; by a vote of credit three millions; and by smaller items producing by the figures on the minister's paper 40,000*l.* excess, supposing the taxes to produce, as calculated.

	£.	s.	d.
The income of the consolidated fund, was, for the year ending January, 1811	42,286,152	18	11¼
Charges	35,296,313	10	9½
Surplus	6,989,839	8	2¾

	£.	s.	d.
The income of the consolidated fund, was, for the year ending January, 1812	40,917,835	18	4½
Charges	36,801,993	18	9½
Deficiency	4,115,811	19	6¾

The decrease of income was chiefly under the head of customs.

The war taxes for 1810, produced	23,027,444	9	7¼
——— 1811	22,393,053	13	5¾
Decrease	634,390	16	1½

STAMPS AND COUNTRY BANKS.

Stamps for reissuable notes, not exceeding one guinea in value	
From 16th Feb. 1811, to 15th April, 1812	3,323,130
Exceeding 50*l.* and not exceeding 100*l.*	1,396
Total number	4,445,556

In 1811, up to the 10th of October of that year, the number of country banks was 779, and the increase of new banks 83. From the 11th of October, 1811, to the 20th April, 1812, there were granted licences to 788 bankers, of which 735 were renewed licences, and 53 new banks; by which it appears, there was a total increase of 9 banks, and a considerable change amongst the individuals, arising, in part from failures, and partly from changes of

firms and new speculations. In Scotland, during that period, the whole number was 50. The total was 1662.

PRICE OF CORN AND BREAD.

1812, Feb. Wheat 48s. to 120s. per quarter. Potatoes 40s. 60s. 80s. per ton. Quartern loaf, in March, 16¼d April, 18½d. June, 19¾d. July, 1s. 8d. Oct. 18¾d.—November, Wheat, 95s. to 145s. Quartern loaf, 1s. 6¼d. Potatoes, 140s. to 200s. per ton.

PRICE OF GOLD IN 1812.

1812, March 14, Gold fell 2s. per oz.

	Gold. £. s. d.	Silver. £. s. d.
The price of pure refined metal, without alloy, was then	5 8 0	0 7 0
November 12th	5 14 0	0 7 3
A guinea, worth about	1 9 6	
Six one pound notes	4 4 0	

In order to give the value of standard gold, deduct the price of 1 dwt. 16 gr. from the gold, and of 1 dwt. 12 gr. from the silver.

Light guineas have been sold for 1l. 7s. 2d. each. Gold was stated, Dec. 9th, 1812, in the House of Commons, to be at 5s. 5d. per oz. for standard bullion, and the difference between paper and gold to be £35 per cent.

STATE OF THE CLERGY.

Number of incumbents	10,261
Residents only	4,421

There are in England and Wales, 3,938 livings under 50l. a year.

12	do not exceed	10l.
72	——	20l.
191	——	30l.
355	——	40l.
433	——	50l.

LICENCES TO TRADE WITH THE ENEMY.

In 1802	were granted	68
1803	——	836
1804	——	1,141
1805	——	791
1806	——	1,621
1807	——	2,606
1808	——	1,910
1809	——	15,226
1810	——	18,356
1111	——	7,602

The fees of office on these are considerable.

ON

THE LAW OF NATURE.

ON

THE LAW OF NATURE;

AN

INTRODUCTORY ESSAY.

LAW is, essentially, a rule of conduct, whether imposed by reason or by civil authority.

The laws of peculiar states are rules of conduct imposed by the state.

The law of nature is that rule of conduct which is most convenient for man generally; and which arises out of a due consideration of his duties and correspondent rights, in a state of society, generally, without reference to particular customs and institutions.

It is discoverable by the light of reason.

Its obligation is the duty, which each man owes to his neighbour, of doing, in every case, that which is most conducive to the peace, good order and well being of society.

Which is, as it were by way of eminence, *the social compact;* since society implies a consent, arising from necessity, to live together in peace.

The necessity, which produces the consent, is the natural authority which imposes the law of peace. Retaliation is the sanction by which the law is enforced.

This law is observed, or professed, by all nations in their mutual intercourse; and regulates the conduct of all moral men in civilized states, independently of the municipal laws.

It forms the basis of all municipal laws; not connected with unjust fiscal exactions, or superstitious incroachments on civil power; often supplies their defects, moderates, controuls, counteracts, and finally reforms them.

Its effects are, principally, observed in the laws respecting contracts, commerce and war; and its authority is universally acknowledged, and enforced, under the name of equity, in every civilized nation.

When municipal laws violate any of its fundamental principles, they gradually fall into disuse, and are necessarily evaded.

The origin of the law of nature and its sanctions is differently accounted for, by different authors. They refer it to conscience, to an internal monitor, a moral sense, divine justice, the will of God, natural or revealed religion. But all these different views are equally just; in as much, as the peace and good order of society must be consentaneous to justice, whether it be stiled natural or divine; to good conscience; to every sense of morality and religion, as well natural as revealed.

Natural religion cannot be adverse to the law of nature or to right reason.

The revealed religion of christianity avowedly sanctions the first general principle, the leading doctrine of this law; and, in conformity with a celebrated axiom of a Grecian poet and moralist, expressly requires that every man should do unto others as he would they should do unto him.

In this sentence, is included, as a first principle of infallible reason, applicable to all cases, that code of equity which is laid down with such nice discrimination and profound learning, in the civil law of the Romans; and has been

the guide of all European judges and chancellors, for so many centuries.

Natural law has been greatly misrepresented and misunderstood: chiefly from mistaken notions concerning a state of nature; in which man has, by some, been supposed to exist without social rights or duties; the untamed savage of a wood, the beast of prey condemned to solitude in a cave, and the lare of a desert; one of a herd of ferocious animals, liable to be disturbed by the fury of every individual of which it is composed. But, in truth, this state cannot exist. Man is born in society, is preserved and supported by it: and even gregarious animals cannot herd together, without a compact, as it were of peace; a taming of the ferocity of a carnivorous natur.

Life in all its stages of civilization and of savage rudeness, is, more or less, a state of society, of order and of compact; in which rights, more or less ample, and duties, more or less complicated, are observed.

These rights and duties are increased by the knowledge and wealth of civilized society.

In what is called the savage state, they are simple; because the poverty of the savage produces a paucity of wants; and, the consequent facility of gratifying them, renders the imposition of many restraints unnecessary. The violent excesses of passion are checked by the fear of retaliation; and it is only in war, that the ferocity of uncivilized man is thoroughly displayed; when he becomes a murderous assassin, a sanguinary tormentor, and a cannibal, from revenge and false glory.

Yet, even in this state, natural law, reason, convenience, the sense of doing to others as they may be expected to do unto us, the dread of retaliation, render the savage observant of the rights of property amongst his neighbours; of conjugal fidelity, where promiscuous intercourse is forbidden; of respect to elders and rulers, where elders and rulers are in authority; of obedience to leaders, where war is pursued with system; of good faith in promises, where traffic is admitted; and of hospitality to strangers, where the intercourse of travellers occurs.

All this arises of necessity; because no society can exist without it: and man cannot exist without society; nor society be extended without order; which, as it increases the possessions, the means of life, the wealth, the

wants, the desires, the appetites, the vanity, the ambition of man, multiplies his duties and his rights equally. For duties and rights are reciprocal. That, which it is right for me to enjoy, it becomes the duty of every other individual in society to secure to me; and that which I owe, as a duty to others, is owing in virtue of some right, arising from some mere municipal institution, or the natural order and consequent rights and obligations of civil society, acknowledged and supported by right reason and natural law.

In every state is man subject to this law; which is operative, where all other laws are silent; and which is never violated without injury to society, through some individual, and, most frequently, to the ultimate disadvantage, either of him who commits the wrong, or of his relatives and descendants.

The law of nature is, therefore, universal and inviolable. It is the law of nations, because with them, all positive law ceases; and, there being no superior authority to whom they can appeal, individual nations are like individual men living without municipal laws. They respect each other's rights, in the hope of preserving their own; they violate them, when their passions overcome their reason, and

their dread of retaliation is diminished, through a consciousness of their own strength, or the imbecility of their neighbours. Thus they act with more or less justice, fraud, or violence, according to the disposition of their rulers, the spirit of the times, and the state of knowledge and civilization; which humanize their characters, moderate their ambition, and create a sort of refinement in moral sense amongst nations.

This law being discoverable only by the light of reason; being, in effect, the natural equity which results from an improved knowledge of the real organization of society, and of the true interests of mankind; is improved, regulated, and rendered operative and effectual, by the increase of knowledge, wisdom, and experience only. It preserves peace, and regulates commerce; it inspires active virtue; it encourages arts, promotes benevolence, mitigates warfare, and advances happiness, universally. Its essence is right reason; its end the well-being of man. It is the animating genius of all society. It is the main support of all civil institutions.

Yet it is for such institutions that some bewildered declaimers have pronounced, that man has yielded up his liberty, and quitted the

freedom of a state of nature, to submit to the silken chains, or the galling manacles of society.

Absurd sophists! idle dreamers! Man is, by nature, social. In submitting to the law of nature, and the necessary institutions of order in society, he has yielded up nothing; he has quitted no freedom; relinquished no advantages.

He has exchanged, mutually, a pledge of security; bound himself reciprocally with others to contribute to their mutual happiness. He has knit, as it were, the union of peace and concord; by forming the natural compact of society and civil order, for the preservation of his life and freedom.

He is in a state of nature still; so far as he is governed only by wise laws, founded on useful, just, and equitable institutions, and the law of nature and right reason. For it is the first law of nature, that man should will his self-preservation, his individual happiness and the good of his posterity.

It is this sort of tacit agreement to all the laws of right reason, which constitutes the true

social compact; a compact which is the offspring of society, not its parent. For they err widely, who understand by it an agreement, previous to the existence of society; since society is necessary to the existence of man. And its compacts, as founded in nature merely, are necessary and purely beneficial.

If man has not gained, or if he has lost any thing in society, it has been by the combined effects of the ignorance of the many, and the subtle frauds of the few. The error is neither in man, in nature, nor in society, in general; but in particular frauds and individual usurpations, which reason and knowledge will in time redress.

These are my general views of the law of nature.

Of its particular application I propose to exhibit an example in the following pages; which are dedicated to my country, and to that of all men; adapted to the present, as well as to future circumstances; as far as my experience, or that of the present times will allow me to sketch the laws, which should regulate the conduct of future generations.

I propose to enquire what is the nature of *money*, what is its object and use in society: what the cause of its introduction; what are the rights and duties of the state, and of individuals concerning it. And, when its nature is thoroughly understood, and its operations and effects are clearly investigated, there will result from these certain rights, which neither individuals, nor the state can violate; without a dereliction of that equity and justice, which is the foundation of the social compact and of the law of nature.

In all this, reason must be our guide; and the light which she throws on the immutable nature of things, will lead us to a true knowledge of their relations and dependencies; without which, all political institution is error, all municipal law capricious ordinance and rash empiricism.

Should any doubt remain, as to the connexion of the science of money with the law of nature, it will appear in the following pages, that man exists only in society; exchange is necessary to society; equality necessary to exchange; and money necessary as the medium of that equality.

ELEMENTS

OF THE

SCIENCE OF MONEY.

ELEMENTS

OF THE

SCIENCE OF MONEY.

CHAP. I.

History of Exchange, and the Introduction, Nature and Use of Money.

TO understand the true nature of money and its effects on society, it is necessary to review, shortly, the history of exchange and of commerce, for the facilitating of which money was introduced: and, then, to inquire what really constitutes that which is become the universal medium or instrument of exchange and measure of value, amongst all civilized nations, which enjoy an extensive commerce.

1. Whatever may be the final destination of man in a future state, his existence, in this world is, primarily, designed for the support of his individual life, in ease, comfort, and enjoyment; and for the continuance of his species, by the production, education, and maintenance of his progeny.

2. This end can only be attained, when mankind has increased greatly beyond a single pair and their immediate progeny, by the labour of the whole, or the greater part of society, employed in cultivating the earth, and collecting and preserving its productions, or manufacturing them into different articles of necessity, utility, convenience, or luxury.

3. These are severally denominated *commodities*, as being essentially apt and useful to some of the above purposes, and to the various wants and desires of mankind in different states of natural simplicity, artificial civilization, or refined luxury, and capricious taste.

4. In the simple state of the first family which may be placed in any particular region of the earth, the distribution of the simple productions of nature, as they are individually collected, is gratuitous; or upon a sense of duty or affection merely, without the interchange of any equivalents.

5. When the numbers increase, and families multiply, this sense of duty and affection extending only to the small circle of the family, a notion of property arises; and what each individual or the head of each family possesses, howsoever it is acquired, is considered as individually appropriated to them, by general consent and natural right, arising out of universal convenience.

6. From this individuality of appropriation, called *property*, arises the necessity of *exchange*.

7. For, either the commodities possessed by one family, being, more abundant than is necessary for immediate use or consumption, and, for the most part, incapable of long preservation; or, two families possessing each a commodity of some kind different from the other; and each having an immediate want for the commodity in the other's possession, these are exchanged the one for the other.

8. Hence arises a sense of *value* or worth, in *exchange*.

9. For, by easy steps in reasoning, it will be seen, that, of necessity, each individual must consider what quantity of one article he will give for another of a different nature.

10. And this estimation of value proceeds, in every instance, upon a sense of *equality*, which is mutual or interchangeable, at the instant of the exchange.

11. In this exchange the sense of value is directed by each party, primarily, to the commodity which is newly to be acquired, rather than to that which is parted with.

12. Thus A. has a horse, B. a cow and a quantity of corn, which they are about to exchange; B. wants the horse, and A. the cow and the corn. B. directs his attention principally to the horse, and, knowing that A. will not sell it for the cow alone, he is guided, in estimating the quantity of corn to be given in addition, by the desire he has to possess the horse primarily, and then by the quantity of corn which he can spare. The reverse is the case with A.; whose first consideration is the desire he has for a cow and the corn, to induce him to part with his horse. The desire of acquisition, in each, must preponderate respectively, and on opposite sides, over the necessity or desire of retaining the commodity exchanged; and thus, from the opposition and counteraction of the two preponderating desires, a sense of equality is produced, which is the motive and the basis of the exchange.

13. The corn in this instance being a commodity of universal demand, which is capable of being stored and preserved, for a considerable time, and is also divisible into very minute portions or single grains, is the article chosen, to be added to the cow, in order to make up for the deficiency of her value, in comparison with that of the horse.

14. This is called barter or exchange, and is the basis of all contracts of purchase and sale, in trade and commerce; each of which is an exchange of equivalents; that is, of something given and something taken, upon a sense of equality in their value, at the time of the exchange. All other modes of acquisition of property consist in occupancy, inheritance, production, gift, loan, rapine, and authoritative levy, in taxation, by the state.

15. Where one article can be exchanged, in specie, for another, as a sheep for a pig, as being equal in value, no corn will be required to make them equal.

16. But, where this equality does not exist, in the opinion of the two parties, some commodity, possessing the qualities of the corn in the instance given, will be requisite, to produce equality in exchange.

17. These qualities are universality in demand, capacity of being preserved without deterioration for a considerable time, and divisibility into minute portions.

18. In process of time, exchanges becoming frequent and barter being pursued for gain, as well as through necessity, individuals will desire to exchange their commodities for any other commodity of value which can be preserved, and with which other exchanges may be made to advantage, or with gain.

19. In this case, the commodity which performs the office of the corn in our given instance, is frequently trucked or bartered, against every other article whatsoever: and, by frequent use, its value being constantly brought into comparison with all other commodities, it is the medium of comparison by which the value of all things is estimated.

20. It is then the *medium* of exchange and *measure* of all value.

21. Whatsoever this *commodity* may be, it acquires an additional value from its novel use as a medium of exchange.

22. As a *measure* of *value*, its utility will depend upon the qualities of universal demand, durability and minute divisibility: to which must be added, to give it any degree of perfection and stability as a measure, a certain steadiness of value; which can arise only from its being a commodity in universal demand,

and that demand not likely to be glutted by a too great or too rapid supply.

23. Its use, as a medium of exchange, does not arise from an immediate demand for consumption; but, on the contrary, because, for the most part, the commodity exchanged for it is consumable: and this commodity, which is the medium of exchange, may be stored and preserved, until it is wanted to be re-exchanged for other commodities.

24. It is laid up as a sort of pledge, or deposit, by means of which other commodities may, at any future period, be obtained in exchange.

25. The necessity of laying it up requires, therefore, that it should be durable, and not likely to change in value greatly, by the time when it may be required to be used in exchange.

26. Being laid up, to be thus exchanged at a future period, it is considered by the owner as the representative of all other commodities; and since wealth consists in the possession of an abundance of commodities; or things useful to purposes of necessity, or the gratification of some enjoyment; it is considered as the

pledge of wealth, the evidence of wealth, the means of wealth, or as wealth itself.

27. Hence the possession of this article is the great object of human desire, and it may be considered as the principal of all commodities: *the commodity*, by way of excellence; or from its being universally exchanged, it may be called the universal merchandize; or from its passing from hand to hand rapidly, in all exchanges, it may be called *currency*.

28. One of its most essential qualities is, that it is in constant demand. Hence it must not be an article, the demand for which depends entirely upon variable fashion or caprice; which may entirely change before the article is required to be exchanged for other commodities.

29. This commodity, which we now call *medium* of exchange, or *currency*, is different in different states of society.

30. In some it has been said to consist of salt, hides, sugar, tobacco, cacao, gold dust, and even of shells, which are said to be used in Africa.

31. By frequent usage, either of these commodities, or any other, may acquire the property of being in general demand, and readily exchangeable, and thus pass current, as the medium of exchange; but they have their origin as currencies, principally from their original value in use; as even the shells may be highly esteemed for ornament among savage nations.

32. These articles can, however, serve only in very simple states of society, where the exchanges are comparatively few, and the wealth of the people is very small; but they cannot pass in exchange amongst other nations.

33. They serve the purpose of simple states, as *dumps* and *marbles* are used to make up the equality in the exchanges between children; when they truck their toys one against another, and wish to make a peg-top equal in exchange for a hoop, a cart, or a wheel-barrow; or would exchange either of these for a live puppy, a rabbit, or a Guinea-pig.

34. But the articles which suit the purpose of universal exchange the best of all others, are the precious metals of gold and silver; to which may be added copper and brass.

35. These have, each in their several degrees, the qualities peculiarly necessary for a medium of exchange and measure of value. They are of intrinsic value, being raised from the earth and purified with great labour, with much art, and at considerable expence. They are in very general demand for their beauty and utility; as ornaments, or the materials for instruments of much service. When purified, they are of the same comparative value: one piece of pure gold or silver, differing in no respect from another. They are almost indestructible, even by fire; and are almost infinitely divisible. They will also take any shape or form, and any stamp or impression.

36. Hence, where these articles are known, and can be procured in sufficient quantities, they become, by general consent, the universal medium of exchange.

37. Gold and silver, in their pure state, in masses of ordinary size, are called *bullion*, in England; either from *billot*, a mass; or *Billon*, a place where money is made; or from *vellon*, a Spanish word for a brass coin, stamped with a fleece; as the *pecunia*, or money of the ancients was named from *pecus*, cattle, with the figure of which it was impressed.

38. When gold and silver become universally exchangeable, their utility is much increased, and exchange is greatly facilitated, by having certain pieces of known size and purity, stamped with appropriate marks. This renders it unnecessary, either to make trial of their purity, or to weigh them; whereby much labour is saved, and great inconvenience, and many frauds upon the ignorant or unwary are avoided. As is done, also, when other articles are exchanged by the piece, such as linen, or cloth, or lace; which, being marked, after measurement, by some person in authority, may the more readily be exchanged from one dealer to another, without the necessity of repeated examinations and remeasurements, to ascertain the due length, and entirety of the piece.

39. This marking, weighing and assaying, is done by persons in authority, that is, by the state; which adds a small value to the metal, by the greater currency which is given to it, and by the real cost of the mark and assay. For it is, in this state, a more useful article of general exchange.

40. All these currencies are, as we have seen, and particularly gold and silver, commodities universally exchangeable and intrinsically va-

luable, before they attract the notice of the state and are thus marked with a stamp.

41. The marking is called coining, either from *cudendo*, the Latin word for forging, hammering or shaping of metals; or from *koinon* the Greek word for a thing used in common; or, more probably, from *coigné*, the French word for a thing cornered off or squared; the English silver currency being, formerly, hammered out with corners.

42. The pieces so made and stamped are called coins, and all such coins, are denominated generically money, *moneta;* which, it is said, comes from *monitum*, a Latin word, meaning a thing of which advice or notice is given; because, by the mark, the state gives notice, to the receiver, of its weight, purity and value, compared with other pieces of gold or silver.

43. This is all that the state can do by coining. For the stamp, though it ascertains the quantity of gold or silver in each piece, cannot alter the value of gold or silver, materially, in exchange; and, therefore, coining can only ascertain the value of a given piece of gold or silver in exchange for other gold, or silver, raw or in bullion; or manufactured in utensils; or ather in other pieces of gold and silver coin.

44. Such pieces of money pass current in exchange for all commodities; which are first valued in some given species of money, most usually adopted as the measure of value; and then, the commodity is received in exchange for its equivalent in value, made up in any necessary quantity of coins.

45. Hence arises the practice of buying and selling, when the money paid is called *price*; and the things given in exchange are denominated merchandizes, goods, or, generally, commodities. ‡

‡ I am happy to derive authority for my positions from that stupendous monument of human intelligence the Digest, See lib. xviii. tit. de Contr. Empt. Leg. i.

"Origo emendi vendendique a permutationibus cœpit: Olim enim non ita erat nummus; neque aliud merx, aliud pretium vocabatur; sed unusquisque, secundum necessitatem temporum ac rerum, utilibus inutilia permutabat, quando plerumque evenit ut quod alteri superest alteri desit. Sed quia non semper, nec facilè concurrebat, ut cum tu haberes quod ego desiderarem, invicem haberem quod tu accipere velles, electa materia est, cujus publica ac perpetua æstimatio difficultatibus permutationum æqualitate quantitatis subveniret; eaque materia forma publica percussa, usum dominiumque, non tàm ex substantia præbet quam ex quantitate; nec ultra merx utrumque, sed alterum pretium vocatur."

46. Other articles of currency have been called *money;* such as shells, which are said to be the money of some rude people in Africa. But this is not strictly the proper meaning of money; which is something obtaining general currency, partly by the authoritative mark or admonition of the state; whereas these articles are *mere commodities* adopted in general exchange.

47. They are however the *medium* of exchange and measure of value.

48. Coins of various kinds may be used as money; but it is only one species, or one identical thing, which can be said to be the measure of value. Uniformity is necessary to a measure; and this, most frequently, is some coin which, though formerly in use, has disappeared; but the value of which is ascertained with respect to other coins; as the pound sterling, which is equal to twenty parts in sixty-two of a pound of standard silver.

49. This measure of value may be, in some places, wholly ideal; as a *macoute* in Africa, which is no coin; or a *bar*, which is supposed to have a value of about two shillings sterling, but was never in existence as a coin.

50. An actual *standard* of value generally,

can, in strictness, have no existence; because value means only what a thing is worth; that is, what it will exchange for; and not even gold or silver can have a value perpetually the same.

51. The standard, in England, means the settled purity which is required for gold and silver, and the actual weights and alloy of all coined monies; and, consequently, their value in gold or silver.

52. Henceforth, in the whole of this work, the word *money* will be used in the sense of *coin;* in which it is frequently employed by Locke, and others at the beginning of the last century: before paper currency became general, and the notion was adopted that paper may be considered as money. Whereas paper is money, only in as far as it represents a given sum of money immediately or speedily forthcoming; and will never continue long to have any value, when the hope of its being paid is entirely lost. It will, then, represent the *macouts* of Africa; which never passes as a currency, but comes into and goes out of the mind of the buyer and seller, upon every purchase and sale; as a middle term in logic, or *medium* by which to estimate a value between them.

53. The only sense in which the word *money* will be used, in these pages, is that of any given coin, made of bullion, of the precious metals, or as bullion itself.

54. It will be shewn that nothing else, except some commodity adopted by the free consent of a people; or a promissory note or paper, for which the nominal sum is always forthcoming in coin; can pass current in exchange; without some deception, much individual injury, and great public inconvenience.

CHAP. II.

Definition of Money.

FROM a review of the preceding chapter, we may define money by stating its essential properties.

1. Real money is made of silver, gold, or other precious metal, and is a commodity of intrinsic value.

2. It is raised by labour, and purchased with commodities.

3. Its real value is the price of such labour.

4. It is so durable as to be almost indestructible.

5. It is divisible almost to infinity.

6. It is used by the *convention* of all nations, and all ages, as the representative of all things wanted.

7. It serves as a pledge and surety that, whenever the want of any thing vendible shall occur, it will be speedily gratified, by exchange for it.

8. Its name in Greek and Latin, is *nomisma*, and *nummus*; derived from *nomos*, a word signifying law; which indicates that it is in part founded on *convention*.

9. As this *convention* is universal, the law is a law of all nations, and a *law of nature**.

* Axioms 6, 7, 8, are taken almost verbatim from Aristotle, Ethics, lib. 5. See Gillies's translation, p. 270, Quarto Edition; p. 375, Octavo.

I have added Axiom 9, to correct, what I consider, an error in all who have followed his words too implicitly, without attending to their general meaning.

He says, however, expressly, that its use is founded not on *nature*, but on *law*; and, that human laws, which have thought fit to employ it as a measure of value, may, at pleasure, put this use of it aside, and employ some other measure in its stead.

But he proceeds to say, "Money, which represents the value of all other things, varies in its own; but the variations (meaning of real money) are less considerable than those of most other substances. It serves, therefore, to fix their price, and to render them commensurate with each other; thus performing a function essential to the existence of civil society: for community could not subsist without exchange; nor exchange without equality; nor equality without a common measure."

It is impossible not to admire the intelligence and wisdom embodied in this sentence. All theories of money must be a comment and a paraphrase upon this text.

CHAP. III.

Of Price and Value, and the Variations in the Value of Money.

1. BEFORE we state the properties of money, as a *measure* of value; it is necessary to consider, shortly, what *value*, as a commercial term, and *price*, as its correlative expression, justly signify; and how they rise and fall in trade and commerce.

2. Value is variously defined, as it is applied to the estimation or regard, in which an indi-

But it appears obvious, that, if money varies less than other commodities in value; and is, therefore, more useful as a common measure; and a common measure is necessary to the existence of society; the use of money in exchange is as natural as exchange itself; and will last as long as society.

To say that human laws may change its use, is erroneous. They cannot, until they have found an equal common measure. Where paper has been introduced, gold has been still the true measure, and will be while society lasts.

vidual holds any thing; as it respects, either his own convenience, liking, desire, want, or affection. It is also considered, either as real, or imaginary; and, frequently most, as commercial or exchangeable.

3. Upon the present subject, all values may be omitted, from our consideration, save that which is purely commercial; and which affects the general price of commodities, at any given time.

4. In which sense, *value* and *price*, may be considered as equal and corresponding terms; and, when any commodity is exchanged, the one is the value, or the price of the other.

5. But, as *barter* is disused, and sale constitutes the whole of commercial exchanges; since, even where goods are exchanged one for another, they are first valued in money, and exchanged for it in idea; every thing is estimated in money, which is called *the price;** and the commodity which is set against it, may be considered as the *value* of the money.

* Writers on the law of nations, denominate it the *price of eminence*, or *the price* by way of eminence. But *price* and *value*, in exchange, mean the same thing. They are as two equal weights, placed in opposite scales.

6. The change of these denominations does not, however, alter the nature of the things; which still remain, as well the money as the goods, exchangeable *commodities*.

7. The principle, upon which alone they are exchanged, has been explained, already, to be the desire which each party has to obtain that which the other possesses; and transfer it from the one to the other; upon a sense of equality, arising out of their mutual wants.

8. Hence the inducement to exchange and sale, or purchase, is mutual want; which is called demand: and the means of effecting exchange is the possession of the equivalent, to be transferred in place of the thing wanted.

9. This *want*, and the *possession* of the equivalent, combined, is called the *effective demand*.

10. The effective demand rests with the buyer, as respects the price: the amount of which is agreed between the buyer and seller. And where there are more persons desirous of selling than of buying, the price will fall; or, when the contrary is the case, it will rise.

11. Now the increase in the quantity of any *article*, beyond its ordinary demand, increases the number *of sellers;* as the increase of *money* does that *of buyers.*

12. Of course, prices rise or fall, as commodities or money are increased, relatively, to each other.

13. *Commodities* are increased by agriculture, mining, fisheries, manufactures, and other productive arts: and in some sort also by commerce.

14. *Money* is increased, either by mining, or commerce.

15. *Prices* will, therefore, generally be higher or lower, as there are more or less commodities to be exchanged; and more or less money in general circulation.

16. But the *quantity* of money in circulation does not, wholly, depend upon its absolute quantity. It is greatly affected by the state of credit, and the mode of conducting trade; by means of which, traders, dealing together and allowing each other credit, do not exchange money for goods upon every transaction; but wait

till after many dealings are had; and, then, pay over only the money due upon an actual balance.

17. By this means, much less money is employed, than would otherwise be necessary; the rate of prices still remaining the same. And this effect of trade and credit on the quantity of money is greatly increased, by the facilities afforded in payments through bankers and bills of exchange; and, particularly, by the mode of settling balances between bankers, each day, at a place called the *settling-house.*

18. These may be denominated the *artifices* of commerce; and operate, more or less, according to commercial skill at any given time.

19. The value of money depends upon the price of commodities, and must be subject to many variations: but, before we can thoroughly explain the laws of its variation, we must enter into several preliminary inquiries, which will form the subject of some of the following chapters.

CHAP. IV.

Of a common Measure; and Money as a Measure of Value.

1. A COMMON *measure* is a quantity which will measure any two numbers or quantities equally, without a remainder; and *unity* is the common measure of all integral numbers and fractions.

2. A common measure of space is any given portion of space, considered as an *unit*, applied to any other quantity of space; as a *foot*, or a *yard*; and a common measure of gravity is a given weight applied, as a measure, to all other weights; by which their quantity is compared.

3. When these measures of space and gravity are accurately ascertained, a precise *standard*, or fixed measure and weight, may be obtained; by which all things may be compared with each other; in respect of extension or space and gravity; now and for ever.

4. All *goods* may, therefore, be weighed

and measured; and their proportions to each other fixed; without any possible variation. But *price* and *value* are not properties inherent in things; in the same manner as extension and gravity. They are accidents of a moral or political nature: the mere result of *conventional* exchanges; and are not capable of accurate admeasurement, at all times and in all places: the price and value of all things depending upon accidents of time and place; and other variable circumstances.

5. All things may, however, be compared with any one individual commodity, at any given time; and their relative value thereby ascertained: although this relative value can never remain constant or fixed. And, in all commercial exchanges, articles are compared with money; by which their relative value is fixed, as nearly as possible; and *money* is, for this reason, deemed a good common measure.

6. It is the best common measure of value hitherto known; because it is capable of being reduced to perfect identity, at all times and places. For one pound of *pure* gold and silver is as little different from another as any

ideal *unit*; or as any quantity of extension and gravity is from another. And this quality is sufficient to give to the precious metals a superiority over all other articles as a common measure.

7. In addition to which there are no commodities, which vary so slowly in their price or value as gold and silver.

8. They vary necessarily; but their variations are connected intimately with the nature of exchange and value; with commerce itself; with the quantity, production and increase of all articles of commerce.

9. Some writers, as *Sir James Stewart*, consider a money of account, or an *ideal unit*, as the best common measure. But they have all erred in attributing to these things a *metaphysical* notion which, like most other metaphysical ideas, cannot exist.

10. *Money* of *account* is a mere name; which when translated truly, means a given quantity of gold or silver in some coin not in use; but the real quantity of which is ascertainable by figures.

11. The money of account, in *England*, was, *formerly*, the pound sterling; which was

1718 grains, and seven tenths of a grain (1718 .7) of fine silver; or 118 grains and five tenths of a grain (118 .5) of pure gold.

12. The real money of account in *England*, for many years, has consisted entirely of notes of the bank of England, or more properly of all sorts of notes: those of country bankers passing at exactly the same value.

13. The pound sterling has varied in successive reigns, by frequent debasements. From the reign of Queen *Elizabeth*, to the year 1797, it may be considered as fixed at the above standard. But, from that time, it has ceased to have any standard; and now varies with the value of a bank note: which has one value as to one thing and one as to another; but which ought, in justice, to bear always the same value as to gold and silver.

14. Either, therefore, the pound sterling does not exist; is gone out of use; or the money of account in England is changed, from a fixed and known standard, to a variable quantity.

15. An *ideal unit*, as applied to value, is merely a *quaint*, *metaphysical*, *term*; signifying the number one; and *the number one* is

itself a mere term of no definite meaning; until it is applied to some *one* thing. It is a mere *symbol*; and, like all other symbols, means nothing, until the thing typified by the symbol is put in its place.

16. Thus, in talking of any number of pounds sterling, we settle nothing; until we ascertain what, in reality, those words stand for, *symbolize*, *typify*, or imply. We may as well write, nine digits as nine pounds; until we translate them into meaning. And then in different reigns we have, as the thing signified, different quantities of gold and silver; till, in the present year, we find that 'nine pounds' mean nine bank notes, which will purchase a certain quantity of gold; but which, whenever they are *paid*, in strictness, and converted, by the actual discharge of them, into the thing signified by their original import; will produce, and therefore, *signify*, a much greater quantity of gold; namely 118 .5 grains of pure gold.

17. The convenience of using a common measure of value in gold, is the same as that of using a fixed measure of space; and measuring by a foot of twelve inches, instead of the individual foot of a human being. The

one is fixed and known, at all times and places, as far as it can be known. The other is variable and uncertain. The one is readily compared with all other measures; the other requires several previous calculations.

18. The value of gold or silver must be the same in all countries, as to themselves; and the proportion which they bear to all commodities is the best measure of price, in different countries: because, by sending commodities to the mines in exchange, gold and silver can, at all times, be procured.

19. The relative cheapness or dearness of living is, however, frequently confounded with ideas of value generally; but these depend upon the relative quantity of money and its proportion to commodities; and the different distribution of wealth, at different times and places.

20. Sir *James Stewart*, and his followers, have puzzled themselves and their readers by *scientific* comparisons; which for want of a simple *logic*, have confused what might have been rendered very clear.

21. They notice the geographical measures

of degrees of latitude and longitude; and the inaccuracies of such measures; and then infer that, because no two degrees are mathematically equal, no two measures of value will be equal. They then state, that the true measure of latitude and longitude is an *imaginary* circle and its parts; and, thence, infer, that the true measure of value should be an *ideal unit.*

22. This is merely bad logic; for *imaginary* measures can ascertain nothing.

23. The truth is, that a degree in latitude and longitude is, properly defined, the one such a space of the earth as will be passed over in a right line, to give one degree of elevation of the pole-star, measured on any circle by the quadrant from *north* to *south;* and the other is, the three hundred and sixtieth part of the earth's circumference, from east to west; measured by the apparent course of the celestial bodies.

24. The difficulty of measuring these things in feet and inches, is very great; as is the difficulty of weighing with absolute certainty a pound of gold or silver; and much more so that of purifying gold and silver perfectly. But these difficulties are inherent in the nature

of things; and are not remedied by recourse to *ideal units* and mathematical measures of *imaginary* lines; for the *imaginary* line and the *ideal* unit, when truth and accuracy is required, must still be reduced to the natural pound, and the natural space over the earth, actually implied by the term.

25. To explain, according to truth, the *metaphysical* language of *Sir James Stewart* and his followers, the *imaginary line* in geography can never be accurately measured; whereas the money of account, the ideal unit, whether it is a pound sterling, or twenty stivers banco of *Amsterdam*, or a bank note of *England;* are terms referring, immediately, to a certain quantity of gold and silver, at some given time; and then, by implication, to any other article of commerce, which that quantity of gold or silver will obtain in exchange.

26. A common measure should be uniform; and, therefore, the common measure of value should be, either gold or silver simply, or gold and silver together, in certain proportions; and not either the one or the other indifferently, at the same time.

27. *Locke*, and the writers of his day, were

therefore, correct in saying, that money should be composed of silver alone, and gold be left to its value, as a commodity: the reasons for which are well explained by Sir *James Stewart**, to whose work the reader must be referred, for the arguments in detail; by which the necessity of an uniform common measure of value is clearly proved.

* See the Principles of Money, by Sir James Stewart, Bart.

CHAP. V.

Of Commerce; the Balance of Trade, and the Source of mercantile Profits.

1. In the first chapter of these elements, an attempt was made to explain, concisely, the nature of money from the history of exchange; which it was shewn proceeded, always, on a sense of equality; produced by the mutual opposition of equal and contrary desires.

2. From this arises all trade or traffic and all commerce; which is only, the extension of trade to foreign dealings: and consists of a mutual exchange of equivalents.

3. As in agriculture, so also in all manufactures, the first object was to provide for the immediate consumption of the individual and his family: when, by the necessary course of all such arts, the produce exceeded their immediate wants, and the surplus was exchanged for some other commodities; and, in time, the produce exceeding the consumption of the immediate community, this second surplus was carried to a greater distance; and exchanged with the members of some other community.

4. It is impossible to measure production exactly to immediate or domestic demand; and therefore, if foreign commerce did not take off the excess, manufactures and the productive arts must, each in their turn, frequently languish and decay; become excessive; or relapse.

5. But in process of time the foreign demand is considered as an original demand; productions are educed, for the immediate purpose of supplying it; and thus, that which might be considered as the drain for an overflow, or surplus, is rendered a constant and equable stream; and commerce is, really, trade extended, and by its enlargement rendered more generally certain; but, still, like all other trade, when the channel is full, subject to occasional vacillations or relapses.

5. The nature of exchange is, however, not in the least altered, by this process. It continues still a conventional act; by which one equivalent is transferred for another; by which neither party loses; but each gains.

7. In speaking of commerce, there is therefore

a palpable absurdity, in considering the balance of trade as favourable or unfavourable to any country; if to that idea is attached, as is generally done, the belief of any inequality in the transactions, between the two countries.

8. To give credit to the ministers and financiers of most nations, it must be supposed, that every nation fancies it has cheated every other nation in the world; while by every other nation it is considered as having been cheated; for each nation states the balance of imports and exports as in its own favour and against all the world.

9. The difference is supposed to be made up by the transmission of bullion, from the one to the other. This trade, which in earlier times was deemed the chief source of national wealth, is now generally allowed to be of little ultimate advantage to any country.

10. Yet, still, do the financiers make their boast of this balance; still does the assembly, before whom their accounts are detailed, bow a grave assent, or yield a vain applause; and still does error prevail in almost all the popular notions upon commerce. For statesmen, ignorant or careless of the truth, too frequently, are content to flatter the rooted prejudices of the people, for the purpose of more easy delusion,

rather than improve that knowledge, the extension of which would but too often betray their own imbecility or corruption.

11. The fallacy arises from the narrow views of professed traders; by whom the language of finance has been framed.

12. They are accustomed to balance their accounts, debtor and creditor, by the ultimate amount which remains to be paid; and, when the exports exceed the imports, they consider, that a sum remains to be paid; which they treat as gain.

13. The mystery can only be solved by considering the practical effects of what is technically called exchange; when it will be found, that this balance will for the most part disappear; or be converted into items of foreign expenditure, payment of rents, transmission of dividends on public stock, differences of exchange, bullion; and losses by sea-risks, and captures, to countervail it.

14. The true balance of trade is, like every other balance, an equality; it is a scale in which commodities are valued; and in which neither preponderate.

15. It is always beneficial or it ceases to be pursued. I go to my baker, because I wan to purchase bread; to my hatter, for hats,

to the jeweller, for jewels; to the wine merchant, for wine. I go to each without compulsion; to satisfy my wants, my convenience, or my pleasure. I send to another, to pay a bill in money; to another, and offer him goods instead of money which I owe; to another, to give him a bill upon a third person, in payment.

16. Just such is all commerce; it is the exchange of mutual equivalents and mutual conveniences; upon a voluntary contract: and each trader goes where he is best served.

17. When, therefore, any *financier* interferes to compel the trader to purchase at one market, rather than another, he does an universal injury; for all traders will speedily discover where they are best served.

18. Busy idlers, officious meddlers, troublesome intruders, baneful despoilers! cease your attacks on commerce! learn, statesmen, that all interference with commerce is mischievous; teach your subjects good faith; compel them to pay foreigners their debts; and let commerce flourish, free as the wind that bears her merchant ships across the ocean.

19. And, like the wind, let it shift first to one

quarter and then to another. For it would not be difficult to prove, that every act of interference with commerce has been ineffectual, delusive or injurious; without excepting even the famous navigation acts, to which so many advantages are falsely attributed; advantages which are owing solely to freedom, the nurse of every art, the parent of every virtue, the source of every excellence.

20. As little is it worthy of a statesman, to encourage commerce if he could.

21. Increase of population and inequality of possessions, naturally engender commerce; or the difficulty of supporting life checks population, and produces, either misery, or more simple manners; as the people enjoy a moderate equality, or the few usurp the rights of the many.

22. Every state of society has its natural advantages; which alone should be improved; cultivated, naturally, and not forced.

23. Nor are these the only errors which prevail, with respect to commerce.

24. The merchants, themselves, appear not to

understand from whom their profits are derived; or we should not hear so much of the absurd notion of the balance of trade. They see all nations exchange their surplus commodities with each other; they presume that others lose, and we alone gain.

25. Yet they see their fellow traders mutually selling and reselling; and getting rich.

26. They overlook this plain fact.—The profit of the merchant is gained at home and not from abroad. He gives less for the commodity abroad, or buys it with some cheap commodity; but it is the purchaser for home consumption that pays him the additional per centage in money; which enables him to live.

27. What, then, is the true secret?——

28. Is it not this? The wealth of every nation is unequally distributed. *Industry* increases its productions. Industry transfers them from hand to hand in trade; manufactures them into conveniences and luxuries; and transports them in exchange, for other articles of necessity, convenience, or luxury, in foreign commerce.

29. In every exchange, industry keeps back a

portion for its own use; and thus earns its fair reward. The more it can appropriate to itself, the greater will be its exertion; till it grows rich, luxurious, and idle, and makes room for the industry of others.

30. Secure, therefore, to industry, its free competition, and the enjoyment of its fair gains, and a nation will flourish: but whether its industry is employed in one manufacture or another, is immaterial; for the world cannot be all farmers, all manufacturers, nor all merchants.

31. The happiness of a nation must, therefore, consist solely in its equal laws, its moral habits, its political freedom, its domestic tranquillity; and it matters little whether it is chiefly agricultural or commercial.

32. Many errors also prevail, with respect to the effects of money.

33. This, as it always commands a market, and can always purchase commodities, is supposed to be, in its total effect, exactly what it is in the hands of individuals, the means of increasing wealth; but *Hume* has proved, that increase of money, or any other *currency*, can only augment prices and depreciate itself; and

Wheatley * has sufficiently established, that it necessarily goes by the operations of commerce and exchange, to the place where it can purchase most commodities; and, thus, becomes distributed all over the world, with a nice equality, as to its effects; though with great inequalities, as to its actual quantity.

* See an Essay on the Theory of Money and Principles of Commerce; by *John Wheatley*. *Cadell*, 1807.

CHAP. V.

Of Credit and Bills of Exchange.

1. CREDIT, as it regards commerce, is founded on good faith; and is the giving of time, for the payment of the price of any commodity. In which case, the seller delivers over the property to the buyer, upon a price agreed to be paid at a future day.

2. This price is, for various reasons, always higher than where the money is paid immediately: for the seller might make some advantage of the money in the interval; and must have some compensation for the risk which he runs of the debt not being paid.

3. Credit, however, greatly facilitates commerce. It enables many more persons to make purchases, and enter into competition in the market; bidding against each other; than could, otherwise, find means to become purchasers.

4. By this increase of competition, or of the

number of buyers, and the effective demand, it also augments the price of commodities; but it, also, promotes the increase of commodities, by increasing the demand and the market. And these circumstances have a mutual and opposite effect on each other.

5. By means of credit, merchants and traders are enabled to carry on a great deal of business, and make many exchanges of commodities; before they actually pay any sum of money, as the equivalent; or consideration, for their dealings.

6. The commodities are thus only valued in money, mentally, or in idea. They are then frequently set off against each other; and the ultimate sum, or balance, which is due on the expiration of the time allowed for credit, is the only sum of money paid over.

7. This happens very much not only in domestic trade; but also in commerce or foreign trade: and, hence, the greater part of the commercial dealings of the world may, in effect, be considered as an actual barter of one commodity for another; in which the use of money is, chiefly, as a measure of their

value; and not as an equivalent, actually exchanged.

8. A much less actual quantity of money is, therefore, requisite for the purpose of trade and commerce with credit, than without; and its effect is equal, in all respects, to that of a larger quantity.

9. This effect of credit, upon the quantity of money, is also increased, by the number of dealers, through whose hands a commodity passes before it is ultimately consumed. For the object of each dealer is to gain by his exchange; and he adds something to the price, on each transaction.

10. It is of the nature of trade and competition, however, to accommodate these exchanges to the actual necessity of commercial transactions; and to that limit which is necessary to the supply of commodities, for the demand of the consumers. And these exchanges may be considered as, always, necessary and beneficial to commerce.

12. Although, really, beneficial to the consumers, its effect on money is to increase its

quantity; either in reality or in appearance. And the apparent as well as the real increase of money has the same effect, upon its value; as compared with commodities.

13. The real quantity of money, in any country, can only be increased by mining; or by exporting commodities in exchange for money.

14. The apparent quantity of money may, however, be justly said to be increased by the increase of credit; and by all those artifices of commerce, by means of which actual payments of money are deferred or avoided.

15. A bill of exchange is an instrument by which the drawer, who is the creditor, orders the drawee, who is the debtor, to pay to a third person any sum of money due to him. By means of which, the actual debt is transferred to the holder of the bill.

16. In foreign trade, this is an instrument of great convenience; by appointing an agent, who is immediately interested in the receiving of the debt.

17. But it is also used in transactions of domestic trade; where, its use being less ob-

vious, the transfer of the actual debt, with all the rights of the original creditor, was not, for a long period, acknowledged by law. It was however, so acknowledged by a decision in the time of James I.; whereas the validity of foreign bills of exchange, in transferring a right of action, was admitted some time before.

18. In commerce and also in trade; when dealings have been had to any extent, between traders; these instruments are created: and they are, afterwards, repeatedly transferred from one dealer to another, in payment of debts; and thus are made to pass as money.

19. The increase of these instruments, therefore, must give an apparent increase to the quantity of money; and must have a similar effect on the value of money, as its actual increase.

20. It must not, however, be omitted, that bills of exchange, for any length of credit, cannot so pass as money. They are only the means of extending credit, by passing from one to the other, and giving the holder a better security for his debt. In which respect, they increase the effect of credit; and still further diminish the necessity of employing money in exchange.

They repeat the circulation of commodities; but do not in an equal degree, increase the apparent mass, or general stock of money.

21. But for more than a century past, promissory notes, payable on demand, have been used in payments; instead of money.

22. These were first issued, about the time of King Charles II. and somewhat previous; by the goldsmiths, who acted as bankers; and they were called goldsmiths notes.

23. After the revolution, the bank of *England* was instituted; and their promissory notes superseded the use of the goldsmiths notes.

24. Subsequently, persons have formed banks, as they are called, all over England, in almost every town and village; which issue notes payable on demand; and all these notes are paid and transferred from one dealer to another; as money.

25. The effect of these instruments is, greatly, to increase the apparent quantity of money; and to render a very much less quantity of coin necessary to carry on the exchanges.

26. A further artifice for rendering the actual employment of *money* unnecessary in exchange, has been noticed already; namely, the employment of bankers, by all traders indiscriminately; who pay their bills, that is to say, all their commercial debts, by means of written orders, or checks, on their bankers.—These also have contrived a further artifice for diminishing the quantity of money, necessary to make their payments; by agreeing to hold all the checks each banker receives, payable by other bankers, until a certain hour of the day; and then meeting at an appointed place, and paying over only the balance due by each; after setting off the checks debtor, against those which each holds, as creditor.

27. This is called *settling* amongst bankers, and is fully explained in the appendix to the report of the Committee on bullion 1810.

28. By means of this artifice, it appears, that a sum total of 5,000,000*l.*; being the average amount of drafts and bills payable in one day; may be actually paid and settled by the transfer, in specie, or in notes of a very small sum, in comparison.

CHAP. VI.

Of the Increase of Money by Commerce.

1. MONEY being once introduced, it must appear obvious, that, in all exchanges, money will be the principal object of commercial dealing.

2. On one side, money will always be made to pass, either really or in idea; whenever any commodity is transferred from one purchaser to another.

3. It is, therefore, truly considered, as the commodity, by way of excellence; and, as it always finds a ready purchaser, it is always in demand.

4. It is, therefore, the *medium* of all commercial exchanges; the article by means of which all commercial exchange is effected; and without which commerce must necessarily languish.

5. For, in all commercial dealings, for gain, it is of the greatest importance, and indeed

matter of absolute necessity, to have a return or investment in some article of certain sale. And money may, always, be considered as this article.

6. Hence it follows, that, the demand for money being unlimited; where money can be increased, it will, always, be kept in a state of perpetual increase.

7. This increase, however, is limited, as to money, that is coined money, generally, all over the world, by the production of the mines; and the quantity of the precious metals that can be raised annually.

8. The quantity which is possessed by any individual nation, which has no mines of the precious metal, must depend upon its commercial dealings; either with the country having mines; or with other countries possessed of the produce of the mines.

9. And the quantity of money which any commercial nation, not possessing mines, can acquire by commerce must depend upon its commercial dealings; and upon the quantity of goods or commodities which it can export, in exchange for money.

10. The quantity of these goods must, further, depend upon the number of its inhabitants or population, and its arts of production and manufacture; by which alone the native stock of commodities can be increased.

11. And, indeed, as it is apparent, that money or commodities, from abroad, can only be introduced, by exchanging these for equal quantities of money or commodities or their equivalents in labour; so commodities and money cannot be increased by commerce directly; but only indirectly, as it is the medium of exchange.

12. The true source of the increase of commodities and money is, therefore, in all cases the productive labour of the inhabitants.

13. In one respect, war itself may be considered as productive labour.

14. For, if a nation agree to perform services in war for another and receive the hire of its soldiers, or a subsidy, in money or goods, from a foreign nation; then, does the war actually increase the stock of commodities; without exporting any equivalent for them in money or commodities.

15. Supposing, that a nation were possessed of commodities in abundance; but wholly without money; then, might the commodities be exported and money received in return; which would introduce money and decrease the stock of commodities.

16. In all foreign commerce, therefore, the introduction of money is effected by the decrease of the stock of commodities; and again, when the money is exported, commodities are returned, as the equivalent in exchange.

17. Thus the stock of commodities and of money, in a commercial state alternately rises and falls; by the exportation and importation of money and commodities. These are therefore, continually, fluctuating.

18. It is the nature of trade, that all dealers will carry their goods to that market, where the highest price is to be had for them, in money; and they also go to market to purchase goods, where they are to be sold cheapest.

19. The only impediment to the frequenting of any particular market, is the expence

of attending it, and of carrying and recarrying the goods. This expence must be paid out of the profits of trade: and commerce will only be carried on, so long as it will pay this expence; which, in foreign trade, chiefly consists in freight and insurance.

20. Foreign merchants, therefore, observe the money price of commodities in different foreign markets, and export or import goods as they appear higher or lower in one market than another.

21. Wherefore, when the general price of goods, from an abundance of money, is greater in any market than in another; commodities will immediately be sent there, to get the high money price. And, on the contrary, the money will be transferred to the other country.

22. Thus it will always, happen, that, as goods are cheap or dear, and money in a state of abundance or scarcity, so each will be interchanged; and thus, gradually, there will be a tendency to an equality of prices, and an equality in the effect of the stock of money: whether we consider prices to depend upon the whole stock of money, or otherwise.

23. Money is thus, absolutely, necessary for the encouragement of foreign commerce; and for the medium by which it is affected: and on the other hand commerce is necessary for the general diffusion of money, all over the world; which it produces with great equality as to its real effect. For the process of which we must refer, as before, to *Wheatley* on *money* and commerce; and to the consideration of the process of what is called technically exchange: which is the peculiar business of the dealers in foreign money, amongst all nations.

CHAP. VII.

Of Wealth; Circulation; Prices; and the Value of Money.

1. WEALTH may be defined the possession of durable and consumable commodities.

2. Money is wealth also, in as far as it is the representative of such commodities; and may be exchanged for them. And when it may be exchanged for them, in foreign commerce, it may be considered as national wealth, generally.

3. All commodities and, therefore, wealth are unequally distributed in every state. And, as commodities are distributed unequally, so, also, is money.

4. Those who possess a larger share of the mass of the money in any state, are enabled to purchase commodities at a higher rate, than others; and it is generally found, that, where wealth is distributed with great inequality, the prices of commodities of necessity will be increased thereby; but the tendency to this increase may be affected by some counterpoise,

in the nature, course, or, as we may call it, the elements of prices.

5. The exchange of commodities for money is, frequently, denominated the *circulation* of money, which must, from necessity and the nature of things, be incessantly repeated. It has been observed, however, with some justice, that it is rather the exchange of the commodities, which produces the circulation of money, than the money which influences the exchange of the commodities. The notion of *circulation* is, notwithstanding, well applied to money; and deserves our principal consideration.

6. It is from the peculiar circumstances, which attend this circulation, that arise the different variations in the mass, or whole stock of money in any country; and the rise and fall, or permanent state of prices.

7. These circumstances may be considered distinctly; and, *first*, the number of exchanges, or circulation of money, in a given space of territory, will be more or less, as the actual number of the people, or the population of the state, is greater or less. In the language of mathematicians, therefore, it may be

said, that circulation varies with, or as population: and this we shall call its *first element.*

8. *Secondly*, the number of exchanges must be increased, or diminished, by the actual increase, or diminution, of the quantity of exchangeable commodities, in a nation; or its wealth; which may be called its *second element.*

9. *Thirdly*, These exchanges will be more or less frequent, as the effective demand; that is, the possession of the equivalents to be exchanged, and the wants of the consumers. And this is its *third element.*

10. Again, we may consider, how these elements themselves are subject to variations; and, as to the changes in the amount of population, we may consider it as having a tendency to perpetual increase, restrained only by the effects of war, disease, vice, moral restraints, and the other checks to population; which are so admirably discussed, and so amply detailed, in the excellent work of *Malthus* on that most important subject.

11. *Secondly*, The quantity of consumable commodities varies, according to the different

states of the arts of production: as agriculture and manufactures: and also, as commerce is more or less extensive, and trade more or less free.

12. The effective demand, or power of giving any fixed sum of money, or price for any commodity, is different, under different distributions of wealth; and, therefore, varies by the enjoyment of civil and personal liberty; and as the arts and facilities of commerce are more or less improved; and also according to the prevalence of habits of consumption, or parsimony; that is, as luxury or economy prevail.

13. *Price* has been already defined to be, the money given for commodities; and *value* may be considered as the quantity of commodities exchanged for any given sum of money.

14. It will, therefore, readily be perceived, that the *mass*, or stock of money, in actual circulation, must depend upou all the above circumstances; which affect circulation. And that the general rate of prices, in any given territory, will be in a ratio compounded of the frequency of circulation, and the mass of the money which is in circulation. In other

words, that, all the above circumstances, or elements of circulation, remaining the same, prices will be higher, when the mass of money in circulation is greater; and, on the contrary, that they will fall, as it increases. While the value of money will vary, exactly in an opposite direction, with the price of commodities.

15. It will also appear, that, if these circumstances, which affect prices, vary in themselves; prices may remain the same, under very different circumstances: because a change in one element of circulation affecting prices, may be counterpoised by some opposite change in another element.

16. Thus prices vary as the mass of money, and as circulation, and its elements. Suppose the mass of money 2, and circulation 3, then $2 \times 3 = 6$, and if the mass of money be increased to 3, and the circulation fall to 2, the product will still remain equal to 6.

17. *Credit*, it has been seen, affects the mass of money, by rendering less money necessary; but it gives the same, or a greater effect to a small sum, as would be produced, under like circumstances, by a large sum; and rather increases prices, than otherwise.

18. The same may be said of trade and commerce, in all their arts; except so far as superior arts and manufactures increase commodities.

19. With respect to the increase of prices, and their gradual, or sudden rise and fall, this must depend upon sudden, or gradual changes, in the above elements of circulation and of price; they may, therefore, be said to increase invariably with the rapid increase of money; provided it increases faster than the above elements of population, commodities, and demand; or provided each of them does not keep pace with it.

20. Now, as the mines of the precious metals continue constantly to be worked, and to produce incessantly more and more money; which is distributed in commerce amongst all nations; it may be expected, that prices will be incessantly rising.

21. This is certainly true to a great extent; but as no state can acquire any quantity of the precious metals, except in exchange for commodities, or labour; it follows, that this increase of money is a great encouragement to the production of commodities; and that the

proportion of the mass of money in any state, is very slowly increased; though its actual quantity is incessantly augmenting. And, in general, money may be said to bear a very constant ratio, to the increase of commodities: considering money, as the generical term for all coins of the precious metals.

22. Aristotle is therefore correct when he says, "Money, which represents the value of all other things, varies in its own; but the variations are less considerable than those of most other substances." But this can only be true of money, as a generical term for the precious metals coined into money; the rate and nominal value of which is not altered by the state. It is true of no other sort of currency; falsely called money. It is false, when the value of money may be capriciously altered by the state. It is not true, when a money of paper can be created instantaneously; at the will of the state, or of individuals.

23. The real cause of this quality of money is, that it is, in its nature, a commodity; raised by labour; purified with art; and to be purchased only by the exchange of commodities.

24. *Depreciation* of money is the increase of

prices. *Increase* of the value of money is the fall of prices.

25. Depreciation is a fact to be ascertained by experience; by the increase in the rate of prices generally; and more particularly by the increase in the price of arable and pasture land; which, as it is the chief source of production, and is generally of a steady value, is the best test of the value of money. *

26. The increase of real money is definite; and cannot exceed the increase of the quantity of the precious metals by mining.

27. But the increase of all the representatives of money, which depend upon credit, is indefinite; for credit itself has no limit.

28. The increase of real money is a perpetual incitement to commerce; and also to the production of commodities.

* See Puffendorff, Lib. v. Cap. 11. Sec. 15, 16.

CHAP. VIII.

Some Axioms concerning Money by way of recapitulation, from the foregoing Chapter.

As the extent and multiplicity of subjects considered in the foregoing chapters may, upon reference be somewhat embarrassing; it may be convenient to recapitulate some of the most important results, by way of axioms; in the most concise terms that we can devise.

Axioms concerning Money, by way of recapitulation.

Of the Variations in the Value of Money.

1. MONEY, which represents the value of all other things, varies in its own.

2. But its variations are less considerable than those of most other substances.

3. It varies as the effective demand for it, and its own quantity or supply.

4. Both its quantity and its effective demand vary, as the commodities by which it

is first purchased, and for which it is exchanged*.

5. These exchangeable commodities vary in quantity and value as population and the productiveness and quantity of labour.

6. Its quantity and effect also vary as the number of exchanges or degree of its circulation; which varies as population; and as the quantity of commodities; which also varies as the distribution of wealth; as the productive arts; as commerce, and the arts of money dealing; and as luxury and economy.

Money a good common Measure.

8. Money is a good common measure of all things in exchange. It is indeed the best known.

9. Exchange is essential to society.

10. Equality is essential to exchange, and money produces this equality.

* Money would not be raised, if it were not to be used, or to be exchanged, for commodities. It is, in its very essence, a pledge of commodities.

11. The exchangeable value of money has a tendency to equality every where.

12. But it is never equal in all places; but is constantly fluctuating by the operations of commerce.

13. To illustrate it by a figure, money, in commerce, is like the water of the ocean; which is elevated by the swell of the tides perpetually; has a constant tendency to subside into a level; and is, therefore, never stagnant or at rest.

Price and Value, what they are and their Changes.

14. Price is the money given for a commodity; and value in exchange, the commodity given for money.

15. Prices vary with the relative quantity of money; and the stock of commodities in the market.

16. The value of money is estimated by the quantity of commodities which it will purchase.

17. Prices determine this value.

18. Increase of money advances prices.

19. The advance of price is the diminution of the value of money.

20. Prices are steady or unsteady, when the demand and supply of commodities and of money are regular or steady; or the reverse.

21. Prices become steady, when money has got into circulation, and measured the price of many commodities.

Of Wealth.

22. Wealth is the possession of productive, permanent, and consumable commodities.

Money, a Pledge or Symbol of Wealth.

23. Money being a pledge or symbol of value, is a pledge of wealth.

When Increase of Money is Increase of Wealth.

24. The increase of money, as a pledge, or *symbol*, can be no increase of wealth, until the wealth, which the pledge, or symbol, represents, is forthcoming. And while it decreases prices, it is no increase of wealth; but

may become so, by exportation and the purchase of commodities, which are wealth.

25. The expectation of this increase may be called convertibility of money into wealth.

Commerce what, and its Effects on Money.

26. If prices are higher in one place than another, commodities will be carried from the one to the other, while the difference wil. pay the charge of conveyance.

27. This promotes trade and commerce.

28. Commerce tends to bring prices to a levell

29. The effects of commerce can only be impeded by financial and other restrictions; except such as are for the maintenance of good faith.

30. Commerce is necessary to the first introduction and continual supply of money.

31. It circulates money, and effects the exchange of commodities universally.

32. It tends to equalize the price of com-

modities, and the value of money universally; except as far as it is impeded by financial regulations.

Medium of Exchange.

33. Money is necessary to commerce as the medium of exchange.

34. Money is the incitement to commerce, by affording a ready and safe pledge of value and medium of exchange.

Money the chief Object of Commerce.

35. Money, being considered as a pledge, or symbol, of wealth, is the chief object of commercial exchange.

36. Money can pass from nation to nation, only in exchange for value, in labour or commodities.

37. It is exchanged for commodities, when the price is higher where the commodities are to be consumed.

38. By the above Axioms 15, 18, prices will be higher where the relative quantity of money is greater, and where the productiveness and

quantity of labour and skill in commerce are less.

Of the Equalization of the relative Quantity of Money.

39. By exchange in commerce, the relative quantity of money will be reduced or equalized.

40. As money is the pledge or symbol of wealth, commodities, being valued in money, pass from nation to nation in exchange; upon a sense of equality.

Of Foreign Expenditure.

41. Labour being valued in money; if any state, by convention, agree to perform certain offices of labour, for another, as in war; money or commodities must pass to pay for it. The price of such labour is called a subsidy.

42. This, as well as the pay of armies and agents of the state, in foreign countries, is called foreign expenditure.

43. Domestic trade occasions a circulation of money, in exchange for labour and commodi-

ties, and in payment of taxes, or the price of the labour of the state, the one for the other.

44. Foreign commerce effectuates the exchange of labour, or foreign expenditure, money and commodities; to which may be added the payment of rent and annuities, from the inhabitant of one country to the inhabitant of another.

The true Balance or Equality of Commerce.

45. In trade and commerce, these articles must balance each other equally.

Commerce spreads the Supply of Money equally.

46. The quantity of money which passes from one nation to another must be regulated by the supply from the mines and by Axioms 5 and 15.

47. Commerce equalizes this supply, and disperses the money raised at the mines all over the world.

48. The supply being definite, the circulation of money cannot exceed it.

False Notion of the Balance of Trade corrected.

49. The old notion of a balance of trade,

meaning that an importation of money is the only beneficial trade; is absurd. Such an importation is useful, or otherwise, according as money is the real pledge or symbol of wealth.

50. As money comes into any country by commerce, in exchange for wealth or labour; it goes out, also, in exchange for wealth or labour.

51. A balance of trade invariably on one side cannot be paid in money; except where the country paying the balance possesses the exclusive property of the mines: or either, an exclusive or superior trade with the country possessing the mines.

Credit defined.

52. Credit, in commerce, is a pledge of faith for the payment of money.

53. Credit gives an apparent increase to the quantity of money; as money does an apparent increase of wealth.

Of Bills of Exchange.

54. Bills of exchange and promissory notes are evidences of credit.

55. Increase of bills of exchange and promissory notes is an apparent increase in the effectual quantity of money.

56. Credit being a pledge for money, and money a pledge for wealth, wealth is increased by neither, till the things apparently represented by them, that is wealth, is forthcoming.

Credit affects Prices indefinitely.

57. Increase of credit, bills and notes, increases prices.

58. Credit, is ideal, and matter of opinion.

59. Credit does not vary, as the labour and commodities, by which money is first purchased; nor, as the productiveness and quantity of labour.

60. Increase of credit, and of bills and notes, is indefinite, and has no fixed or definite proportion to labour and commodities, or to their production.

61. Credit being ideal has no natural limit.

CHAP. IX.

Of Coins, and the Duties of the State, in regard to Coinage.

1. BULLION is gold or silver, purified to various degrees of fineness; from which *coin* is made.

2. *Coin* consists only of certain portions of the precious metals assayed, weighed, and stamped by the authority of the state, and allowed to pass current in all payments. It is a thing so well known in *specie*, that to describe it is wholly unnecessary.

3. While *coin* remains within the territory of the state, by which it is stamped, or by which it is authoritatively allowed, it is called *money*; the stamp upon it marking the degree of its purity.

4. The imposition of this stamp is an important duty of the state, which cannot be neglected. For, although, it is apparent, that, when the purity of bullion, or money, is ascertained, a better measure of value cannot be

formed; yet, unless that purity is known, and can be readily discovered, there is, perhaps, no worse measure of value; because there is nothing, in which persons may, ordinarily, be so greatly deceived, as in the real quantity of pure gold or silver, in any given bar, or ingot of bullion, or any piece of plate. Hence the gross imposition of those who make base and counterfeit money.

5. It is true, that science has afforded an easy method of ascertaining the purity of these metals, by the hydrostatic balance; which ascertains the specific gravity of every metal. But, in early times, this art was not known; and, for the convenience of exchange, it is necessary that good and bad money should he known by immediate inspection, which can only be done by stamping it in the manner of coin. When it will be readily distinguished, by the correctness of the impression, whether it is genuine; and, by its perfection, whether it is of full weight, or diminished by wearing.

6. Fraud, in this article, mnst be prevented by the severest penalties; and all states punish, with inflexible rigour, every act of counterfeiting, debasing, or diminishing the coin; ex-

cept when it is effected at the will of the state itself, or of those who wield its powers.

7. From the moment that any coin is adopted by the state, all ordinary contracts of exchange will be made, for a payment in some such coin; and, in performing them, it is necessary that a definite rule should be laid down by the state, as to the quantity of coin, money, or bullion, which shall correspond to any given denomination; as a pound sterling. And the settled quantity of pure gold or silver, in each coin, is called the standard, or fixed purity and alloy; and necessarily fixes its value in exchange. While the ordaining, that a particular coin, or quantity of gold or silver, shall pass, in all exchanges, with time given for payment; according to certain rules, as to weight and intrinsic value, is called the *legal tender*.

8. These are most necessary and important objects of concern in every state; whose duty it is to provide for them, with a just attention to the interests of its subjects. For, without them, all money payments, with time, must be rendered uncertain and insecure; and the greatest confusion introduced. What expedients might be adopted, if the state did not

interfere we shall not inquire; though, probably, commercial men would have discovered some means of making their payments in bullion, with accuracy and justice. And banks, upon the principle of those of *Hambro'* and *Amsterdam*; where bullion is assayed, deposited for safe custody, and transferred from one account to another; would, sufficiently, answer the purpose. These banks are, indeed, entirely an artifice of mercantile invention; and an evidence how easily commerce adapts its usages to its actual wants. For the ordinary purposes of life, however, some small coins seem to be absolutely necessary: and these it is the duty of the state to provide.

9. The nature of money, as a measure of value, has been already sufficiently explained. It is this use of it, which demands the peculiar attention of the state. If a money could be devised of one of the precious metals only; which should be divisible into portions sufficiently minute for the purposes of small change, and the standard be invariably fixed; a measure of value would be obtained as perfect as the nature of money will allow. A permanent standard of value, it has been seen, is not in the nature of things. But, it is clear, that a money, upon the principle of

the *Hambro'* bank, would answer the purpose of small change also; if the small sums were transferrable to bearer, by notes like those of the bank England. The actual and corresponding deposit, must, in that case, at all times, be retained in specie, in the bank; ready to be delivered to the holder immediately. The advantage of such a money would be, that it would afford a single and uniform measure of all value in exchange.

10. As monies or coins are at present made, consisting of different sorts of metal, there is, necessarily, a difference in their comparative values; which occasions many inconveniences to the circulation of money; and almost constantly affords a profitable speculation to acute money dealers in every nation.

11. When a state fabricates two species of coin, the one of silver and the other of gold, it ordains, that one shall be exchanged against the other, at a certain rate; as a guinea for twenty-one shillings; or a louis d'or for twenty-four livres. By this act, it necessarily fixes a maximum; and establishes a price, which its subjects cannot exceed. But, whether this price is the just value of gold and silver, comparatively speaking, can never be truly ascertained. It may be the just proportion to-

day; but is not so to-morrow. For it is the nature of all commodities, and of gold and silver amongst the rest, to fluctuate in their comparative values: a truth which we shall not further investigate; having already established, at so much length, the real nature of value in exchange.

12. The instant, that this relative value alters, a skilful refiner has an opportunity of gaining money, in the easiest manner; without exciting the suspicion of his simple neighbours. He immediately proceeds to collect all the coin of this metal which is underrated in the coin, melts it in his crucible, and sells it for plate; or sends it to some other country, where its true value is obtained. And thus, in a short time, is all the coin of this kind made to disappear. This happens particularly, when the proportions of gold and silver coins, a valued by the state, are different in neighbouring countries. Thus in 1690, in *Germany* the proportion of value in coins of the country, was as 12 to one, the gold against the silver: in *Flanders* as 12 ½ to one; in *England* as 13 $\frac{1}{3}$ to one; and in France as 13 ¼ to one. Whence, it is apparent, that by collecting gold in exchange for silver, in any of the above countries, and transmitting it to France, a

profit might be made; and particularly by transmitting it from *Germany*.

13. This will be sufficient to shew the difficulty there is of affixing justly the relative price of gold and silver, in the coins; but, if a further practical elucidation of the subject is necessary, it may be obtained in the work of Sir *James Stewart*, already cited. For, although, in theory, that writer is very defective, as will be observed by the perusal of the foregoing chapters, yet in his statement of facts there is much accuracy.

14. We shall further illustrate the subject, by analytical calculation.—Suppose the common proportion, throughout Europe, of gold to silver, in value, as 15 to 1, weight for weight; and let a signify a pound of gold and b a pound of silver: the equation is $a = 15\,b$. Then, if any nation values its gold coin in the proportion of 16 to one, it will in coin be $a = 16\,b$; and each neighbouring nation will send gold to exchange for silver, and gain one sixteenth upon each transaction; or the same thing will be effected by a refiner, who melts and converts it into plate.

15. The same thing will happen also, when

the *alloy* or impure mixture in coins, is not preserved in equal proportion in silver and gold. Thus let the fine gold, in *pure* coins be 16. c.; and the fine silver 6. d.; and suppose it required, to make a coin of gold, only half as fine, the pure gold will be 8. c. Wherefore, to preserve the proportion, of value in the gold and silver coins the pure silver in the latter must be 3. d. For 8. c. 3. d. :: 16 c. 6. d. But, if the proportion is increased in favour of gold, and 8. c. made equal to 4. d, or 8. c. = 4. d; then will foreigners gain by exchange, and the refiners, by melting, one fourth part or 25 per cent. And gold will be exchanged against silver until the whole silver coin is destroyed.

16. Upon the above suppositions

$$a + 16\ c = 15\ b + 6\ d$$
$$a + 8\ c = 15\ b + 3\ d$$

And if the proportion of one is altered it must be set right by the other;

$a + 16\,c = 30\,b + 3\,d :: a + 16\,c = 15\,b + 6\,d$
$a + 8\,c = 7\frac{1}{2}\,b + 6\,d :: a + 8\,c = 15\,b + 3\,d$

It follows, therefore, that the alloy is valued as nothing, in all foreign exchanges. And the *standard* being equal, it is the quantity which is given for the most plentiful metal, in change for the more rare, that forms the proportion of their value.

17. Also, when exchange is favourable, and without departing from the above rules of proportion, so as to leave a difference which may encourage the withdrawing of one of these metals, there is a small advantage in favour of the other; it is clear the balance will be paid in the preferable metal; and after a number of years this will be the most abundant in the currency. Besides which, if this metal is the most rare, its being susceptible of fewer divisions, the commodities of luxury which are purchased by the rich, will be somewhat higher in price, than if the preference were given to the more plentiful metal. And as it is easily conceivable, that the more minute are the subdivisions of coin, the greater opportunity there is for depressing the price of commodities in traffic, and dividing the difference between buyers and sellers; so, if there are not pieces of coin sufficiently small, the poor must feel great inconveniences; and riches must be very unequally divided. Of course, small money of copper or some coins greatly alloyed become necessary.

18. But this, two-fold proportion, between the weights and the standard of the different coins, is not the only one necessary to be observed. These constituting the only intrinsic

value of coins, an equal proportion is essential between the divisions and subdivisions of each coin. For example, let there be one quantity of silver m, of the weight a, of a given standard, of the denomination c; Then is $a = c$. But let the standard be altered; that is, suppose the quantity of silver m is changed; by placing instead of any given portion of it, as x, an equal weight of alloy as y; while the portion of silver m, in the other coin, remains still of the weight a. Let z be the difference between the real value, and the nominal value of the quantities x and y: and there will be one weight $a = c - z$. If then the eglislature directs that this weight in money a, of one kind or other indifferently, shall be paid for c; it is precisely the same thing, as if it should command that c in figures shall be equal to $c - z$; or c, less z—which is impossible. And thus the equality, which is the basis of all exchange, is destroyed.

19. It must, then, happen, of necessity, that every one will endeavour to make the payment of c, in the less valuable coin; that is in that weight called a, which is equal to $c - z$; to which nobody is willing to consent; and a great interruption of commerce and general disorder follows, by the locking up of all the

pieces denominated a which are equal to c. The case would be exactly the same, if, by any other means, the equality of exchange was interrupted. The most valuable coin would be no longer circulated. And this principle is incontestable, namely, that when a state gives, at the same time, two different intrinsic values to the same nominal value of its specie; or two different nominal values to the same intrinsic value, it stops the circulation and diminishes the quantity or general mass of its coins.

20. An instance of this now occurs. The *dollar token* is valued at 5*s*. 6*d*. and its subdivisions, the 3*s*. and 1*s*. 6*d*. tokens, are estimated at the like rate; while a *crown* is estimated at 5*s*. and a half-crown at 2*s*. 6*d*. Whereas the *crown* contains sixpenny worth of fine silver more than the dollar token. Again, the bank note is, to many legal purposes, a tender for 20*s*. sterling: while it is valued by the bank at 3 dollars, one 1*s*. 6*d*. token and one shilling. And the guinea sterling, which is worth 21*s*. sterling silver, or four crowns and one shilling, is required by law to pass for a pound note and a shilling. The pound note is, therefore, the representative of a coin, which has two

different values. The whole of the good silver and gold coins is out of use, and the bank note is never exchanged, except for the bank tokens and some light shillings.

21. The reason of this is apparent from the principle of exchange; which being a voluntary contract, can never proceed, except upon the fair principle of a just equality. When this principle is violated, exchange never takes place, without the deception of one of the parties; when it is properly denominated fraud; or by the violence of the law; when *law* enforces *rapine*. If, upon any other principle, a man exchanges a crown for a dollar, he gives nine-pence, or more, out of his pocket for nothing, apparently; unless he has some secret interest in imposing upon the bystanders. This act is not an exchange simply, but a gift; with the probable purpose of delusion.

22. While the people remain ignorant of any disorder in the coinage, these exchanges will pass without notice; until the most valuable coin becomes scarce, by being withdrawn from circulation, and melted by the refiners. And, during this time, many artful money dealers

will profit by the universal ignorance of their countrymen.

23. From these principles it follows, that it is the duty of the state to watch, with great caution, over its monies; and not to alter them without absolute necessity.

24. It is not the simple denomination, but the intrinsic value of the coin, which gives it a value in exchange. If, therefore, the coin is worn, or much diminished in weight, it will be unequal in value to new coin, and cannot be exchanged for it. So that if the old coin is suffered to pass by law in payments, no new coin will be made; and that which is good will be melted. So, if an allowance is made for wear in coin; an opportunity will be afforded to the artful of quickly reducing all new coin to the lowest standard, at which it is permitted to pass current. Thus, in the *English guinea*, an allowance is made of one grain and four-tenths of a grain for wear. This affords a profit to any one, who is artful enough to reduce all his guineas to this lowest standard. And hence it has followed, that, although the actual and fair wear of a guinea would not sensibly diminish its weight, in many years; yet a great part of the coin, which

was formerly current in *England*, was reduced below the standard; and nearly all of it was diminished to the lowest current value.

25. The cost price of coining gold in *England*, is now estimated by *Mr. Mushet*, of his Majesty's mint, at fifteen shillings in the hundred pounds; which he justly says cannot, upon any principle, create a material rise in the price of commodities, or an alteration in foreign exchange. It is probable, indeed, that, as the price of coinage is not valued in foreign exchange, by which, however, the price of commodities must be greatly regulated, the price of coinage is seldom valued in the exchange of money for commodities; whatever it may be with regard to bullion. The value of money, however, is, principally, as the value of bullion; which was commonly lower than that of coin, by a small per centage of three shillings and seven pence half-penny. This, it will be seen, might be about the real loss of interest by coinage; the cost of which was paid by the government.

26. It will not, therefore, be necessary to enter into the question, whether, or not, the coinage should be at the expense of the state; but it may be assumed, that it should be paid

by the owner of the bullion. Because, then, the state might gain some advantage by coinage, and might freely admit of the exportation of its coin. While, for the purpose of preventing the frauds above alluded to, it might strictly preserve the standard; by allowing no coin to pass current, except at the full weight; or with a very small allowance for wear.

27. At present, the recent issue of tokens from the bank of *England*, supplies the only metallic currency of considerable value. All the shillings are reduced greatly below the standard; or they could not pass current with the bank tokens: and it may be safely predicted that, in a short time, the arts of the money dealers will reduce the whole of this silver currency greatly in value. It is only necessary to use a simple process to reduce any silver coin, imperceptibly; by a per centage, which will yield a tempting profit to the dealers; and, as this currency has now no regular standard, the public are exposed to the greatest frauds; without any adequate security.

28. If the current coin were not allowed to pass, except in a very perfect state, means would be found of adopting banks of deposit in every town; upon the principle of the

Hambro bank, by which the wear of the coin would be greatly prevented. It would then be possible to render every piece equal or nearly so in value. For, without these deposits, as soon as the coin becomes worn, there is always a temptation to cull out the heaviest pieces; and reduce them to the lowest current value.

29. In regard to the true value of a guinea and a pound note, the following appears to be a tolerably accurate calculation; although, it is rather too high as to the bank note; because the dollar token is not made of silver equally pure, with the *English* statute coin, weight for weight.

30. Thus a bank three shilling token weighs 9 dwts. 11 grs. or 227 grs. and the weight of three shillings is 11 dwts. 15 grs. or 279 grs.

Therefore 7 tokens are = to 1589 grains of silver, and 21 shillings = 1953 ditto ditto.

Therefore a guinea: 5 tokens :: 1953 : 1589.

Therefore a guinea is equal to $\frac{7 \times 1953}{1589}$ tokens; equal to $\frac{13671}{1589}$ tokens; which is equal to 8 tokens 1s. $9\frac{1}{4}$d. $\frac{1}{1}\frac{2}{5}\frac{9}{8}\frac{3}{9}$ or a guinea is equal to 25s. $6\frac{3}{4}$d. bank currency.

Now by deducting 93 grs. (the weight of a shilling) from 1953; and 76 grs. (the weight of $\frac{1}{3}$ token) from 1589, we shall have a one pound note : 20s. :: 1513 : 1860.

Therefore the one pound note is equal to $\frac{20 \times 1513}{1860}$ shillings; equal to $\frac{30460}{1860}$ shillings; equal to 16s. $4\frac{1}{4}$d. $\frac{8}{3}\frac{5}{1}$; or a one pound note is about equal to 16s. $4\frac{1}{4}$d statute currency.

31. We may therefore state the proportion of these currencies nearly as follows; viz.—A guinea is as 1953 grains of silver; a pound note as 1589 grains of silver; a shilling 93 grains; a bank shilling as 76 grains of silver. A guinea equal to 25*s*. $9\frac{3}{4}$ bank money; and a pound note equal to 16*s*. 4*d*. $\frac{3}{4}$ $\frac{8}{3}\frac{5}{1}$.

CHAP. X.

Of debasing the Coins by the State, and the mischievous Effects thereof; and how the same thing is effected by Paper Money.

1. As coin, or money, is rendered less valuable, by diminishing either its weight or purity; it has frequently happened, that the ruling powers of every nation have, by all these methods, for particular purposes, and for temporary advantages, diminished the value of the coins, retaining their nominal values.

2. The purpose immediately in view was the liquidation of the debts of the state; when the sovereign, having a certain quantity of coin in his treasury, was desirous of paying his debts at an easier rate. Thus, if the king owes one million of guineas to his subjects, and has five hundred thousand in his coffers, it is easy to coin these into a million guineas of a new standard, and to pay, in this new coin, the whole of the old debt.

3. Although this is a plain fraud, the ruling powers in all states, in early times, have com-

mitted it. But there is reason to hope it will not be attempted again; at least, not for the same reason. Fraud is seldom long-sighted; and frequently injures itself. On a great scale it is productive of pure mischief, and is an advantage to no one. And so it has happened with the monarchs, who have wantonly altered, or debased, their coinage.

4. Their debtors are paid, by compulsion, in the new coin; which immediately sinks in value, with respect to commodities, and to the old coin. Its value is in the exact proportion of its weight in bullion, compared with the old coin. And, at this rate, only, it passes in all future exchanges.

5. It then follows, that if the monarch omits to increase his taxes, his future revenues cease to be equally productive in real wealth.

6. In all future contracts, the price of commodities is immediately raised upon him; and if "he is paid in his own coin," a vulgar phrase drawn from this bad practice, and denoting retaliation and severe retribution, he becomes poorer than before. If he should increase his exactions, he is rendered odious, and is execrated as a tyrant. His ministers soon fail

to serve him, in this fraudulent practice. For they speedily discover, that, as exchanges are continually circulating, the evil is constantly returning upon themselves. Their salaries are paid in the debased coinage: in other words, they are diminished, in an equal degree as the public is defrauded. The army, also, discovers the fraud, and revolts at the measure, unless its pay is immediately increased.

7. Without ministers and an army, a monarch is a feeble being. He is, absolutely, without power. When, therefore, a scheme is proposed, in which, neither his ministers, nor his army, will assist him, the monarch must desist from his design, or submit to be deposed.

8. What is the principle of this? The equality of exchange is broken, by attempting to make a guinea pass for half its value; or half its value be exchanged for a guinea. Society cannot exist without exchanges; nor exchanges take place without equality. This is one of the first laws of nature, which are inviolable. No tyrant, however powerful, can break it. The

equity of commerce discovers the fraud, and circulation ceases, till the error is corrected.

9. Whenever this attempt has been made, it has failed; because it is a fraud too palpable to be concealed; too gross to be palliated; too violent to be endured. The remedy is in the hands of every one; the knowledge of the remedy is with every one; and it is instantly resorted to. Power thus finds a natural limit. It is defeated by knowledge; it is stripped of its hands; it finds no agents to perpetrate its misdoings. For it is a truth of eternal force, that power will never find a voluntary agent of gratuitous mischief. The agents of mischief, must share in its gains; they will not become odious without compensation.

10. Would, therefore, a monarch in future, interfere with the coinage by debasing it, he must expect that all exchanges upon an inequality will cease. He must, therefore, stop the circulation of money; and raise all the wealth necessary for his dignity and support; for the pay of his soldiers and his ministers; by simple requisitions.

11. One reason why these frauds have not succeeded is, because they are of easy detec-

tion; for even the debasement of money, by adding to the alloy, is speedily discovered. They can also be repeated only at distant intervals, when the treasury is full. Besides which, it takes some time to complete the coinage; and the operations of the state must be almost suspended for the interval.

12. Were a means discovered of concealing the evil, and repeating it slowly, imperceptibly, by easy degrees, and without checking the circulation, it would probably be resorted to, even in this enlightened age.

13. It will be shewn, hereafter, that a paper money affords the means of doing this, in a very effectual manner, for a long time.

14. Paper money was introduced about the time, when the monarchs of *England* ceased to debase the coin; and it has been resorted to by every state in *Europe*, and by the republic of *America*. Its mischievous effects have, in many states, been most severely felt; and it has then ceased to obtain any currency.

15. In *England* its currency is universal; but it is formed upon a system so complete and so intricate; yet so moderated by certain elements which tend to its support; that

its mischiefs have not been felt; to such a degree, as to render it either intolerable or odious.

16. It will require a long and perhaps tedious investigation to unravel the mystery: but, in the *elements of the science of money*, this fact must be made to appear; or the work will be justly deemed defective.

17. How a paper money of some kind, may be made to produce the effect of debasement can thus briefly be demonstrated.

18. Suppose a sovereign to institute a bank or banks upon the principle of a deposit or of a pawnbroker's shop; and to raise, by force or on loan, all the money of his people. This he might deposit in his treasury; in order to pay his foreign troops: and, for every guinea and shilling thus raised, he might give a note, check, token or duplicate; in exchange for which he promises to return the money pledged, either on demand, or at a future day.

19. Before the day comes, he privately creates new notes or duplicates, as like the former as possible; with the same stamp of authority. No one can see a difference; no one is ac-

quainted with the actual sum in the treasury. They cannot be weighed; they cannot be rung on the counter first, and then nailed to it; as bad shillings are, to stop their circulation. The notes pass for exactly the same sum as they did originally.

20. They are increased gradually, from day to day, and their effect is slowly perceived in the rise of prices. For such an increase of money necessarily raises prices. Land grows dearer; bread rises constantly; wages cannot keep pace with it; the poor starve; the rich find their incomes inadequate to their expenditure. All this has passed for years, without any one suspecting the cause. The truth is, the monarch has been secretly debasing his money; violating his compact; infusing, daily, not a base metal, but a quantity of bad faith into his new paper coin. But as bad faith is a quality of which no subject can suspect his monarch; a few calculators only, discover it; but no one speaks out, and the notes continue to circulate.

21. At length, the demands of the state increase rapidly; the money must be increased with equal rapidity; and prices rise as rapidly. With the rise of prices, the demands of the

state increase; the pay of the army becomes insufficient; the army demands an increase; more new paper money must be issued; and prices still increase. The officers of the state require higher salaries; the army again demands higher pay; and more money is again made.

22. Till, at last, it is found, that increase of money and rise of prices revolve in an endless circle. The money is increased; but not its effect. General discontent prevails; the ministers find it of no use to continue to struggle against the law of nature; which, by the equality of exchange, constantly defeats their purpose. Justice is then resorted to, as the only policy which can restore public tranquillity; the coinage is reformed; and the state by adhering to good faith recovers its equilibrium.

23. This exact career has been run by nearly all the nations of *Europe*, *England* only excepted. And, if we look to *France* we shall find that, during the revolution, all the most violent commotions happened during the currency of paper money, or while its ruinous effects were fresh in recollection. *Napoleon*, the emperor of the extended dominion of France, notwithstanding his military talents,

probably owes the stability of his reign to the having fixed or preserved the pure standard of the French coins; and thus maintained public credit: or rather to the having had so little recourse to public credit, as respects money, that it is not to be regarded.

24. The mischiefs of paper money are well known; and a paper, issued by the state, is, generally deemed odious in *England*. It would probably be too revolting to the parliament to adopt it; and the virtues of the *Brunswick* line of kings are too well known, to believe that they would willingly yield their sanction to it.

25. A paper currency is, however, universal in *England*; but its influence is not as yet of equal malignity with that which we have hitherto described.

26. That it will in time be felt, and will be destroyed is capable of demonstration; for no paper money can differ, in its real effect, from that which we have described. Its poison may be concealed; and it may be swallowed greedily. It may be administered in small doses, and, like *opium*, may stimulate with pleasure; long before it destroys with

stupefaction. It may give a temporary vigour to the trader; but it saps the constitution.

27. Before we proceed to our detailed account of the paper money of *England*, let us attempt a brief and ready demonstration that all paper money must have the same effect as debasement. It will satisfy the rapid glance of those less cautious and scientific inquirers, who seek to know all things by intuition. It will lay bare the principle of the science, while it leaves the practice of the art to be slowly acquired.

28. By collecting the whole money of a nation, and issuing paper in exchange, we have shewn how easily a monarch may debase it. By collecting all the money in the state, and issuing notes, it will be easy for a bank to do the same thing. By collecting but half, and issuing notes equal to twice the other half, it will render the whole currency of less actual value, by one fourth. The pure metal in this case is the coin; the *alloy* is the *credit* of the bank, whether founded upon public or on private faith.

29. The same effect is produced in the rise

of prices; the same increase in the money or paper price of land; the same inadequacy of wages to support life; the same insufficiency of the pay of soldiers to maintain respect; the same want of the means of luxury renders the rich discontented, and ministers themselves uneasy in their post, unsettled in their state.

30. The crown itself is not exempt from the evil. The revenue of the state is deficient, and its deficiency daily increases.

31. We shall explain the whole, in due course; but for the present we will assume, from our brief demonstration, that all paper currency is debased money; always accompanied with deception; but sometimes without intentional fraud; as we sincerely believe to be the case with respect to the English currency.

CHAP. XI.

Of the successive Debasements of the English Coin: the Prerogative of the Crown relative to Coin; and the Law of Nature thereon.

1. THE successive debasements of the English coin may be most clearly stated, by giving a table of the weight of a pound sterling at several successive periods.

2. Thus, according to Lord Liverpool's statement *, the Tower pound of silver was coined in

A. D.		s.	d.			s.	d.
1066	into	20	0				
1300	- -	20	3				
1344	- -	22	2				
1346	- -	22	6				
1353	- -	25	0				
1412	- -	30	0				
1464	- -	3	6			s.	d.
1527	- -	42	$2\frac{1}{4}$	Pound Troy		45	0
1560	- -	56	3	- -	-	60	0
1601	- -	58	$1\frac{1}{2}$	- -	-	62	0

* See a Treatise on the Coins of the Realm; in a Letter to the King, by *Charles Earl of Liverpool.* Cadell, 1805.

3. By these successive debasements, from William the First to Elizabeth, therefore, the pound in tale, or 20*s.*, was nearly reduced to one third of its primitive weight*.

* Afterwards in the reign of King Charles the II. similar attempts were projected. The following short tract of Sir Robert Cotton is scarce; and as it contains important information on the subject, and clearly shews that our doctrines are not novel or rash, we shall insert it in form of a note.

A Speech, made by Sir Robert Cotton, Knight and Baronet, before the Lords of His Majesty's most Honorable Privy Council, at the Councel Table; being thither called to deliver his Opinion, touching the Alteration of Coyne. 2. Sept. Annoque Regni Regis Caroli 2.

My Lords,

Since it hath pleased this honourable table to command, amongst others, my poor opinion concerning this weighty proposition of money, I most humbly crave pardon; if with that freedom that becomes my duty to my good and gracious master, and my obedience to your great command, I deliver it so up.

I cannot (my good Lords), but assuredly conceive, that this intended project of enhancing the coin, will trench both into the honour, the justice, and the profit of my royal master very far.

All estates do stand *magis famâ quam vi*, as *Tacitus* saith

4. The debasements, which were made in the coin during this period, were partly effect-

of *Rome*: and wealth in every kingdom is one of the essential marks of their greatness: and that is best expressed in the measure and purity of their monies. Hence was it that so long as the Roman empire (a pattern of best government) held up their glory and greatness, they ever maintained, with little or no charge, the standard of their coin. But after the loose times of Commodus had led in need by excess, and so that shift of changing the standard, the majesty of that empire fell by degrees. And as Vopiscus saith, the steps, by which that state descended, were visibly known most by the gradual alteration of their coin. And there is no surer symptom of a consumption in state than the corruption in money.

What renown is left to the posterity of Edward the First in amending the standard, both in purity and weight from that of elder and more barbarous times, must stick as a blemish upon princes that do the contrary. Thus we see it was with Henry the Sixth; who, after he had begun with abating the measure, he after fell to abating the matter; and granted commissions to Missenden and others to practise alchemy to serve his mint. The extremity of the state in general felt this aggrievance; besides the dishonour it laid upon the person of the king, was not the least advantage his disloyal kinsman took to ingrace himself into the people's favour, to his sovereign's ruin.

When Henry the Eighth had gained as much of power and glory abroad, of love and obedience at home, as ever any; he suffered shipwreck of all upon this rock.

When his daughter queen Elizabeth came to the crown,

ed for the purpose of augmenting the revenue by the seignorage which was subtracted from

she was happy in council to amend that error of her father's; for, in a memorial of the Lord Treasurer Burleigh's hand, I find that he and Sir Thomas Smith (a grave and learned man) advising the queen that it was the honour of her crown, and the true wealth of her self and people, to reduce the standard to the ancient purity, and purity of her great grandfather King Edward IV. And that it was not the short ends of wit, nor starting holes of devices that can sustain the expence of a monarchy, but sound and solid courses: for so are the words. She followed their advice, and began to reduce the monies to their elder goodness, stiling that work in her first proclamation Anno 3. A famous act. The next year following, having perfected it as it after stood; she tells her people, by another edict, that she had conquered now that monster that had so long devoured them, meaning the variation of the standard: and so long as that sad adviser lived, she never (though often by projectors importuned) could be drawn to any shift or change in the rate of her monies.

To avoid the trick of permutation, coin was devised, as a rate and measure of merchandise and manufactures; which if mutable, no man can tell either what he hath, or what he oweth, no contract can be certain, and so all commerce, both public and private, destroyed; and men again enforced to permutation with things not subject to wit or fraud.

The regulating of coin hath been left to the care of princes, who are presumed to be ever the fathers of the commonwealth. Upon their honours they are debtors and war-

the coin on its refabrication, and partly with the view of relieving the crown from its ex-

ranties of justice to the subject in that behalf. They cannot, saith Bodin, alter the price of the monies, to the prejudice of the subjects, without incurring the reproach of *Faux monnoyeurs*. And therefore the stories term Philip de Bell, for using it, *Falsificateur de moneta. Omnino monetæ integritas debet queri ubi vultus noster imprimitur*, saith Theodoret the Goth, to his mint-master, *Quidnam erit tutum si in nostra peccetur effigie?* Princes must not suffer their faces to warrant falsehood.

Although I am not of opinion with *Mirror des Justices*, the ancient book of our common law, that *Le roy ne poit sa mony empeirer ne amender sans l'assent de touts ses counts*, which was the greatest council of the kingdom; yet can I not pass over the goodness and grace of many of our kings: (As Edward the First and the Third, Henry the Fourth and Fifth, with others, who, out of that rule of this justice, *Quod ad omnes spectat, ab omnibus debet approbari*, have often advised with the people in parliament, both for the alloy, weight, number of pieces, cut of coinage and exchange) and must, with infinite comfort acknowledge, the care and justice now of my good master, and your lordships wisdoms, that would not, upon information of some few officers of the mint, before a free and careful debate, put in execution this project, that I much (under your honour's favour) suspect, would have taken away the tenth part of every man's due debt, or rent already reserved throughout the realm, not sparing the king; which would have been little less than a species of that which the Roman stories call

igencies, by enabling it to liquidate its debts with a smaller sum of money.

Tabulæ novæ, from whence very often seditions have sprung: as that of Marcus Gratidianus, in Livy, who pretending in his consulship, that the current money was wasted by use, called it in, and altered the standard; which grew so heavy and grievous to the people, as the author saith, because no man thereby knew certainly his wealth, that it caused a tumult.

In this last part, which is, the disprofit this enfeebling the coin will bring both to his Majesty and the common wealth, I must distinguish the monies of gold and silver, as they are bullion or commodities, and as they are measure: the one, the extrinsic quality, which is at the king's pleasure, as all other measures, to name; the other the intrinsic quantity of pure metal, which is in the merchant to value. As then the measure shall be either lessened or enlarged, so is the quantity of the commodity that is to be exchanged. If then the king shall cut his shilling or pound nominal less than it was before, a less proportion of such commodities as shall be exchanged for it, must be received. It must then of force follow, that all things of necessity, as victuals, apparel, and the rest, as well as those of pleasure, must be inhanced. If then all men shall receive, in their shillings and pounds a less proportion of silver and gold than they did before this projected alteration, and pay for what they buy a rate enhanced, it must cast upon all a double loss.

What the king will suffer by it in the rents of his lands, is demonstrated enough by the alterations since the 18 of Edward the Third, when all the revenue of the crown

5. According to Lord Liverpool, the silver subtracted on re-coinage, or the dues of seig-

came into the receipt *pondere et numero*, after five groats in the ounce, which since that time, by the several changes of the standard is come to five shillings, whereby the king hath lost two third parts of his just revenue.

In his customs, the best of rate being regulated by pounds and shillings, his majesty must lose alike; and so in all and whatsoever monies that after this he shall receive.

The profit by this change in coinage, cannot be much, nor manent. In the other the loss lasting, and so large, that it reacheth to little less than yearly to a sixth part of his whole revenue: for hereby in every pound tale of gold there is nine ounces, one penny weight, and 19 grains loss, which is 25 l. in account, and in the 100 l. tale of silver 59 ounces, which is 14 l. 17s. more.

And as his majesty shall undergo all these losses hereafter in all his receipts; so shall he no less in many of his disbursements. The wages of his soldiers must be rateably advanced as the money is decreased. This Edward the Third (as appeareth by the account of the wardrobe and Exchequer) as all the kings after were enforced to do, as often as they lessened the standard of their monies. The prices of what shall be bought for his majesty's service, must in like proportion be inhanced on him. And as his majesty hath the greatest of receipts and issues, so must he of necessity taste the most of loss by this deviee.

It will discourage a great proportion of the trade in England, and so impair his majesty's customs. For that

norage, sometimes amounted to a considerable sum, as the frauds which were practised, in

part (being not the least) that payeth upon trust and credit will be overthrown; for all men being doubtful of diminution hereby of their personal estates, will call in their monies already out, and no man will part with that which is by him, upon such apparent loss as this must bring. What danger may befal the state by such a sudden stand of trade, I cannot guess.

The monies of gold and silver formerly coined and abroad, being richer than these intended, will be made for the most part thereby bullion, and so transported; which I conceive to be none of the least inducements that hath drawn so many goldsmiths to side this project, that they may be thereby factors for the strangers, who by the lowness of minting (being but 2s. silver the pound weight, and 4s. for gold; whereas with us the one is 4s. and the other 5s.) may make that profit beyond sea they cannot here, and so his majesty's mint unset on work.

And as his majesty shall lose apparently in the alteration of monies a 14th in all the silver, and a 25th part in all the gold he after shall receive; so shall the nobility, gentry, and all other, in all their former settled rents, annuities, pensions, and loans of money. The like will fall upon the labourers and workmen in their statute-wages: and as their receipts are lessened hereby; so are their issues increased, either by improving all prices, or disfurnishing the market, which must necessarily follow. For if in 5. Edward 6, 3 Mary, and 4 Elizabeth, it appeareth by the proclamations, that a rumour only of an

the remedy of the coin and the admixture of alloy materially contributed to its augmentation.

alteration caused these effects, punishing the author of such reports with imprisonment and pillory; it cannot be doubted but the projecting a change must be of far more consequence and danger to the state, and would be wished that the actors and authors of such disturbances in the common wealth, at all times hereafter might undergo a punishment proportionable.

It cannot be held (I presume) an advice of best judgment that layeth the loss upon ourselves, and the gain upon our enemies: for who is like to be in this the greater thriver? Is it not usual, that the stranger that transporteth over monies for bullion, our own goldsmiths that are their brokers, and the foreign hedgminters of the Netherlands (which terms them well) have a fresh and full trade by this abatement? And we cannot do the Spanish King (our greatest enemy) so great a favour as by this, who being the lord of this commodity by his West Indies, we shall so advance them to our impoverishing; for it is not in the power of any state to raise the price of their own, but the value that their neighbour princes acceptance sets upon them.

Experience hath taught us, that the enfeebling of coin is but a shift for a while, as drink to one in a dropsy, to make him swell the more: But the state was never thoroughly cured, as we saw by Henry the Eighth's time and the late Queen's, until the coin was made up again.

6. The familiar habit of circulating money by tale, instead of by weight, had given rise to an opinion that government was enabled to affix on the coin an arbitrary value, and that it was only necessary to declare, that such a piece of money should be a legal tender for such a sum, in order to make it permanently pass for so much value. But though, in the common intercourse of society, any given coin, impressed with a particular stamp, and designated by a particular term, may pass current by tale from a confidence in the government, which publishes it, without any consideration of its weight; yet when, from an alteration in the standard, it no longer indicates the same quantity of metal, which it antecedently

I cannot but then conclude (my honourable lords) that if the proportion of gold and silver to each other be wrought to that parity, by the advice of artists, that neither may be too rich for the other, that the mintage may be reduced to some proportion of neighbour parts, and that the issue of our native commodities may be brought to overburthen the entrance of the foreign, we need not seek any way of shift, but shall again see our trade to florish, the mint (as the pulse of the common wealth) again to beat, and our materials, by industry, to be a mine of gold and silver to us, and the honour, justice and profit of his majesty (which we all wish and work for) supported.

expressed, it is immediately decried, and circulated at the value which it actually contains.

7. The mischief of these debasements extended, therefore, through all the gradations of society; and in every relation of private life, maintained by the payment of a fixed income, an injury was sustained*.

* Dr. Henry in his History of Britain has ably illustrated the effects which they produced.

"Though our kings and great barons," he says, "were the chief promoters of the diminution of the weight and value of the coin, they were by far the greatest sufferers by that imprudent measure; for by that means all the fixed annual payments that were due to them from their subjects and vassals, were much diminished in their real value, though they continued the same in name; they received the same number of pounds, which had been originally stipulated, but these pounds did not contain the same quantity of silver, and would not purchase the same quantity of goods with those in the original stipulation. The king and the nobility discovered the error they had made and the loss they had sustained, and endeavoured to apply a remedy, but it was not the natural and only effectual one of restoring the coin to its original weight and purity. An act of parliament was made in 1467 to the following purpose: 'that all debts should be paid in the same substance or quantity of silver, as at the time of making the contracts.' This law was certainly very equitable, but it is obvious the execution of it would be attended with many

8. In estimating the value of money in the age between William the First and Elizabeth with the value of money in the present times, it is necessary to convert the money of the particular reign into the money of the present times, for the purpose of reducing them to a common standard. This reduction may be effected by the following table of the specific gravity of our coin from William the First to Elizabeth, constructed in the able and elaborate treatise of Mr. Folkes*.

difficulties, and productive of many disputes, and that it would be no easy matter to persuade vassals, tenants, and debtors of all kinds, to pay a greater number of pounds, shillings, and pence, than they were bound to pay by their original obligations. There is sufficient evidence still remaining, that though several laws were made of the same tenor with that above, none of them could be executed, and that the several feudal payments, due by the vassals of the king and barons, by the successive changes of the coin, and of the value of money, dwindled down to less than the hundredth part of what was originally intended, and in many cases, to a mere trifle."

* See Treatise of Mr. Folkes on Coins.

Year of the King's Reign, and A. D.	Standard of the Silver.	Weight of 20 Shillings in tale.	Value of the same in present Money.	Proportion.
		oz. dwt. gr.	*£. s. d.*	
Conquest, 1066	old ster.	11 05 00	2 18 01 2*q.*	2.906
28 Ed. I. 1300	—	11 02 05	2 17 05	2.871
18 Ed. III. 1344	—	10 03 00	2 12 05 1*q.*	2.622
20 same 1346	—	10 00 00	2 11 03	2.583
27 same 1353	—	9 00 00	2 06 06	2.325
13 Hen. IV. 1412	—	7 10 00	1 18 09	1.937
4 Ed. IV. 1464	—	6 00 00	1 11 00	1.55
18 H. VIII. 1527	—	5 06 16	1 07 06 3*q.*	1.378
	oz. dwt.			
34 same 1543	w 1 2	5 00 00	1 03 03 1*q.*	1.163
36 same 1535	w 5 2	— — —	0 13 11 2*q.*	0.698
37 same 1546	w 7 2	— — —	0 09 03 3*q.*	0.466
3 Ed. VI. 1549	w 5 2	3 06 16		
5 same 1551	w 8 2	— — —	0 04 07 3*q.*	0.232
6 same 1552	w 0 1	4 00 00	1 00 06 3*q.*	1.028
1 Mary 1553	w 0 2	— — —	1 00 05 3*q.*	1.024
2 Eliz. 1560	old ster.	— — —	1 00 03	1.030
43 same 1601	—	3 17 10	1 00 00	1.000

9. As the sovereigns of Europe have exercised, from time immemorial, the right of declaring at what rate or value the coins of every denomination, current in their dominions, shall pass, and become, in that respect, lawful coins, or legal tender; so have the kings of England always enjoyed and exercised this right. Sir Matthew Hale reckons it *inter jura majestatis*, and says, that it is an unquestionable prerogative of the crown; and he treats with great ability of the nature and extent of this prerogative. In very ancient times, some of the powerful and rebellious barons appear to have assumed this right contrary to law, "which

occasioned great confusion and corruption in money and commerce;" and he adds, that Henry II. coming to the crown, reformed this usurpation and abuse.—In the articles of peace between Stephen and Henry, there was one, which required that the silver coin * should be one and the same throughout the kingdom. In times less ancient this right has been conferred, by special charters, on ecclesiastical corporations, such as the archbishops of Canterbury and York, the bishop of Durham, &c. and on some of the most dignified abbots. But Sir Matthew Hale adds, "that they had only the profit of coinage, and the residence of some moneyers at their cities, &c. and that they had not the power of instituting either the alloy, the denomination, or the stamp." The stamps were usually sent to them by the treasurer and barons of the exchequer, by the king's command, under his great seal; and the masters of these mints, or the chief officers employed therein, were sworn to the king for the just execution of their offices. It appears from the coins made in these mints, which have been preserved, that they were in general of the

* There was at this time, probably, no gold coin in currency; at least, none that was made at the English mint.

smaller denominations; and it is probable that the right of coining, which was given to them by these charters, was restrained to pieces of this description: but the practice of devolving this right of coining gold and silver to the corporations before-mentioned, has never been exercised since the reign of Edward VI.

10. The kings of this realm had frequently mints of their own, not only in London, but in Southwark, Calais, Bristol, Hull, Dublin, and many other cities and towns of England and Ireland; but these were all royal mints, and under the immediate management and direction of the king's officers.

11. The right of setting a rate, or nominal value, on coins authorised to be current, has been exercised by the kings of this realm in two ways: *First*, By their mint indentures, in which a clause is inserted, declaring, at what rate or nominal value the coins, therein ordered to be made, shall be current. *Secondly*, By proclamation. Sir M. Hale inclines to think, that proclamations are not absolutely necessary to legitimate any coin made at the mint, or to make it current; but that the mint indenture, or general usage, is in this re-

spect sufficient evidence, except in the following cases: *First*, To legitimate or make current base coin, or such as is below the standard of sterling. He observes, that a proclamation is in this case necessary, in order to dispense with the provisions of the statute of 25 Edw. III. ch. 13. and the 9 Henry V. Session 2. ch. 6*. *Secondly*, To raise any coin already in currency to a higher denomination or extrinsic value. *Thirdly*, To decry any money already current, that is, either to reject it wholly out of circulation, or to make it pass

* Sir William Blackstone is of opinion, that by the statute of 25 Edw. III. ch. 13. the king's prerogative seemeth not to extend to the debasing or enhancing the value of the coin below or above the sterling value. He acknowledges, however, that Sir Matthew Hale appears to be of another opinion. But if this opinion of Sir William Blackstone is true, the king is also restrained, by the same statute, from diminishing the weight of his gold or silver money. The gold of all the gold coins now circulating in the kingdom has more alloy in it, and consequently is of a baser standard, than in 25 Ed. III. Blackstone's Commentaries, book i. chap. 7. What is called in the text the 9 Henry V. is in Sir Matthew Hale's Pleas of the Crown, said to be the 4th Henry V. ch. 6. which last statute has no relation to this subject; and this mistake is probably owing to the copyists or printers of Sir Matthew Hale's work. (See Lord Liverpool on Coins, p. 19.)

at a less rate or value than that, at which it has hitherto been current. In conformity to this rule, a proclamation was issued on the 17th day of December, 1717, reducing the value of guineas from twenty-one shillings and sixpence to twenty-one shillings; and there are many other instances of the same kind in preceding periods. *Fourthly*, To make foreign coin current at a determined rate or value. The reasons which make proclamations necessary in the two last instances, are so evident, that there is no occasion to state them.

12. In consequence of the great confusion introduced into the system of our coins, by the frequent debasements and alterations, that were made in them during the latter part of the reign of Henry VIII. and the reign of Edward VI. a new practice was introduced in the first year of Edward VI. of notifying to the public the rate or value of some of our silver coins, by placing on the face of them figures, denoting at what rate, or value, they should be taken in payment. The variety of silver coins, then in circulation, of the same denominations, though of different intrinsic values, made it highly convenient that the people should in this manner be apprised of the rate, or value, at which

the sovereign intended that they should be current. This practice continued in use in some of the subsequent reigns, but not in that of Elizabeth (none of whose coins have any such figure upon them): and the same practice of placing figures on some of our gold coins, to denote the nominal value at which they should be current, was first introduced in the beginning of the reign of James I. But this manner of ascertaining the nominal value of our coins has been discontinued for about a century past, except in small silver coins, under the value of a sixpence, which still have figures, denoting the rate at which they are to pass, on the reverse of them.

13. The parliament has frequently complained, and endeavoured to restrain this branch of the prerogative: for in the 5th Ed. II. it was provided by the lords ordainers, (persons, who at that time were intrusted with the government of the kingdom,) that no change should be made in the coin of this realm, without the consent of the barons in parliament; but this, among other regulations made by these lords ordainers, was repealed in a subsequent year of this king's reign. Another attempt was made by the commons in the 20th Ed. III. to re-

strain this prerogative; but Edward III. frustrated their request, by returning an evasive answer to their petition. The frequent debasements, made by this monarch in his coins, induced the commons, in the 25th year of his reign, to make a further attempt; and they petitioned that the money of gold and silver then current should not be impaired in weight, or alloy. The answer returned to this petition was a promise on the part of the king, "that as soon as a good way could be found, the money of gold and silver should be put into its ancient state." In imitation of this monarch, the kings of this realm, in succeeding periods, very frequently exercised this prerogative; and this prerogative was at length recognized and confirmed by an act of parliament passed in the 19th Henry VII. chap. 5. by which it was enacted, that all gold and silver coins "shall be current for the sum that they were coined for;" and by an act passed in the 5th and 6th years of Edward VI. chap. 19. by which it was enacted, "that if any person exchanged any coined gold, or coined silver, receiving or paying any more in value, than the same is, or shall be declared by his majesty's proclamation to be, current for, within his Majesty's dominions, the same shall be for-

feited." and the persons so offending shall be punished in the manner therein directed.*

14. Such, says Lord Liverpool, is the history of the law of this kingdom and the extent of the prerogative, as stated by Sir Matthew Hale, in the History of the Pleas of the crown. Previous to that period, several statutes were passed, establishing regulations with respect to the royal mints, and requiring that the coins issued from them should be of due weight; but not one, that took from the sovereign the right of giving to the coins, circulating in his dominions, their denominative value.

15. Though this great prerogative is, however, unquestionable, says Lord Liverpool, it is certainly advisable, that in the exercise of it, whenever any great change is intended to be made, the king should avail himself of the wisdom and support of his parliament. Sir Matthew Hale observes, that it is neither safe, nor honourable, for the king to debase his coin be-

* In the subsequent period, that is, in the 6th and 7th William III. ch. 17. this prerogative is further confirmed and acknowledged, by enacting additional penalties against those "who shall receive or pay any unclipped silver money, of the coin of this kingdom, for more than in tale it was coined for, and ought by law to go for."

low sterling, "if it be at any time done, it is fit to be done by the assent of parliament;" and he concludes, that, on such occasions, "*fieri non debuit, factum valet.*" It has happened, that since the revolution, the kings of this realm have occasionally exercised this prerogative, on smaller occasions, without consulting the two houses of parliament: yet, on greater occasions, such as a general recoinage, they have always thought it right to avail themselves of their advice and report.

16. We have thus given, from the best authorities, what is considered to be the regal prerogative, in *England*; which corresponds with the power assumed by the monarchs of every other state in *Europe*.

17. But it will appear, from the foregoing chapters, that wherever this power is exercised, in altering the coin by rendering it less pure, or less weighty, it is done for the private advantage of the monarch, and for the deception and injury of his subjects; and that, in the end, it fails to produce any permanent advantage. In practice, therefore, it has long fallen into disuse.

18. From the exercise of this power, in former

times, it has grown into a general belief, that the king can set any value which he pleases upon his money, as it is erroneously called. But the king can, in truth, have no money, except that which he holds in his own treasury; as a private man holds money in his private coffers. To this he may assume the power of giving what denomination he pleases, and may call this a right; but he can, by this act, do no more than a private man, who, having incurred debts to the amount of one thousand pounds, and possessing only five hundred in specie, should deliver them to his creditors, and obtain an acquittance for the one thousand pounds. In both cases this is either a fraud, or an act of insolvency and compounding with creditors.

19. It is clear, the monarch can have no other inducement than insolvency, to alter his coins; unless he orders, that all former contracts shall be satisfied in equal weights of metal; and not in tale: in which case, it is certain, the monarch will rarely find occasion for the debasement of coin.

20. The power of the monarch, or of the state,

has been, therefore, misunderstood. The prerogative, as it is called, is founded on erroneous and impracticable notions of arbitrary power, ill suited to the present times: and it would be simple justice to the advanced knowledge of the present age to annul it altogether; and to declare, that the king should order, in all cases, the purest metal to be formed into coins; the coins to be current only at their just weight, with a very small allowance, if any, for wear; and the legal tender to be observed in the utmost strictness.

21. The legal tender, in effect, is nothing more than a legal definition of the meaning of the words pound, guinea, crown, and shilling; and if these things are altered, it is evident that a gross injury is sustained by all creditors, who are made to receive in payment a less quantity of the thing, than that for which they have stipulated. It would not, in any degree be less a fraud, to declare, that, having purchased a load of corn, I should receive but half a load; than, that, having bargained to sell a load of corn for five guineas, of a certain weight, I should be compelled to receive five guineas of half their weight in gold.

22. The state ought never to interfere in either case. Its duty is to maintain equity and justice, between all its subjects; and it has no more right to interfere with the weights of money, than with the weights of other things; except in as far as it is a part of its duty to prevent fraud in all weights and measures. The standard of its measures in money, should, therefore, be as invariable as that of all its other measures; and a pound sterling, in tale, as fixed as a pound troy. With the exchangeable value of a pound sterling, the state can have no interference. It can no more fix a price on money than on any other article; and, in truth, to establish the exchangeable value of money, upon an invariable footing, is, in other words, to fix the price of every commodity whatsoever. An attempt, which is as feasible as to command the tides not to flow; the wind to remain stationary; or, what would really be the effect of it, the corn not to grow, and the people not to eat.

23. We may therefore conclude, that the prerogative concerning money, in the extent in which it has been claimed and exercised by some kings of *England*, and all the other monarchs of *Europe*, is a mere assumption of arbitrary power; in direct violation of the law of

nature. And we may be well assured, that, in this country at least, until the return of the barbarity and ignorance of former times, the prerogative will not be exercised to that extent.

24. Whether the kings of England will, in future, even in the empty name, boast of a prerogative, which is a mere relict of ignorance and barbarity, will appear, at least, problematical. It is plain that such a prerogative can add neither to the dignity, nor the splendour of the crown; which are best preserved, by rendering it the perfect symbol of invariable justice and untainted honour.

25. We may observe, however, that in times of great distress, as in the midst of a siege, the greatest monarchs have issued a money, as it is called, of diminished value, termed obsidional money. This, however, is nothing more than an engagement to pay to the holder a good coin, at the end of the siege; and is wholly superseded by the use of promissory notes and exchequer bills. Such articles cannot properly be called money; which, in truth, means nothing more than metals, coined and stamped with a *monition*, or *monitory mark* of their

weight and purity. Money, in right of this mark, always passes for its intrinsic and exchangeable value. All other articles, falsely called money, whether of paper, or metal, must pass, at a higher rate, than their real value in mere metal or paper, by the effect of *credit;* or by force of violence, which authorizes legal *rapine.*

ELEMENTS
OF THE
SCIENCE OF MONEY.

BOOK THE SECOND.

Introduction.

IN the foregoing chapters, which we may consider as the first book of our Elements, we have discussed, at considerable length, the nature and effects of money, in its real sense, as consisting of bullion, coined by the authority of the state.

We shall, now, proceed to an inquiry into the nature of those artifices, by which the use of real money has been supplanted, and a paper money*, as it is called, has been introduced; whence we shall proceed to examine its effects upon society.

* This *paper-money* is, perhaps, better defined *circulating credit:* as *bullion* has been called the *universal equivalent.*

CHAP. I.

On Banks of Deposit, with an Account of the Bank of Amsterdam.

1. BANKS have been properly divided into two sorts: those of *deposit*, and those of *circulation.*

2. A bank of *deposit* is instituted for the purpose of receiving into its coffers, sums of money in coin and bullion, valuing each according to its real quantity of bullion only: for which the owner has credit in the books of the bank; and this credit is transferred on demand of the owner, from his own account to that of some other person.

3. A bank, upon this principle, is only a warehouse for safe custody of coin, or bullion; and the only profit to be gained is by the sum paid for the warehouse-room, or for the transfer.

4. Such a bank has been instituted, for a long time, at *Amsterdam* and at *Hamburgh*; and it affords many advantages to the state,

chiefly in providing a preventative against any alteration in the value of coins, by inequality of wear, or by the frauds of money-jobbers, or coiners, or by the arbitrary abuse of power amongst princes. For the principle of its institution consists in rating all coins whatsoever by the mere quantity of bullion which they contain; that is to say, at their real intrinsic value.

5. By appointing particular hours for the making of transfers, and a specified time, within which no bullion can be taken out of the bank, much inconvenience is avoided.

6. The transfers of such a bank, it is clear, can be nothing but the payment of a price for any given commodity in *bullion*; that is to say, in so many grains of pure *gold* and *silver.*

7. Such a bank, therefore, answers all the purpose of the royal authority, in making a good pure coin; as far as respects large payments amongst merchants. With this additional advantage, that there is no trouble in weighing, no fear of deception, no loss by wear of the coin, no expence of coinage. To counterbalance which, and to provide for the

expences of the bank, a small sum is paid upon every transfer*.

* The rules of the *Amsterdam* bank are as follows: The accounts are kept in florins, styvers, and deniers; a florin being twenty styvers, and a styver sixteen deniers. Persons keeping accounts pay three florins for opening the account. Bullion is kept there, and may be demanded at any time, at $\frac{1}{16}$th per cent. So that an ounce of bullion being taken and received one thousand six hundred times in a year, the bank gains one ounce of bullion; and if it were suffered to remain there one thousand six hundred years, the bank would receive the one hundred and sixteenth part of an ounce for its trouble. Bullion is, however, of small value, unless it changes hands; and therefore the bank is not liable to be burthened with its custody, without profit, for a long time.

The transfer is made by a note to the following effect:

Folio 1124. *Messrs. the Commissaries of the bank, please to pay P. N. the sum of twelve hundred fifty-four Florins, twelve Stivers, eight Deniers, at* Amsterdam, the 1st Day of January, 1702.

Florins 1254. 12. 8. J. J.

The folio is the page of the account of the person making the transfer, and must be duly inserted; and, if the credit is upon account of a third party, this must be noticed. These notes are carried to the bank at any time between seven and eleven o'clock in the forenoon; but afterwards each transfer is charged six styvers. Deniers are never written except to the exact number eight: all below or above are omitted.

8. In these banks credit has no place, considered in a commercial view. The only credit that is required is the good faith of the public, that the money, or bullion, shall be continually retained in the coffers of the bank.

A credit cannot be transferred the same day it is received, except twice a year on the settling of accounts; or on payment of 3 per cent. for the transfer.

The parties send before eight o'clock in the morning, to know if a transfer has been duly made; between eight and nine a fee of two styvers is paid; and between nine and three, a fee of six styvers; or the clerks for ten ducatoons a year will send daily notice; and a fine of three per cent. is payable, upon writing off more than is in the account.

In January and July the accounts are balanced, and within six weeks each person must go and check his balance, under a penalty of twenty-five florins. All payments above, or to the amount of three hundred florins, are to be made in the bank; and no sum is entered in their books under that amount. See *A General Treatise of Money and Exchanges*. 1707.

It is obvious, that by means of subsidiary bankers, and a settling house, much labour might be saved.

The origin of this bank was in 1669, to facilitate payments in countries where, from their vicinity to other states, there was a great influx of foreign coin, over which there could be no legislative check, or controul. This it has effected by reducing all coins to bullion merely.

9. The object of such a bank is not to supply a deficiency of coin, currency, circulating medium, or money; but to obviate the inconveniences which arise from the circulation of various unauthorised coins, the value of which it is difficult to estimate.

10. The transfer in this bank being an actual transfer of money, what is called bank money, at *Amsterdam*, is truly money, and not a substitute for money. It is the purest money in the world.

11. One great political advantage of such institutions is, that, thereby, the actual quantity of money in circulation, in large payments, may readily be ascertained.

CHAP. II.

Of Banks of Circulation; and of the Bank of England.

1. BANKS of *circulation* are formed on a principle entirely different from *banks of deposit:* the object of them being, not to correct any inequality in the value of the coins in circulation; but to supply an additional quantity of money, by affording a ready substitute for coin, in general payments.

2. This is effected by issuing a promissory note, importing that, either upon demand, or at some fixed day, the bearer shall receive a certain sum in coin.

3. The basis of such banks therefore is either public or private credit; which is supported by the confidence which the people, in general, place in the expectation, that the money will be received upon demand.

4. Banks have been divided into those which are founded upon real, those on personal secu-

rity, and those on government security. But, in the view which will shortly be given of the system of banking, it does not appear very material to ascertain, what is the security upon which a bank, founded on credit, to a very large extent, ultimately rests. They are denominated, chiefly, according to the nature of the security, or pledges, upon which they make advances.

5. In the infancy of the system of banking, it was thought that the bank which should issue notes upon the security of landed property, or real security, would be, under all circumstances, safe. But a little experience discovered the fallacy of this opinion; for it was shortly found that, by advancing notes to a person who pledged land as a security, the bank rendered itself liable to pay its notes instantly on demand; and might be called upon suddenly to pay very large sums, without the means of providing funds as suddenly, through the aid of the landed security. It was, therefore, deemed most adviseable to issue notes upon personal or mercantile security; that is, upon bills of exchange, drawn between merchants, and payable at short dates.

6. In this manner the bank would have an opportunity of speedily collecting in its debts, and meeting all the demands upon it; and, as those bills of exchange are created upon the sale or transfer of goods, or other property, it is obvious, that if the bank, instead of holding the security in *specie*, receives a bill of exchange, or personal security, from those who hold the real security; the bank, in effect, is nearly as well assured of repayment, as if it had possession of the effects in its own custody; without the trouble and inconvenience of maintaining warehouses for the deposit of goods, or of inspecting titles to lands. Wherefore it is probable that banks upon landed security, will never again be established; their object being as well attained by other persons accepting mortgages, and drawing and redrawing bills, which may be discounted at a bank, as by the bank itself taking the mortgage.

7. When a bank is instituted upon government security, the faith of the government is pledged for the payment of the notes; and this is the case, when government issues exchequer bills, or creates funds of stock, as they are called; by which is, however, more truly

meant, the contracting a debt, of which the interest is to be paid annually. For a *fund* should imply something real; whereas public funds are nothing more than the credit of the existing government: which promises to pay certain sums of money, that can only be raised through the voluntary aid of the people, or by compulsory levies from them in taxation. And such a government is liable, by the accidents of time, and especially by oppressive taxation, to lose its influence and authority over the people, and ultimately may fail in its payments.

8. The object of instituting such banks is two-fold. *First*, as it respects the bank or company, it is the private gain of the partners by the profit of banking. *Secondly*, as respects the state, or the persons dealing with it, the object is to raise a substitute for money; which we have seen is the credit of the bank. Mere credit is, therefore, made to pass as money; and bank notes are justly denominated *circulating credit*.

9. Wherever, therefore, credit notes are made to circulate largely, in any country, with or without an accompanying circulation of money, the whole money of the country must be considered as composed of *two articles*, namely,

of the precious metals, and of *circulating credit*. Whence, also, we may draw a further illustration of the principle already suggested, that paper money is, in effect, a debasement of the currency. For it obviously gives to the whole sum of money an increased extent, beyond the absolute quantity and value of the metals in the coin. The effects of which we shall hereafter consider.

10. To explain the principles, upon which all such banks are founded, it will be useful to consider the institution and practice of the *bank of England*. For which purpose we may adopt, with safety, the very accurate account of *Sir James Stewart;* from whose work the succeeding paragraphs of this chapter are extracted; omitting all those observations of theory, which he has interspersed throughout: and which we consider greatly defective and confused, from his very inaccurate notions of the nature of money and value.

11. The establishment of this great company, the bank of England, was formed about the year 1694. Government at that time having great occasion for money, a set of men was found who lent to it about one million two hundred thousand pounds sterling, at eight *per*

cent. for the exclusive privilege of banking for thirteen years: with this additional clause, that four thousand pounds sterling *per annum* should be given them to defray the expence of the undertaking. This sum of one million two hundred thousand pounds sterling, was the original bank stock. It has been since increased to eleven millions of pounds, by farther loans to government, for the prolongation of their privileges*.

* In addition to the account given in the text, we add the following still more authentic account of the business of the bank from the reports of the house of commons. As these reports are voluminous and expensive, we have extracted an abridged account from a useful work, called The Literary Panorama for January, 1808, the editor of which very judiciously furnishes the public with a cheap account of the authentic documeuts published by parliament; documents which will hereafter form a basis for a perfect school of financial instruction.

BANK OF ENGLAND.

Second report of the committee of the honorable the house of commons, appointed to examine and consider what regulations and checks have been established, in order to controul the several branches of *the public expenditure* in Great Britain and Ireland; and how far the same have been effectual; and what further measures can be adopted for reducing any part of the said expenditure, or diminishing the amount of salaries and emoluments, without detriment to the public service. [Ordered to be printed August 10, 1807.]

12. It is a rule with the bank of England not to issue any notes upon mortgage; but the prin-

The business of banking is, beyond a doubt, one of the most artificial that is followed as a profession. It results from no law or operation of nature, but is a mere convention among a certain description of persons, for mutual conveniency. Commerce was originally conducted by barter; then money became the medium of commerce, and, the admitted standard of valuation; and, at length, it not only became the umpire of bargain and sale, but its services were bought, and it was hired out, by those who had a superfluity of it, to those who could employ it to advantage. Merchants hired the money with which they bought goods in one place to sell in another; farmers hired money, with which to pay the labourers who tilled their ground, and the expected crop was to discharge the loan; and governments hired money with which to pay the troops who defended them, or attacked their enemies.

The merchant and the farmer need but small quantities of money, but the operations of government are on so large a scale, that it may be considered as a wholesale dealer in this *primum mobile*. The wants of the merchant and farmer may be supplied by private individuals; but the wealth of individuals cannot be equal to the demands of a state, the necessities of which press suddenly, and often in all directions.

To meet such exigencies, companies have been established, and have met with special protection from the ruling powers, in most nations of Europe. The plans on which they have been established have been various; differing sometimes according to the constitution of the go-

cipal branches of their business may be comprehended under four articles, viz. 1. The cir-

vernment, the disposition of the people, or the circumstances which determined their institution.

The bank of England, under its present establishment, may be considered as a consequence of the Revolution; it was patronized by William III. and after struggling with various difficulties in its infancy (for its notes were at a discount) it surmounted them all, and has for many years been the most considerable money-center in Europe, and in the world.

The bank is by its charter restricted to dealings in gold and silver, coined, or in bullion, and in securities. It cannot purchase land, or adventure in shipping: it cannot stock its warehouses with merchandize; and the propriety of this regulation is evident, since it makes payments with its own notes, and by its credit might accumulate stores of various descriptions to its own injnry, or that of the community.

We have no occasion to pursue these hints any further, as a sufficient knowledge of the nature of the bank for the purpose of the present paper may be obtained from that part of the second report from the committee on the public expenditure, &c. of the united kingdom, made to the Right Hon. the House of Commons; from which we transcribe the following information.

The funds of the bank, which are the sources of profit, and which constitute the measure of the sum they have to lend, (subject only to a deduction on account of cash and bullion,) may be classed under three heads.

First, The sum received from their proprietors as

culation of the trade of London. 2. The exchequer business of Great Britain. 3. The

capital, together with the savings which have been added to it.

Secondly, The sum received from persons keeping cash at the bank. This sum consists of the balances on the deposit accounts both of government and of individuals. In 1767, this fund, including all the balances of individuals, was only £5,130,140. The present government balances alone have been stated at between eleven and twelve millions, including bank notes deposited in the exchequer.

Thirdly, The sum received in return for notes put into circulation. A corresponding value for every note must originally have been given, and the value thus given for notes constitutes one part of the general fund to be lent at interest. A note holder, indeed, does not differ essentially from a person to whom a balance is due. Both are creditors of the bank, the one holding a note, which is the evidence of the debt due to him, the other having the evidence of an entry in the ledger of the bank. The sum at all times running at interest will be in exact proportion to the amount of these three funds combined, deduction being made for the value of cash and bullion.

Under the three heads above-mentioned, first, of capital and savings; secondly, balances of deposit accounts; and, thirdly, notes in circulation; all the sums are stated which the bank would have to discharge in the event of the winding up of their affairs; and they must of course have assets sufficient and available for this purpose, which assets can only consist of cash and bullion, and securities for money lent.

paying of the interest of all the funds transferrable at the bank. 4. Their trade in gold and

In whatever degree, therefore, any one of the three first-mentioned items, namely, capital, deposits, or notes, increase, the other two remaining fixed, in the same degree, must the sum running at interest increase, provided the cash and bullion do not vary; and this adaptation of the sum at interest to the amount of the balances, may be presumed to take place without any particular cognizance of the subject by the directors, who make a profitable use of the balances by consenting so far to satisfy the current demands for discount, or by making such loans to government, or buying such number of exchequer bills, or other securities, as may suffice to maintain in circulation the accustomed quantity of notes.

Those balances are lent at interest, because a demand for loans to this extent cannot fail to arise out of the natural demand for the accustomed quantity of notes. The bank have no property of any moment lying dead, cash and bullion excepted; they possess, indeed, property in buildings, but these are stated in the evidence to have been paid for as they were erected, out of their current profits, and constitute no article in their accounts. Unless therefore they have a sum at interest applicable, together with the cash and bullion, to the purpose of answering the demands of those who have deposits in their hands, they have not assets necessary to satisfy the three classes of claimants which have been mentioned.

The productive quality of the floating balances is confirmed by a statement presented by the bank itself to the secret committee of the House of Lords, in 1797, (page

silver. We shall now shortly explain the nature of these four great operations; and first, as to the circulation of the trade of London.

132) From thence it appears that the bank notes were on the 25th February, 1797 £8,640,250
And the "drawing accounts" (or deposit accounts) and "audit roll" (or unclaimed dividends, &c. 5,140,130
And the "surplus" (or undivided profit) of the bank, which was of the nature of additional capital 3,826,890

Making together £17,597,280

This debit side of the account exhibited the total sum due both to the bank proprietors and others, on the 25th Feb. 1797, with the exception of £11,686,800 capital lent to government, which was adverted to only at the foot of the statement. The credit side of the account enumerated the effects (amounting to £17,597,280) applicable to the payment of that debt.

These assets were stated to consist of "advances on government securities," viz. "on land and malt," on exchequer bills, &c." "bills discounted, &c." and "cash and bullion." Supposing therefore the amount of surplus capital, and bank notes on the debit side, and the cash and bullion on the credit side, to continue stationary, the amount of the other articles on the credit side (all of them articles producing interest) must necessarily fluctuate in exact correspondence with every fluctuation of the deposits; and in case another statement, formed in the same manner as that presented in 1797, were now to be made out, the

13. If a London merchant has occasion for money at any time, he sends to the bank the

sum of £8,640,250 of notes having been augmented to £16,621,390, and the sum of £5,130,000 of deposits having risen probably to about thirteen or fourteen millions, there would unquestionably be an increase of about sixteen or seventeen millions running at interest, to be stated on the other side, deducting whatever may have been added to the cash and bullion since February, 1797.

The annual and temporary bonus of five per cent. which the bank have, for some successive years, added to their accustomed dividends of seven per cent. and the recent augmentation of their regular dividends to ten per cent. exclusive of property tax; the rise also of the market price of their stock, which having sold in 1800 from £156 to 172 per cent. now sells at £230, are strong circumstances in confirmation of the large increase of their profits. This increase cannot be accounted for by any material augmentation of the advantages derived from the management of their own capital, nor from that part of their business which they transact as bankers to individuals, (a part, indeed, at all times comparatively small in its amount;) for although the number of persons having accounts open with the bank, has been lately much increased, the floating balances on those accounts are known to be in general very small, most of the accounts being kept open only for the sake of the opportunity which they afford of borrowing in the way of discount. The extension either of loans to government, or of discounts to the merchants, or of both, is the necessary effect of the augmentation of the government deposits, and it is to the largeness of these deposits, that the increased profits ought to be referred.

bills he has, before they become due; and the bank discounts them: but if a bill is at a

The gain which the bank have derived from the issue of one or two pound notes, amounting to £4,217,960. on the 1st of February last, may be expected to cease whenever the payment of cash shall have been resumed.

It is a principle in all trade, and especially in that executed as commission, that, within certain limits, the greater the quantity of business done, the lower is the rate per cent. which is esteemed a fair compensation for the trouble, &c. of conducting it. Government, then, dealing at all times very largely in money, has a right to expect that its money transactions should be more favourably executed at the bank, than those of any other customer, whose accounts, in comparison, could not be other than trivial. On the same principle when the accounts of government were themselves small, as ten, twenty, fifty millions: for adjusting these accounts a greater premium per cent. was fairly demandable, than when they rose to three, four, or five hundred millions. The rate of allowance originally was £562. 10s. for each million: this, in 1786 was reduced to £450 for each million. The same allowance was made to the bank of Ireland: the debt of that country being no more than twenty-two millions; whereas the debt of Britain, has varied as follows, viz,

On Jan. 5th. 1786, it was £224,102,424, and the charges of management were then (according to the reduced scale of allowances) £100,846. Jan. 5th, 1797, the year in which the committee on finance reported, the principal of debt unredeemed was £272,892,444, the charges of management upon which, so far as concerned the bank, were £115,543.

Jan. 5th. 1800, the year of the renewal of the bank char-

longer date than 60 days, they will not discount it. The reason for this is evident: the

ter, the principal of debt unredeemed was £375,185,801, and the charges of management, received by the bank, were £170,053.

The debt unredeemed, Jan. 5th, 1807, was £550,441,314, and the charges of management, received by the bank, were £265,818; to which must be added £5,687, on account of the Austrian loan, according to the same rate of commission. The allowance of £4,000 towards the expenses of the house, and also the original allowance of £1,898, on £4,000,000 purchased from the South Sea Company, are in addition to the before-mentioned sums.

The increase in the establishment of the bank, which has been rendered necessary by the progressive augmentation of this branch of their business, consists principally in a large addition to the number of clerks; of whom the whole number employed in the public business, exclusively, or principally, was in 1786, 243; in 1796, 313; and in 1807, 450; whose salaries, it is presumed, may be calculated at an average at between £120 and £170 for each clerk; taking them at £135, which exceeds the average of those employed in the South-Sea House, the sum is £60,750
at £150 the sum is 67,500
at £170 the sum is 76,500
either of which two last sums would probably be sufficient to provide a superannuation fund.

The very moderate salaries received by the governor, deputy governor, and directors, amount to between £7 and 8,000; and only a part of these must be considered as compensation for the trouble of superintending the public business.

security upon which such bill stands, is purely mercantile. The nearer, therefore, the

Incidental expences and sundries may be estimated at about £15,000
Buildings additional, and repairs, at about 10,000
Law expences, and losses by frauds and forgeries, at about 10,000

The whole increase of the officers who actually transact the business, in the last eleven years, is only 137, whose annual expence may be from £18,449 to £23,290; the addition to the other permanent charges being probably about one-half, or two-thirds of that sum; but the additional allowance for management in the last ten years, is more than £155,000. This general conjectural estimate of the expences actually incurred by the bank, exhibits, if it be near the truth, the charge which would have attended the management of this business by government, if previous to the arrangement which took place in 1786, it had been thought advisable to adopt the suggestion formerly made by the auditors of public accounts, when this matter was referred to them by the treasury.

Their report, already printed in XIV. 30. well deserves the consideration of the House; and particularly the estimate they formed of the real value of the service, which they supposed might be executed at less than one-third of the charge at that time incurred, that is, at a rate of allowance under £187. 10s. for each million, when the debt was no larger than has been before stated.

The committee of finance so far agreed with the auditors of the public accounts, as to intimate an opinion in favour of the reduction of the existing rate of allowance for ma-

payment is, the less risk the bank incurs from the failure of those who are bound in it. The

naging the public debt. They state "that the bank, over and above the charges of management, are accustomed to receive allowances from the public, at the rate of £805. 15s. 10d. per million, for receiving contributions for loans; and £1,000, or sometimes more, for contributions to the lottery; and that they have the benefit of holding all the money for half-yearly dividends, besides having the custody of cash for the navy and army services.

"Upon reviewing, therefore, these circumstances in the present times (1797), and without questioning the propriety of the arrangement made in 1786, when the public debt was so much inferior in amount, your committee cannot forbear to state it as a question still deserving the attention of parliament, whether a further deduction of expence cannot, and ought not, to be made upon this branch of public expenditure?"

Besides the management of the debt, the bank have large transactions with the public, affording a considerable profit to the corporation; into the nature and amount of which, it is proper to enter.

1. Average balance of cash kept at the bank, during the three months, ending Jan. 1807, under the head of customs, excise, and stamps, about £457,000

Under the head of post-office, during several months in 1807, in which year that account was first opened 20,500

2. Average balance of sundry other accounts, during a similar period of 3 months, to Jan.

intention of this operation of discounting bills is, plainly, to employ the cash of the bank to draw an interest for it.

1807, viz. under the head of paymaster general of the forces, treasurer of the navy, treasurer of the ordnance, barrack-master general, transport office, agent general of the volunteers, treasurer of Chelsea hospital, surveyor general of woods and forests, accountant general of the court of chancery, and commissioners for reduction of land tax	£477,500	£1,531,974
3. Average amount of unclaimed dividends in the hands of the bank, during 1806,	1,341,154	
Deduct lent to government on that account without interest	376,739	964,415
4. Average balance during three months, to Jan. 1807, in the hands of commissioners for reduction of national debt, arising from the dividends received by the commissioners on stock purchased by them, and from the issue of sinking fund money		1,488,073
		£4,461,962

5. Further balance of cash to a very large amount, consists of sums lying nominally in the exchequer, which, nevertheless, actually accumulate for the benefit of the bank, and are for the most part applicable at the end of each quarter, to the payment of dividends. It is the established usage of the bank to draw daily from the exchequer the several sums in question as they accrue, depositing indeed exchequer bills in return for their own notes, which are thus received as money. This deposit is to be con-

14. The bank is constantly receiving cash from every person who keeps his cash with

£4,461,962

sidered simply as a security for the public money drawn away, as the growing interest on the exchequer bills belongs entirely to the bank: and in case all the exchequer bills possessed by the bank, which they think fit to apply to this purpose, prove insufficient for the whole sum, the surplus remains in the exchequer in the shape of bank notes—The notes thus taken out of circulation amount occasionally to several millions, and by their detention in the exchequer, both the bank and the public are placed in circumstances substantially the same as if the notes in question were carried to the bank, and constituted a balance due to the public on a deposit account, differing in no respect from other deposits.

Total average amount of exchequer money, by which the bank may thus have profited, was, from Jan. 10, 1806, to Dec. 19	6,167,928
	£10,629,890
To this may be added a balance, of a temporary nature, which has remained for no inconsiderable time in the bank, on account of the commissioners under the convention with the United States of America, which is part of £600,000, originally deposited	475,029
Total average balances	£11,104,919

it. This occasions a constant fluctuation of payments, which of course must leave, at all

The committee is aware, that in exhibiting *average* balances of cash in the bank, instead of *actual* balances, it may possibly be considered as presenting an unfair view of the subject; but it must be observed, that however fluctuating many of the individual balances may be, the aggregate is never likely to vary materially, which are moderate in the early part of each quarter, and extremely large towards the conclusion of it, are compared with the balances of the commissioners for the sinking fund, and those on account of unpaid dividends, both of which are large in the beginning of each quarter, and small towards the end, the aggregate sum under these principal heads will be found to furnish a stationary balance of a most important amount.

The documents from the bank, and the exchequer, which could conveniently be furnished, give the following results, viz. that on October 11th, 1806, the time immediately *preceding* the payment of the dividends, the sums in the bank, were

1. Customs, &c.		£176,974
2. Paymaster general, &c.		£1,378,900
3. Unclaimed dividends, Oct. 9	£1,033,175	
Deduct	376,739	
	£656,436	
4. Commissioners for the sinking fund, Oct. 11	389,197	
5. Exchequer money, Oct. 10	9,121,700	
		10,167,333
Together		11,723,207

times, a considerable sum of other people's money in the bank; because it never is in ad-

		£11,723,207
Add the money vested in the American commissioners		£475,026
Total actual balances		£12,198,236

Nov. 10. a period of about three weeks *subsequent* to the payment of the dividends, the balances were

1. Customs, &c.		608,133
2. Paymaster, &c.		1,356,051
3. Unclaimed dividends	1,559,144	
Deduct as before	376,739	
	1,182,405	
4. Sinking fund	2,217,171	
5. Exchequer money, November 7th. (£4,270,000 exchequer bills, and £1,517,800 bank notes)	5,782,800	
		9,112,376
		11,148,160
Money of American commissioners		475,029
Total actual balances, Nov. 1. and 7, 1806		£11,623,189

And it appears that at other times, as on Nov. 8. the balance was £11,461,200, and on Dec. 1. it was £12,018,324, so that the fluctuation of the aggregate balances was inconsiderable.

The magnitude of these balances, and of the profit which must be derived from them (a profit which is likely to in-

vance to any one. By long practice in the trade, this sum of money becomes determinate:

crease during the war, but which may be subject to diminution on the return of peace) has attracted the attention of the committee no less than that of the allowance for the management of the national debt. The annual interest calculated at 5 per cent. upon them amounts to between £500 and 600,000.

Whenever an addition is made to the amount of these balances, it is effected in general by a payment into the bank of their own notes. The notes so paid in are cancelled. Thus a reduction takes place in the circulating notes, and these notes are a fund, which supplies, in the same manner as the government balances, the means of lending at interest. Every such reduction of notes, however, must be considered as temporary, because the maintenance of the circulating bank paper at the accustomed, or nearly the accustomed point, is felt by the bankers and merchants of the metropolis to be necessary to the regularity of current payments. Bills of exchange are therefore offered to the bank to be discounted, in such quantity as to restore the amount, or nearly the amount of notes cancelled by means of any increase of balances, unless the bank itself, by delivering out notes in payment for exchequer bills which they may have bought, or for loans to government, should have rendered the application for additional discounts, unnecessary. This application for additional discounts, on the occasion of an increase of balances, must indeed ordinarily precede such increase, and furnish the means of effecting it.

That the great augmentation of government balances of

let us call it the *average-money* in the hands of the bank. It is then with this average-money

the bank, which has taken place since the year 1797, (an augmentation amounting probably to seven or eight millions,) has not permanently diminished the notes in circulation, is proved by the amount of notes in circulation between Feb. 7, 1795, and Feb. 1, 1807, by which it appears that the notes, exclusive of £1 and £2 notes, were on

7 Feb. 1795	12,870,500
6 Feb. 1796	11,215,000
1 Feb. 1806	12,856,770
1 Feb. 1807	12,333,430

The fluctuation in those twelve years (with the exception of a short period preceding the suspension of the cash payments) was only between the sums of £11,589,380, and £13,845,800, to which last-mentioned sum they amounted on the 25th January, 1801, a period not long subsequent to the day of paying the dividends, when a more than ordinary issue of paper must be supposed to have taken place. Since, therefore, each augmentation of the government balances, though it may be at first attended by a diminution of bank paper, is followed by a proportionate re-issue of that paper, and since, in return for the paper so re-issued, additional bills are discounted, additional exchequer bills are bought, or additional loans are furnished to government, (all articles equally yielding interest,) it follows that those additions which are made to the balances must be considered as producing a corresponding increase of interest. The proportion will be exact, whenever the notes suppressed are exactly restored, provided the quantity of cash and bullion continues precisely the same.

alone, that the bank can discount bills. Now if the trade of London afford bills to be dis-

Such being the general state of the connexion between the public and the bank, it becomes an object of consideration, in the last place, what have been the transactions between them since the year 1786. These are, first, the statute of 1791; secondly, the renewal of the charter in 1800; and thirdly, the agreement for the loan of £3,000,000 in 1806.

First, The act of 1791, c. 33, authorized the bank to advance £500,000, without interest, for the service of the public, which came, in fact, as has been already explained, out of the unclaimed dividends; but in consequence of the second clause for repayment, in case of a deficiency, the sum remaining in the hands of the public is no more than £376,739, there being no provision for increasing after the diminution had once taken place.

It was a further enactment of this statute, that the allowance for managing the debt should continue at the rate of £450 per million; and it is observable, that this is the only statute which contains any distinct stipulation upon that point.

Secondly, By the act, 40 Geo. III. c. 28, the bank charter was continued until 1st August, 1833, on condition of three millions being advanced for the public service, without interest, for six years, ending 5th April, 1806.

Thirdly, The last agreement with the bank which it will be necessary to notice was in 1806, 46 Geo. III. c. 41, when the three millions, which ought to have been repaid on the 5th April, were continued as a loan to the public until six

counted at different dates within sixty days, sufficient to absorb the whole average-money

months after the ratification of a definitive treaty of peace, at an interest of £3 per cent. which is to be considered as a gift of £60,000 per annum so long as the war continues. This transaction is most material, as it evinces, that the agreement made in 1800 was not considered, either by those who acted upon the part of the public, nor by the bank directors themselves, as a bar against farther participation, whenever the increase of their profits derived from the public, and the circumstances of public affairs, might, upon similar principles, make such a claim reasonable and expedient.

After a summary recapitulation of the advantages which the bank derive from their charter, and from their connexion with the public, it will be proper to enumerate the benefits which the public receive from them in return.

1st. A large profit on the management of the public debt is enjoyed by the bank: and 2dly, the interest arising from between eleven and twelve millions of government balances lying in their hands. 3dly. They have whatever profit is to be derived from their paper circulation, amounting to £16,621,390, the issue of which results from the exclusive powers given to them by their charter.

1st. The capital (£11,686,000) of the bank is lent to the public at the rate of £3 per cent. The benefit derived from this loan amounting at present to £233,720.

2d. Advances are made to the extent of £2,750,000 upon the annual land and malt taxes, or the duties substituted, at an interest of £4 per cent.

of the bank appropriated for discounting, this branch of business would not go forward with

3d. A sum of three millions was lent to government, as has been already stated, without interest, for six years from 1800, as the price of the renewal of the bank charter; and it was agreed in 1806, that the same should be lent at 3 per cent. during the continuance of the war.

Another direct advantage derived to the public consists in the receipt at the bank of the property tax upon the dividends, and the prompt payment of it into the exchequer, without any charge or additional allowance; by which means all delay is obviated in the collection of a large portion of the war taxes, and the expense of officers is saved. The stock transferred to the commissioners for reducing the national debt, and on account of the redemption of land tax, is not charged by the bank with any allowance for management, which two sums amount to about £134,000,000, exclusive of South Sea annuities.

The practice of making advances upon certain instalments of the public loans, on the security of the receipts is a considerable accommodation to the subscribers, and enables the government to contract for loans upon terms somewhat more advantageous than could be done if that facility were not afforded. The bank, however, receive in return the legal rate of interest, as they do also upon all transactions with the government, except those already stated. The accommodations derived by the public from its connexion with the bank, have been carried, in some years, to a very large amount; and it must always be considered as an object of the greatest consequence to maintain the permanence of an establishment of such opulence and credit, which, by the judicious conduct of its own affairs, has contributed so materially to extend the commer-

the celerity required for the trade of London, if the bank were to indulge merchants so far as to discount at a longer date.

cial prosperity, and to maintain the public faith of the country.

The bank proprietors have received, in addition to their usual dividend of 7 per cent, the following bonus's:—

In June 1799..10 per cent...in 5 per cents. 1797.
May 1801.. 5 per cent...in..navy 5 per cents.
Nov. 1082.. 2½ per cent. ..in..ditto
Oct. 1804.. 5 per cent. in..cash
Oct. 1805.. 5 per cent. increase of dividend
Oct. 1806.. 5 per cent. increase of dividend
April 1807.. permanent increase from 7 to 10 per cent. per annum.

Our readers are now enabled to judge for themselves, as to the equity of the public's demanding a *bonus* of some kind from the bank. This is capable of being taken under different shapes. If the bank diminish the rate per million at which it does the public business, that is a gain: if it diminish the rate of interest, on any determinate sum, which the public might otherwise borrow elsewhere, that is a gain: if by leaving smaller balances in the hands of the bank, the public, on the faith of the nation to answer all demands, should use its own money, that also would be a gain. And something of this nature the committee has recommended, by which a profit of £50,000 might accrue to the nation. This would demand nothing more than the simple operation of paying to the commissioners for redeeming the national debt, that money every six weeks, which they now receive quarterly.

15. From this we learn another reason why the bank of England discounts no bill which has more than sixty days to run. The first, mentioned already, is for the greater security of payment; and the second, which we now discover, is in order to be able to discount more bills than otherwise they could do, did they discount at a longer day.

16. Besides foreign bills, which the bank of England discounts, they also discount inland bills, and notes of hand between merchants in London, at five *per cent.* but the inland bills

It is not credible by any but those accustomed to calculate interest, what is the power of simple interest *for days* on a large sum; or that of compound interest, which is still greater. By way of instance, we shall merely observe, that a person having £100 to pay on Saturday, might gain *two shillings* by paying it on the *preceding* Monday. This is a trifle; but if the sum were £100,000 he would gain a thousand times as much, *i. e.* £100 by such anticipation; and in proportion were it a million. We should advise, therefore, that whatever cash the nation could *conveniently spare*, should be paid *monthly* to the commissioners for redeeming the national debt; the profit would soon exceed the double of that stated by the committee in their report.

It is to be observed that no blame attaches to any person for suffering these accumulations to have increased at the bank: it was a circumstance not of a nature to be foreseen and guarded against.

to discount at the bank, must all be payable in London.

17. As the discounting of notes of hand between London merchants might operate the same effect, as if the bank should advance them money upon personal security, which would be the case, were the notes of hand drawn for obtaining credit, instead of paying money really due between the merchants, in the course of business; the clerks of the bank keep a watchful eye over this branch of management, and, by examining the reciprocal draughts of merchants between themselves, they easily acquire a knowledge of the state of their affairs, and are thereby enabled to judge how far it is expedient to launch out in discounting either the notes or bills wherein they are concerned.

18. We come next to the circulation between the bank and the exchequer. The bank of England is to the exchequer, what a private person's banker is to him. It receives the cash of the exchequer, and answers its demands.

19. Cash comes to the exchequer from the amount of taxes. The two great branches of which are the excise and customs. The excise is computed to bring in annually from

London, and the fifty-two collections over all England, nett into the exchequer, above four and a half millions sterling*. The fifty-two collectors send the amount of their collections to London eight times a year, *almost entirely in bills*, drawn payable to the commissioners of excise; they indorse them to the receiver-general; he carries them to the bank as they fall due, and gets a receipt for the amount; this receipt he carries to the exchequer, who charge it in their account with the bank, and delivers tallies to the receiver-general for the amount of his payments; these tallies he delivers to the commissioners of excise, who enter them in their book of tallies. This operation is performed once every week, and serves as a discharge from the commissioners to the receiver-general. The bank, again, keeps an account with the exchequer, which is settled once every day, by two clerks, who go from the bank to the exchequer for this purpose. When coin is wanted by the exchequer, for payments where bank notes will not answer, the coin is furnished by the bank; when paper will serve the purpose, paper is issued.

20. Besides this operation in the receipt of taxes, the bank advances to government, that is to the exchequer, the amount of the land, or

* The produce of the excise, A. D. 1812, is £15,768,167. 12s. 4d. and of the customs, £3,974,732. 1s. $10\frac{1}{4}$d.

other taxes imposed, which are to be levied within the year. Thus the whole amount of taxes is poured into the bank, in the manner we have been describing.

21. The bank also keeps the transfer books of all the funds negotiated at the bank; and out of the public money in its hands it pays the interest of these funds, for which government allows to the bank a sum proportionate to the expence of this branch of management. When the bank, as a company, lends to government upon a permanent fund, the capital whereof is not demandable, this operation is foreign to their business as a bank, and is conducted by the company as an article of management of their private property.

22. Let us now examine by what channels their notes enter into circulation, and the security upon which they stand. When issued in the discount of bills, they stand on the principles of mercantile credit, and depend upon the goodness of the bills discounted. When issued upon the faith of taxes, to be paid within the year, they stand upon the security of this payment, which is that of the public.

23. The greatest risk the bank runs, is in discounting bad bills: but by the extent of

their business in this branch, and by circulating the cash of all the merchants who keep accounts with them, they acquire so perfect a knowledge of the state of their affairs, that it rarely happens that any one can break for very considerable sums, without the bank having a previous notice of it. A sudden loss may, no doubt, happen, without a possibility of being foreseen; but the matter of fact proves, that their losses upon bad bills are inconsiderable.

24. We come now to the last branch of their management, to wit, their gold and silver. For the circulation of bank notes, coin is necessary. In times of peace, and a favourable balance of trade, the bank suffers little by the obligation it is under, to pay in coin, except as far as the great confusion of currency affords an occasion to money-jobbers to melt down the new guineas. But when large payments are to be paid abroad, the distress of the bank is, no doubt, very great. The exportation of the heavy guineas in time of war, and during a wrong balance on the trade of England, leaves circulation provided with a light currency only, in which the bank is obliged to pay their notes: and the intrinsic value of the gold in which they pay regulates the price of the metals they are obliged to buy at market. If they provide them

themselves from abroad, they must pay the price of them in bills of exchange. But then the lightness of the currency at home, sinks the value of the pound sterling, as it raises the value of the ounce of gold and silver.‡

25. Let us now examine how far the paper of a mercantile bank, like that of England, tends to supply the demand of circulation. Were no bank established at London, all bills would be paid, or discounted in coin. The bank, therefore, melts down into paper money, all the bills discounted by them, and throws it into circulation. It also melts down into paper all the sums it advances either to government, or to the great trading companies. In this respect it acts upon the principles of banks upon mortgage. It also melts down into paper, all the interest on the public funds paid at the bank. All this sum of paper issues from the bank into the city of London, and proportionally supplies the circulation of that great capital.

26. Let us next examine how this paper can find its way into the country of England, there to supply the use of coin. The whole consump-

‡ The opinions stated in this chapter from Sir *James Stewart*, are not adopted wholly by the author.

tion of London for meat, beer, fire, and an infinity of articles of manufacture, for domestic use, and foreign exportation, comes from the country of England. Did the country owe nothing to London, the sums due for those commodities would be sent into the country, in the current circulation of London, which, by what we have seen, absorbs a very large quantity of paper.

27. But we have said above, that the whole amount of taxes, almost, is remitted to London in bills: this could not be the case, were not the capital constantly indebted to the country. This circumstance confines the circulation of bank notes chiefly to London, and some other cities, to which the inhabitants of London resort, and whither they carry, in their pockets, the money of the capital, viz. bank notes. For these reasons bank notes can never be common in the country: and if at any time, a scarcity of currency *there*, proves hurtful to industry, the defect cannot be remedied but by establishing banks of circulation upon mortgage, or otherwise, in the principal towns of England. This new bank paper coming in place of the coin, would no more be sent to London than coin is sent now. The

debts due by the country for taxes, would be compensated by the reciprocal debts due by London for subsistence, &c. and the compensation would go on as at present, by bills. But were the case otherwise, and did a change of circumstances oblige the country to make delivery in coin to London, the holders of the country banks would constantly have recourse to the bank established in the district, for the coin wanted to be sent to London.

CHAP. III.

Some of the leading Principles of Banking explained.

1. After the detailed account of the practice of banks of circulation, in the last chapter, it will be easy to comprehend the principles upon which they proceed, and how their notes obtain circulation.

2. With respect to all banks connected with government, it is plain that, while that connexion lasts, the circulation of their paper is certain. For, as the government agrees to receive their paper in payment of taxes, it must of necessity circulate to a very great extent: because every man, having taxes to pay, will have a certain demand for this paper, and as it were, a certain vent for it: and will, therefore readily take it.

3. In like manner, as it is the interest of every bank, formed upon these principles, to keep as much of its paper as possible in circulation, for which it receives an interest, at the

rate of five per cent. and upwards, it will endeavour to discount as many bills as it can with safety. All persons, therefore, who can employ money in trade to a greater advantage than five per cent. will be eager to discount their bills at the bank, paying that interest, and will, of course, have an interest in supporting the credit and the circulation of the bank.

4. While the bank is bound to pay its notes upon demand, in cash, there is, however, a constant check to the extent of this circulation; which, being supported entirely by credit, can be maintained only so long as the bank can preserve its credit, by the faithful performance of its contract, in paying upon demand.

5. It must, therefore, always keep such a due proportion between the stock of its cash and the quantity of its notes in circulation, that if a sudden demand for cash to a greater extent than usual were made, it could readily meet the demand, and pay to the full extent of it.

6. To hope to pay suddenly all demands upon it in cash, it will be seen hereafter, is impossible. For, if it were to keep such a quantity of coin as would be equal to the whole number of its notes in circulation, it must be obvious, that it would lose as much by the hoarding of the cash, as it would gain by the circulation of its notes. It would be merely a bank of deposit; and would be restrained to a profit of five per cent.; with a considerable abatement for expences, reducing it probably to three per cent.; on its original capital. Whereas the bank of England has, for some years, divided a net profit of ten per cent. on its original stock of eleven millions.

7. *Smith*, the author of the justly admired work "*the Wealth of Nations*," has detailed, at considerable length, the principles of banking, and endeavoured to prove, that, when the bank is bound to pay in cash upon demand, a greater quantity of paper could not circulate, than would equal in amount the coin that would naturally circulate in its place: but with all deference to so great an authority, there seems no just foundation for this opinion, as far as it is really definite and intelligible. Since the very object of instituting such banks is to supply the want of coin; to extend the circulation. And when money, or any article, having the false semblance of money, can be created rapidly, the demand for it increases with its increase; and there is no fixing a limit

to the possible extent of circulation: where its supply is as rapid as the demand, which is incessant. Without, therefore, entering into a full discussion of this subject, which will be found to be practically inapplicable, when payment of the notes in cash cannot be enforced, as is the case in *England* at present, we may venture humbly to doubt the justness of this doctrine.

8. With respect to the process of banking, it is obvious to remark, that the issuing of notes upon the discounting of short bills, is, of all other modes of circulation, the most advantageous, for many reasons. *First*, By such short loans, the security is rendered more safe. *Secondly*, The discount being taken beforehand the profit of banking is encreased. *Thirdly*, The bank, by such short advances, is enabled to adjust its circulation to its credit and state of immediate solvency, with greater accuracy, and to call in its notes with more certainty and regularity.

9. By this means it will be found, that very few of its notes, comparatively, are ever paid in cash; or can ever require to be paid in cash. For, as it never advances a note, without some security, such as a bill of exchange,

the real process of the circulation may be thus described. Upon the first of *January*, we will suppose a person borrows of the bank £100 in notes, upon the security of a bill of exchange; upon which, the bank, deducting 17s. 9 ½d. for interest for sixty-five days, will deliver out ninety-nine pounds in notes, and some odd shillings: and, at the end of the two months, or 68 days, (allowing three days' grace,) will be entitled to receive of the acceptor of the bill of exchange, one hundred pounds in its own notes. In the intermediate time, should cash be demanded for any of these notes, the bank, by the frequent payment of discounted bills, and new demands for discounts, will be enabled to draw in, or shorten its circulation at pleasure.

10. Should, however, any sudden demand for cash occur, and the bank be in danger of not being able to meet that demand, it should stop payment entirely; for, in less than two months, all its notes will be returned by the acceptors of the bills of exchange: who will have to take them up with the notes of the bank.

11. It would be absurd in such a case, to proceed to pay in cash: for the notes will

be constantly returning, at the expiration of its short credits. Thus its stock of cash is, in reality, merely an instrument of trade: a sort of delusive decoy, to keep up its credit only: which it would not be right to part with upon the mere expectation of its returning in payment of the bills of exchange, when the value of bank notes will be depreciated and absolutely discredited.

12. These principles apply to all banks existing now in England, as well private as public; to the bank of *England*, as well as to the *country* bankers: and will readily explain how properly the former proceeded, when upon the run which was made upon it in 1797, it applied to the government to allow of a temporary suspension of payments: and will evince how absurd must be the fear of those who doubt the solvency of the bank of *England*. For little more than two months are necessary to call in the whole of its present issue of twenty-three millions of bank currency; unless, indeed, it shall be supposed, that for want of some immediate supply for the currency so diminished, the greater part of the persons indebted to the bank upon bills of exchange should become insolvent. This, however, would greatly establish the credit of the bank, and raise its notes to a very high value, in exchange for all commodities.

13. These principles, which also clearly shew, that all the *country bankers*, who have stopped payment, have failed chiefly through the most imprudent personal extravagance, or through unsuccessful and injudicious speculation in other trades. Since as lenders of notes, upon ordinary good security, they can be subject to very few losses, which will not in the end be made up to them, where they have had the caution to have several names upon their bills; as, out of many bankruptcies, they will receive all, or nearly all their advances from the different assignees of the different indorsers upon any one bill. They will also explain why, in reality, the personal wealth of a bank is the last security that the note holders should regard. Whatever may be the real or personal fortune of any man, extravagance and injudicious speculations will ruin him: whilst parsimony, prudence, and skill, by keeping a banker's expenditure within his profits, and employing his advances of notes upon good bills only, will always afford ample security for their payment. Even should a run upon him

oblige him to stop, he will be enabled to pay twenty shillings in the pound, in two months after; notwithstanding he should never have had any capital of his own, but have carried on his business entirely with borrowed money.

14. A penurious miser is, therefore, of all characters, the fittest person for a banker; and a dashing speculator, a jobber in loans, a gambler in the funds, or an adventurer at elections, the very worst. A truth which, as bankers are probably growing more plentiful every day, it would be well to fix steadily in the mind of all those who come within the vortex of the circulation of a country bank. In the present state of the currency it would be well to write up in every counting-house, "Take no paper of any persons who keep dashing establishments and splendid equipages." Upon the same principles as the trade of a banker, is one of the easiest which can be conceived, it would be well to allow of a number of corporate banks, the clerks of which would be bound, as the governors of the bank of *England* are, to adhere to certain strict rules in their advances; and where it would be certain that the issue of notes would not be made to supply funds for private extravagance, but upon the discounting of good bills.

15. These principles will also explain why, upon the present system, on which the bank of *England* is placed, there is a greater temptation than at other times, to discount bills upon somewhat doubtful security: that is, to extend its circulation almost without limit. For, as it is, in reality, debtor to the holders for every note which is outstanding, if it issues £100 on a bill of exchange, which is not paid, the only difference which this occasions will be, that, at the end of the two months, it will remain debtor in one hundred pounds to the holder of the notes, who receives no interest, and can make no demand of cash. Whereas the parties to the bill of exchange, are all liable to pay interest for the notes which have passed through their hands; and by having time given them will commonly, in the end, be enabled to pay: that is, to take up the bill, by restoring the notes to the bank, and thus taking off its debt of £100 to the holders of it.

CHAP. IV.

Of the Bullion Trade in London, as carried on principally through the Agency of the Bank of England.

1. HAVING explained the dealings of the *bank of England*, which respect the supply of currency for the circulation of trade, it will be necessary now to consider more attentively the nature of the dealings in bullion, as they are carried on in London; which are effected, principally, through the agency of the *bank of England*.

2. This company may be said to have had the complete monopoly of such dealings for a considerable time; and, it is said, that it is found to be so much their interest to keep this trade entirely to themselves, that they frequently buy bullion at the same price at which they sell it.

3. The term bullion is, in *England*, applied to all gold and silver not manufactured into plate, or jewellery, which is saleable, or to

all coins, as well domestic as foreign, which are not current within the realm: and the following particulars concerning the trade in this article, have been extracted from the evidence taken by the committee of the house of commons to enquire into the high price of bullion.

4. *Gold* is sold in bars, called ingots, in foreign coin, in light guineas, or in pieces of standard plate, or broken jewellery. The ingots and foreign coin are sold principally for exportation: the rest for home consumption.

5. The price of foreign coin is somewhat higher in proportion than that of gold in bars, from the conveniency of exchanging it abroad; and different coins bear different prices, according to the demand created by the exchanges required with the places where they are current. When light, and not fit for circulation, this coin is melted into bars.

6. The gold in bars consists either of Spanish ingots, or gold, professedly melted from gold dust, and foreign bars or coin. This fact of their being so melted must be verified by the oaths of two witnesses, before a court of

aldermen in London, in order to obtain a licence for the exportation.

7. The greater part of the sales for exportation are made through the agency of a broker, employed for the bank of England. And from these sales chiefly the price of gold bullion is fixed as it is published in *Wettenhall*'s tables of prices current. For this transaction the broker, Mr. Goldsmid, whose house has acted many years for the bank, charges two shillings and six-pence per cent. to each party.

8. The bullion office at the bank was, formerly, called the warehouse, and the business employs three clerks, who enter the sales and purchases for the bank, and report the amount to the cashiers. With respect to private sales, they make no report, and only a loose entry in a waste book.

9. The bullion is deposited by the masters of ships of war and packets, for the owners; and the bank receives the account of the fineness from the assayers, and acts, gratuitously, as an umpire between the parties. By which means it obtains a general knowledge of the dealings in bullion. The office was established in 1668.

10. A licence being necessary for all gold exported, unless it be foreign coin, the reports of this office will ascertain the quantity exported; and the foreign coin being more valuable as currency than for melting, is, of course, generally exported.

11. The bullion is received in packages marked and numbered, and deposited for safe custody till the sale, when the packages are opened in the presence of both the sellers and buyers.

12. In some instances, bullion is brought by private persons for sale, and it is uncertain whether such sales may not be repeatedly made; but it appears, from the evidence of the broker, that the dealing is entirely for ready money, and by no means on speculation. It is, therefore, probable that all the sales are for immediate consumption or exportation.

13. The average amount of sales is from 2000 to 5000 ounces at a time, and to the value of £80,000 a month, according to the loose guess of Mr. *Goldsmid*, the broker.

14. The purchases are now generally made by foreign houses trading with *Holland*, *Ham-*

burgh, and *France*: and in the purchase of gold for one principal, supposed to be the bank, Mr. Goldsmid has been limited to £4 per ounce, during several years. On the part of the seller he has generally had a discretionary power, which is guided by the price in foreign markets and the exchange.

15. The home trade for bullion is conducted by refiners, who purchase it in various forms of coin, bars, light guineas, and trinkets, and at all standards, from four pounds twelve shillings, and three pounds twelve shillings, to two pounds ten shillings per ounce. These purchasers take the market price from the brokers.

16. Portugal coin is valued at 2s. or 3s. an ounce higher than foreign bars exportable. Bullion is therefore thus classed:

	s.	d.	
Portugal coin standard gold	92	0	per ounce.
Bars *standard foreign*	90	0	ditto
Ditto ditto English from light guineas or plate	86	0	ditto
Light guineas in tale	85	9	ditto

17. Three pence are allowed for melting, or three pence halfpenny, which gives a profit of three halfpence per ounce; and the fair

profit of buyers is from about ten to twenty shillings per cent.

18. The average deficiency in the weight of light guineas is about half a grain, and their sterling value one pound and nine pence. Some persons buy them, expressly for melting, at the market price; others, more scrupulous, profess not to do so*.

19. The gold imported is chiefly from the West Indies and South America: but gold is actually exported to the Brazils, on account of our connexion with Portugal, which remits money for the use of the court of the Prince of the Brazils.

* Most of the witnesses examined would be called professionally unwilling witnesses, and seem very ready to depreciate their own understanding, to preserve the character of bank notes. One gentleman, who professes great anxiety, lest he should be supposed to buy a light guinea for more than twenty-one shillings, or melt any gold into bars for exportation, which consisted of light guineas, or plate, or trinkets, or any thing but foreign gold, falls into the following inconsistency. He says, latterly the quantity of *exportable* gold which he received has been less than formerly, yet he has sold more latterly *for exportation*. His reason is,—I am compelled to swear it off to get the price, which is higher than I can get for home consumption.

20. The ordinary freight from the West Indies, is from four to five per cent. and the expence from Carthagena, or Vera Cruz, to Jamaica, including risk, three and a half per cent.; freight to ports in Europe, is about one and a half per cent. and the insurance varies from three per cent. and upwards.

21. The jewellers melt the light guineas, and many are clandestinely exported. Bankers receive no guineas in the course of their collection of money.

22. Exchange with Portugal was, in 1810, 67½ sterling par for 1,000 rees. A six mill four piece, or 6,400 rees, weighing 9 dwts. 5 grs.

23. Louis d'ors and Napoleon d'ors have an extrinsic value of 1½ per cent. as coin, above bullion; doubloons and Portugal gold above two per cent.

24. A guinea is not taken, as of due weight for currency at the bank, which falls short of five penny-weights eight grains; and guineas, when issued from the mint, weigh five penny-weights nine grains and a fraction. Guineas,

when below the above weight, may lawfully be melted down and sold as bullion.

25. By an experiment made by the officers of the mint, by order of the lords of the committee for coin, dated April 18, 1807, to ascertain the deficiency in weight of the gold coins of the average quality then in circulation, it appeared that out of 100 guineas, there were 686 pieces of the current weight, and 314 below the current weight. That upon the whole mass they had lost 1 grain and 222 parts out of a thousand, 1.222 below the full standard; making a loss of 18s. 11d. or 18s. 10d. per cent.; and that the loss below the standard of currency was about 786 parts out of a thousand parts of a grain, making a loss per cent. of 12s. 2d. But in another experiment on some guineas collected from a retail shop, the proportion of current guineas to light was as 54 to 46 in the hundred, the loss on the standard weight grains 1.51. or £1 3s. 4d. per cent. and on the current weight, one tenth of a grain, or 16s. 8d. per cent.

26. From a similar experiment on half guineas, the current pieces bore the proportion of 23 to 77 in the hundred, the deficiency in standard weight was grains 1.444 by the piece, or

2l. 2s. 7d. per cent, and in current weight grains 1.23 or 1l. 17s. per cent.

27. From a similar experiment on seven shilling pieces, the current pieces were 84, and the light pieces 16 in the hundred. The loss on each piece of the first was grains 0.373, or 17s. 3d. per cent. and on the latter, as a loss from the current weight, grains 0.196, or 10s. 7d. per cent.

28. It appears by the same reports, that from the years 1801 to 1810, both inclusive, there were exported of gold coin and bullion £275,330 ounces and four penny-weights, which, at four pound per ounce, may be valued at £1,113,720; and that there were also exported 37,303,954 ounces and 17 dwts. of silver in bullion, which, at 5s. per ounce sterling, make £9,325,988.

29. That in the same period, the quantity of wrought plate exported was 942,161 ounces 15 dwts. and of wrought gold plate only 315 ounces and 4 dwts. And that from the year 1804 to 1809 exclusive, were exported to Ireland 187,690 ounces of silver coin and bullion, together with 1,044,694 ounces 2 dwts. of silver plate, and a very few ounces of gold plate.

30. It also appears, that the total amount of silver exported through or by the *East India Company*, is 59,730,881 ounces, 8 dwts. from the year 1788 to 1809, both inclusive.

31. That the sales of silver pieces of eight and ingots by the *bank of England*, from the first of February, 1797, to the first of March, 1810, inclusive, amount to 71,741,028 ounces.

32. That the old and new standard gold assayed in London, from and including the year 1800, to the end of January, 1810, was 18,215 lbs. 4 oz. 5 dwts. 6 grains; of which 5,504lbs. 10 oz. 9 dwts. were of the old standard; and that the silver so assayed amounted to 1,322,298 lbs. and 15 dwts.; and that the net weight assayed in Scotland from 1801 inclusive, to the 5th of January, 1810, was 55,446 oz. 2 dwts. 7 gr.; and in silver 9,997,562 oz. 19 dwts. of which latter were exported 1,044,694 oz. 2 dwts. leaving 8,952,868 oz. 17 dwts. silver assayed in plate for the home consumption.

33. That from the year 1797 inclusive to the 1st of March, 1810, there were coined at the mint to the amount of £8,960,113, 11s. in gold coins, no silver current money having been coined during that period.

34. That the value of the gold brought into circulation, and added to the commerce of the world, from the various mines, from 1790 to 1802 amounted to 10,712,883 dollars and a fraction; and in the same time the value of the silver brought in like manner into circulation was 35,049,920 dollars: which allows a value of 45,762,803 dollars annually for the total amount of gold and silver, of which the value of 40,713,395 dollars is produced by *America*, and 36,096,736 dollars by the *Spanish* colonies.

35. From these data some calculations may, hereafter, be made of utility in the science of political economy; but, at present, these remain as insulated facts, from which no political inference has been made by the committee which has drawn up this highly useful and interesting report. In the consideration of exchange, it will, however, afford very instructive information to know, that the quantity of bullion continually added to the commerce of the world, has been correctly ascertained, since from that fact many important consequences may be drawn.

36. In speaking of the price of bullion, much use is made of the term *the mint price*, and the high or low prices are said to be above

or below mint price. To explain which it is only necessary to observe, that, when an ounce of bullion in gold or silver is delivered to the mint to be coined, a certain quantity of coin will be returned by the mint to the owner of the bullion. This is called the mint price, and ascertains the quantity which the master of the mint deducts for the price of coinage.

37. Bullion, in the raw state, can scarcely ever vary much above or below this price, in exchange for new or good coin; except upon certain principles which are easily explained. The coin and the bullion being in substance the same thing, allowing for the difference of their purity, they should exchange, weight for weight, just as any other commodity, such as lead, copper, or iron, which one merchant might lend to another, to be repaid weight for weight the next day. But the coin being useful for circulation at home, and not being exportable; and the bullion being exportable, and not prepared for domestic circulation, some small difference in their value may naturally arise, when either of these uses becomes the motive for dealers to exchange them.

38. That this circumstance, however, cannot create a great difference in the price is clear,

because whatever may be the prohibitions against exporting coin or bullion, they are easily evaded, and persons will be always found ready to convert coin into bullion, or export it in specie, whenever there is a temptation to do it: as appears by the practice of the Spaniards, from whom nearly all the bullion employed in Europe is procured, although by their laws the exportation of it is prohibited by severe penalties, even amounting to death.

39. One cause of an increase of the price of bullion above the mint price, will necessarily be found in the wearing and diminution in weight of the circulating coins. For the mint price of bullion is its price in new coins, weight for weight. But if the coin be at all wore or debased, it must of course exchange for a less quantity of bullion in weight than a new coin: for otherwise the seller of the bullion would take it to the mint and get new coins, by which means he would lose nothing of his weight in bullion.

40. Supposing the current coin to be of an excellent purity, the bullion will be rather below mint price, because no person will exchange money for bullion, without having

some allowance for the time which will elapse before he can procure it to be coined into money at the mint.

41. On the accession of his present majesty to the throne, the gold coins of this country were in a very debased state. Their deficiency in weight increased so rapidly, that, in the year 1773, the government found it necessary to take the subject into consideration; the result of which was, the recalling of all the light coins from circulation, which were re-coined in the years 1774, 5, 6, and 7. From this period the gold coins were in a state of great perfection, and were maintained in this state by frequent new issues from the mint.

42. It is a fact worthy of particular notice, that for several years before the reformation of the gold coins, the market price of gold was considerably higher than its mint price. From 1757 to 1773, a period of sixteen years, its average price was £3 19s. 2¼d. per ounce. But immediately after the re-coinage in 1774, the market price of bullion fell below the mint price; and, during a period of twenty years, from 1777 to 1797, the average price paid by the bank directors for gold, was only £3 17s. 7¼d. which is 2¾d. under the mint price.

43. From this fact the conclusion cannot be considered doubtful, that the high price of gold bullion was occasioned by the defective state of the gold coins; that £3 19s. 2¼d. of these coins did not contain more than an ounce of standard gold; consequently, it would not exchange for its nominal value, but according to the quantity of standard gold which it contained. And this fact is fully proved by the reformation of the coins. When every £3 17s. 10½d. contained an ounce of gold, the market price of gold immediately fell to its mint price; an ounce of standard gold bullion could be readily obtained for £3 17s. 10½d. in coins.

44. Lord Liverpool states another fact worthy of notice, that during the period already mentioned of the defective state of the gold coins, the price of silver was influenced by their deficient or perfect state. From 1757 to 1773, the average price which the bank directors paid for dollars, was 64¼d. per ounce, equal to 66⅝d. for standard silver. But immediately after the recoinage of the gold coins, the price of dollars fell, so that, on an average of twenty-four years, ending 1797, the bank directors have paid for dollars 61¼d per ounce, equal to 63¼d. per ounce, for standard silver, and less than

the average price for sixteen years, previous to the recoinage by ¾d. per ounce or $5\frac{25}{273}$ per cent.

45. The extraordinary difference between the market price and the mint price of bullion, stated in the commencement of this chapter, can only be explained upon the principle of exchange, and the fact of the circulating medium being no longer *money*, or coin, but a bank paper, which being used as a substitute for coin, has now entirely usurped its place. Owing to which there is now no corresponding intrinsic value between the currency and bullion; for they are articles of a very different nature. The one is paper, and the other gold or silver metal. While the paper was convertible into a certain quantity of gold or silver at the option of the holder, he who possessed a bank note, might be said to possess as much gold as it purported to represent; and by transferring it, gave an order to the receiver to obtain a pure and good coin at the bank, on the instant. There could then be no conceivable difference between the exchange of notes and money, each at their nominal value, and bullion must, of course, bear the same price in bank notes as in money. But when they no longer became convertible, either by applying to the

bank of England, or procuring change from private persons, a material alteration in the circumstances was effected. The currency, consisting of paper, was the only measure of value, by which bullion, as well as all other articles, must be estimated.

46. It has been shewn that this paper has a necessary value, in respect of its circulation, in payment of all the demands of the state in taxes, and may so far be considered as a commodity; but the circulation for this purpose is by no means to be compared with the extent of its circulation for other purposes: and paper currency being increased at the pleasure of the *bank of England*, according to the demands of the government, and persons discounting bills at the bank, is in a constantly progressive state of increase, bearing no proportion to that of gold or silver. It therefore can have no corresponding fixed ratio to the price of bullion, which must consequently vary in value, as all other commodities, by the variations of its quantity and demand; which depend so entirely upon the state of foreign exchanges, which occasion its importation and exportation, especially where there is no demand for bullion for the purpose of circulation, as coin,

that the price of bullion must, in that case, be sought for entirely in the state of foreign exchanges.

47. In order the better to direct us in estimating the comparative value of gold and silver, and all coins thereof, it will be necessary to attend to the following tables, which appear to have been supplied to the committee of the House of Commons, by Mr. *Greffulhe*, a foreign merchant, and also a table of the relative value and silver, according to the mint regulations of the different countries of *Europe*, as estimated by Dr. *Kelly*. The letter and the tables we place below in a note.*

* Letter received from Mr. Greffulhe, 14th March 1810: With two Enclosures marked (A.) and (B.) relative to the Weight and Standard of Gold and Silver.

Sir,

According to your desire I have the honour to enclose a statement of the prices of gold and silver at Hamburgh and Amsterdam since the commencement of the year 1804, shewing also the respective standards and weights of those places compared to the English standard and weights. The quotations at Paris, I am sorry to say, I find it impossible to procure here for any length of time back; but I have made the enquiry by letter in France, and hope to be soon enabled to transmit that information to you, together with the prices of corn during the same period.

CHAP. V.

On Foreign Trade, Foreign Expenditure, and Exchange.

1. Few subjects of really a simple nature appear to be so ill understood, as the prin-

With respect to an agio upon gold against silver, I find it regularly quoted at Paris at from 15 to 25 centimes per cent. (i. e. $\frac{1}{7}$ a $\frac{1}{4}$ per cent.)

At Hamburgh and Amsterdam there is no such established difference: but it may perhaps be worth your notice, that in the latter place the principal gold coin, viz. the ducats, intrinsically worth guild. 5. 5. stiv. sell at the rate of g. 5. 12 a 14 stiv.

The rate of such agio at Paris, prior to 1785, I have not yet succeeded in ascertaining; but the difference produced by the coinage of that year in the Louis d'or was, I understand, exactly in the proportion of 30 to 32, *i. e.* 32 Louis were coined in 1785, out of a mark of gold of 22 carats purity, which before that year was coined into 30 Louis.

There is no difference of value between the gold coins prior and subsequent to 1803.

I also take the liberty of annexing a statement of the present value of gold and silver at the said places of Hamburgh, Amsterdam, and Paris in English money, at the current rates of exchange, and for the English standard

ciples and theory of foreign exchange, which is absolutely necessary to all foreign commerce. In truth, it is a science, the practical operations of which lie in few hands, and are out of the ordinary observation of the mul-

and weight; which may, perhaps, be useful for occasional reference, or for a comparison with similar calculations already before you.

Pall Mall, 14th March, 1810.

I have the honour to be,
Sir,
Your most obedient Servant,
J. L. Greffulhe.

Francis Horner, Esq.
Chairman of Bullion Committee,
House of Commons.

PRICES OF GOLD AND SILVER AT HAMBURGH AND AMSTERDAM.

	HAMBURGH.		AMSTERDAM.	
	GOLD. lowest price. highest.	SILVER. lowest price. highest.	GOLD. lowest price. highest Adv. on φ 955.	SILVER. lowest price. highest
1804	97⅜. - 99½.	27. 10. 27. 12.	10½. p. cent. 11½.	25 24. 26. 0.
1805	98¾. - 101¼.	27. 10. 27. 11.	19¾. — 18¼.	26. 0. 26. 3
1806	98. - 103.	27. 10. 27. 10.	9. — 11¾.	24 17. 25. 14.
1807	98¾. - 101½.	27. 10. 27. 10.	9. — 13.	24. 4. 25. 4.
1808	102. - 106.	27. 6. 27. 12.	10. — 17.	24. 18. 25. 18.
1809	101¾. - 104½.	27. 10. 27. 12.	14½. — 20.	26. 0. 26. 8.
1810	101.	27. 10.	12. — 14½.	25. 16. 26. 8.

titude. The arts of the merchant, though founded principally on the simple rules of

Comparative STATEMENT of Weights and Standards of GOLD and SILVER.

In ENGLAND, Gold is sold by the ounce; the standard is 22 carats.

Silver is sold by the ounce; the standard is 11 oz. 2 dwts.

In HAMBURGH, gold is sold by the ducat in stivers lubs banco, (16 to a marc banco)—67 ducats are a marc; 60 marcs are equal to 451 ounces English troy weight; the standard is $23\frac{1}{2}$ carats.

Silver is sold by the marc in marcs banco.—Standard absolute purity.

In AMSTERDAM, Gold is sold by the marc at a settled price of 355 current guilders, with an agio or per-centage upon that price; 80 marks are equal to 633 ounces English troy weight.

Silver by the marc in current guilders.—Standard of both absolute purity.

In France, gold is sold by the ounce in francs; 63 ounces English troy weight are 64 ounces French.

Silver is sold by the marc; the marc is 8 ounces.—The standard of both absolute purity.

VALUE of Gold and Silver at Hamburgh, Amsterdam, and Paris.

An ounce of Gold, English weight and standard, is worth (the foreign money reduced into sterling)

	£	s.	d.
At Hamburgh - Price 101—Exch. 29,	4	17	0

arithmetic, are almost as mysterious to others as the practices of the most refined processes

	£	s.	d.
At Amsterdam - Price $14\frac{1}{4}$—Exch. 31,6, Bank agio, 1 per cent.	4	18	6
At Paris - - Price 105 —Exch. 20 - -	4	19	0

An ounce of silver, as above,

At Hamburgh - Price 27. 10—Exchange as above	0	6	3
At Amsterdam - Price 26. 8— Do. -	0	6	5
At Paris - - Price 53. 60— Do. - -	0	6	$4\frac{5}{6}$

Relative VALUE between GOLD and SILVER, in England and in foreign countries, according to their respective mint regulations; and according to assays.—By Dr. KELLY.

ENGLAND. The relative value between gold and silver in England, is $15\frac{2869}{43650}$, or $15\frac{13}{62}$ to one, making no allowance for remedy, which by the trials of the pix has never been taken.

AMSTERDAM. The relative value of those metals cannot be permanently determined, because the current value of the gold is not fixed. Taking the ducat at five guilders five stivers, the price which it most commonly bore, the proportion is $14\frac{7}{10}$ to one, according to the mint regulations, and $14\frac{63}{100}$ to one, according to assays.

HAMBURGH. The relative value between gold and silver cannot be fixed here, for the same reasons as in Amsterdam, the price both of gold in currency and silver coin in banco being variable; but taking the mean prices as follows, 6 marcs banco per gold ducat, and $27\frac{5}{8}$ marks banco per Cologne mark of fine silver, the proportion will then be as $14\frac{83}{100}$ to one.

of chemistry; and each, when the facts and proceedings are examined, are equally simple.

PARIS. (Old system) 15 to one, per mint regulations, allowing for the remedy, which was considerable, and of which the coiners fully availed themselves.
Per assays 15 $\frac{5}{10}$ to one.
(New system) 15 $\frac{65}{129}$ to one, according to mint regulations, without allowance for remedy.
Per assays 15 $\frac{42}{100}$ to one.

CADIZ, &c. sixteen to one by mint regulations, without the remedy.
Peas says { 15 $\frac{55}{100}$ to one (by doubloons of 1772.)
{ 16 $\frac{45}{100}$ to one (by doubloons of 1801.)

LISBON. 15 $\frac{7}{10}$ to one, per regulations.
15 $\frac{26}{100}$ to one, per assays.

NAPLES. 14 $\frac{5}{10}$ to one, per regulations.
14 $\frac{75}{100}$ to one, per assays.

GENOA. 15 $\frac{54}{100}$ to one, per regulations.
15 $\frac{35}{100}$ per assays.

LEGHORN. 14 $\frac{53}{100}$ to one, per regulations.
14 $\frac{32}{100}$ to one, per assays.

VENICE. 14 $\frac{88}{100}$ to one, per regulations.
14 $\frac{35}{100}$ to one, per assays.

The reports here of the silver coins vary considerably, and have undergone several depreciations of late years.

PALERMO. Fifteen to one, per assays.

AMERICA. Fifteen to one, very nearly, per regulations, without allowance for remedy.
15 $\frac{04}{100}$ to one, per assays.

Mystery consists in secrecy; and every thing narrowly inspected, within the compass of human practice, ceases to create surprise, or involve uncertainty. It is so with commerce and exchange. We require only to be admitted behind the desk, and to the warehouse, and we shall find that there is no art more simple than that of buying and selling goods, and exporting them in return for bullion or other goods, which is the sole business of foreign commerce and exchange.

2. It is the business of a merchant to attend to the prices in foreign markets, and at home, and to send various articles to various places where he finds that the difference in the money prices will afford him a profit; that is, will enable him to buy with one sum of money, and sell for somewhat more, after paying all necessary charges. In this consists all the art of commerce; but yet in the detail it requires constant attention and sedulous activity; without which, all arts of gain become the means of failure.

3. The charges of receiving and shipping goods depend upon many contingencies; on the distance from the manufacturer, or the grower

to the port of exportation; on the package or repackage; and on the quantity shipped at a time, particularly on goods entitled to a drawback or bounty on exportation; on the duties, drawbacks, and bounties on exportation; on the allowances on the weights, the waste, and discounts; which last depend on the different modes of purchase, the quantities bought at a time, the times of payment, and the quantities of the goods subject to waste. On the freight and primage which are paid on the weight or measure, or by the piece; and which depend on seasons, the accidents of war and peace, and the value of the article; on the insurance, depending on the like accidents, and the commission. But neither freight, commission, insurance, nor any other charge are paid in detail by the purchasers of cargoes, deliverable over the ship's side, free of freight and insurance at the port of sale, which is frequently the case in cargoes of rice, tobacco, corn, and other articles of that kind. In conformity with which other articles are often sold to be delivered in proper packages by the buyers at a price free on board ship, to avoid the inconvenience of the trouble and difficulties attending the shipment and paying of duties on different articles, which must be better understood by the particular dealer than by the general merchant.

4. The expenses attending the importation of goods at the place of sale, are also contingent and variable. These are the duties of importation, the charge of lighterage, which depends on the distance of the ship from a wharf; the conveyance from thence to a warehouse, depending on its distance; and the customs of a place, and the rent of a warehouse, depending on the bulk of a commodity, and the continuance of it there. The allowance of weights and discounts, the freight, the insurance and commission, all variable as before. And all these circumstances must be taken into the account, in order to compare accurately the current prices at which each article of goods may be bought in one country, with the prices it may be sold at in all others. This, however, requires a minute acquaintance with the mode of conducting business in each country, and a correspondence in each place with persons, who will inform the merchant of the price of the goods, and the exact charges which he will incur. Upon which he will be enabled to ascertain, when an article is to be purchased at various places, which is the place from

whence, all things being considered, he can import it to the greatest advantage.

5. As every thing is best taught by example and practice, we will give a specimen of a merchant's transaction at Hamburgh, in the year 1762; on the purchase and sale of one chest of linens, containing one hundred pieces at five rix dollars and $\frac{1}{8}$ths the piece; making in rix dollars, banco 562, and 24 sols; which at three marks of *Lubeck*, of 16 sols of *Lubeck* each make 1687, 8 *marks banco*, 8 schillings. To which add, for expences, as follows:

Cost price		B. M. 1687 8
Charges to be added		
Refitting the chest	1 4	
Carrying on board and shipment	2 0	
Duties of export and transit, and those of *Schaumbourg*	1 8	
	4 12	
Marks currency at 152 per cent.		3 14
		Marks banco 1691 6
Commission, 2 per cent.		33 13
		1725 3

Insurance of R. 1726, at $3\frac{1}{2}$ per cent	B. M. 60 6	
Brokerage thereon at $\frac{1}{4}$ per cent.	4 5	
	B. M. 1789 14	
Which, at two for each dollar currency, makes	D. 894 30	
Bill of exchange drawn on *Amsterdam*, at 33 sols the dollar, make of money of Holland in florins, banco	banco, Fl. 1476 13	
Redrawing on Cadiz for the same	banco Fl. 1476 13	
Commission on the bill, $\frac{1}{2}$ per cent	7 8	
Brokerage thereon at $\frac{1}{2}$ per mil.	0 15	
Postage	2 4	
	Banco Fl. 1487 0	
Banco fl. 1487, drawn upon Cadiz at 95 d. the gross, make in ducats		616 2 1

Thus the chest of 100 pieces of linens at *Hamburgh*, making the payment through *Amsterdam* on *Cadiz*, has occasioned the drawing from *Amsterdam* on *Cadiz*, in ducats, of 626 2 1 which was

paid in *Reals of Plate* 6905
9 *quartos*

Cadiz, A.D. 1763, Account of sales and net produce of the above 100 pieces of linen, say 400—4 which were sold as follows:

80 pieces, at 90 reals	R. Pl. 7200	0
16 Ditto, inferior ditto, at 86	1376	0
4 Ditto, damaged, at 80	320	0
	8896	0 0

Charges to be deducted.

Freight and average	R. 30	0
Dues of entry of 100 pieces, *bocadillos* making 4004— at 2 ½ *Reals Vellon*, the quarter piece making R. V. 1000		
Small charges R. V.	8	
	537	9
Warehouse room and brokage, at ¾ per cent.	66	11
Commission, 3 per cent.	266	14
	901	2 0

Net produce of sales in *reals* of *plate* 7994 14 0

Deductions from net produce of R. P. 7994 14 0

Amount of the cost price paid in advance R. P.	6905	3
Interest on advances from the falling due of the bill to the return of the produce, for a period of six months, at three per cent.	207	2
	7112	11 0
Remains a gain of R. P.	882	3 0

One chest of fine linens, therefore, gives a profit of 12⅞ per cent. Without any abatement, say R. P. 882 3, which remitted on Amsterdam, at 96 ¾, gross for each ducat, makes banco, Fl. 19 3 9

6. This example is taken from a French work, published in *Amsterdam*, in the year 1765, entitled *Comptes Simules*, and with others of the same kind would explain the mysteries of commerce better than any other treatise, were it perfect. The author possesses only two numbers of the work, of which six were promised by the editor, and one of them was

designed to contain accounts of exchange and dealings in bullion, as well fine as alloyed; by means of which he has no doubt that the subject would have been most clearly elucidated; but the present account will open to view many considerations in merchandise, and particularly the different calculations which must necessarily be made concerning the different species of money with which the goods arebought and sold; and the most advantageous mode of paying the cost of goods, or obtaining the returns for them by means of bills on a third place. This belongs entirely to the art of exchange, which is not only the calculation of the value of the different monies in each country, but also of the current price of bills of exchange between one country and another.

7. In all transactions of merchandise, either the goods must be paid for on the sale, or the delivery, or after a credit allowed, and they may be paid with or without the intervention of a bill of exchange; but generally it is most convenient that a bill of exchange should be created, which is drawn payable in the sum agreed upon for the price of the goods, calculated in the money of the place where it is due. It is drawn, for instance, from *London* on *Paris*, in so many *livres*, and the drawer through the means of the bill

is to receive payment of his debt. If he waited to have the payment in money he must remit the bill to an agent in *Paris*, who would charge commission for presenting it, and he would be put to an expence in the freight, carriage and insurance of the money, which when received in the coin of France must be either converted into *English* money to be circulated in *England*, or else kept to pay some bill drawn upon him from *Paris*, payable in French *livres;* which we see is not the custom of merchants, who draw their bills payable, and make their sales on prices estimated in the coin of the place of the delivery of the goods or the payment of the bill. The expence of freight and insurance on money passing from *France* to *England* would vary occasionally; and if the trade were considerable, and the circulation of money quick, not only would a great quantity of coin be required for this purpose, but the expense would be so great as to be a considerable burthen upon trade.

8. To remedy this inconvenience there is always an internal traffic carried on in every commercial town in bills of *exchange;* by means of which as little money as possible in gold and silver is suffered to pass from one country to another, or that exact sum only which

it is convenient for the one to part with, and the other to receive; or rather the limit lies in the capacity of disbursing conveniently, since gold and silver is a commodity of such general demand that it rarely fails to find a vent.

9. This traffic is like all others carried on for gain or convenience, and is conducted either with views of speculation, or to satisfy an immediate demand. The former is when the purchaser can make a profit by the purchase, the latter when he has a debt to pay abroad, and wishes to avoid the expense of remittance. For which purpose he must consider what money it would cost him to obtain *livres* to pay his debt in France, and what would be the expense of freight and insurance, and he will of course not much exceed the cost or expense which he must be put to in receiving or paying his own debt in *France*.

10. The bills of merchants are drawn upon sales of goods, or on bankers and correspondents, for the purpose of money negociations. When the bill is drawn for payment of goods sold, value has already passed, and the drawer will not sell for less than he would receive by waiting the remittance of the money through his correspondent in Paris. When it is drawn

upon credit, there must be some small speculative profit to induce the drawer of the bill to engage with the acceptor to make good his payment, or it will not be created. There are therefore various circumstances which affect the price of bills, and make them fluctuate and vary between certain points of value which are nearly fixed.

11. The first thing to be considered is, how much gold and silver the bill will produce in the country when paid; and the next consideration is, the cost of receiving it: these being ascertained, the price of a bill cannot vary much in the ordinary course of trade; because of all articles, money is the most certain of sale, and the quickest in its returns, and therefore all dealings in money are conducted at small profits, upon the detail, though to considerable advantage in the aggregate of many transactions. And by this price of bills, when ascertained, merchants are very much guided in their purchase of goods abroad; for if they can gain three per cent. on a bill, it will be an advantage to remit the bill in payment for goods, upon which they may obtain six or eight more clear profit. All trade must be in some sort speculative; but the balance of receipts and payments between two

countries, must in the end be equal. In every account between merchants, the vendor charges the buyer with goods, and the buyer charges the seller with money: which must be acquitted to complete the payment in some way or other. The goods are an equivalent for the money, and the money for the goods. Commerce can proceed upon no other principle: for commerce and trade are an exchange of one thing for another upon a due sense of equality. The one takes place between the inhabitants of the same country, the other between foreigners.

12. Every transaction in foreign commerce, it is seen, gives rise to a bill of exchange, which may be called the first medium of commerce, and as it is now transacted, a bill of exchange may be considered as the principal circulating medium of commerce. But each bill of exchange must finally be liquidated; which is done either by the transmitting of bullion or goods; and either will in general suffice, or may be made to pay the bill mediately or immediately. In this view the equality of commerce is clear; for every transaction passes on a bill of exchange, for which an equal value is remitted in bullion or goods. In other words, the debts and credits are all equal and

balance each other; if they do not, one party must lose, and the trade cannot be continued.

13. Thus if the balance of trade were, as it is supposed, in favour of *England* to the amount stated in the public accounts, the exports being from the year 1785 to the year 1805, to the value of £559,216,000, and the imports to the value of £499,141,000, making a difference or surplus of £60,075,000, that sum must have been remitted to *England* in gold and silver, which must have been absorbed in the manufacture of plate for home consumption, or locked up in the coffers of the bank, or dissipated by the government, or destroyed by some power unknown, or else the rest of the world must have been defaulters to that amount. Had it remained here, and got into circulation, in the mean time, it will be seen by this work in the end, and may be well understood by the perusal of *Hume's Essay on Money*, how little it could have added to the real wealth or comfort of the people. Something therefore is deceptive in this notion of the balance of trade: for if the goods imported are to be considered as payment for the goods exported, the inequality is to the disadvantage of the exporter, and that nation is really the richest who commands the most

goods for home consumption. The nation which exports more than it receives a return for, must upon the ordinary supposition be very bountiful to its neighbours.

14. Mr. *Blake*, a writer of great acuteness and experience on the subject of exchange, and some others, have conjectured that this excess of exports beyond the imports, may be accounted for by the remittances which are necessary to be made in the discharge of the bills drawn by the agents of government, for foreign expenditure and for subsidies. In confirmation of this supposition it appears that in 1795, when a loan was granted to the Emperor of *Germany* for 4,600,000l. Mr. *Boyd*, instead of remitting money for the whole sum, paid it through the intervention of bills to the amount of 3,400,000l. negotiated in Germany and Holland, which were afterwards sent here in payment for goods, and 1,200,000l. only in bullion. And upon examining the accounts of the exports and imports, it will be found that the balance of trade, as it is falsely called, is greatly more favourable in years of war than of peace; the average excess of seven years of peace, as quoted above, from 1785 to 1791, being only 354,000l. annually, and the average excess from 1799 to 1805, years of war, being

£6,161,000 annually, which is next to a demonstration that the excess was created by the war, which could only, in a commercial view, occasion the drawing of bills which must be discharged by some means or other, and for the convenience of all parties, gave occasion to the export of goods.

15. It has been observed that the traffic in bills of exchange is an internal traffic; and, generally speaking, the gain or loss, if any, by the exchange, passes entirely between the natives of the country where the bills are sold. The payer and receiver of the bill must, the one discharge, and the other receive the debt fully. It is the previous negociator who gains or loses by exchange; and it will be seen by a very slight examination, that from the constant competition which must arise, the gain or loss on bills cannot be very great for a long continuance. It is true, when bills are cheap, that is, when exchanges are low, or as it is called adverse at any place, foreigners by their agents may negotiate or purchase bills for their gain; but the competition which they introduce, of course raises the market and brings all to an equality, which is the very essence of all exchange whatsoever. The necessary limit must be the expense of remitting the money to pay the

bill; for otherwise the trade which must give occasion to the bills must very soon cease. Since unless the profit on the sale of the goods purchased is very high, the drawer of the bill cannot afford to sell it at a great loss, and consequently the number of bills must diminish, and the exchange vary.

16. Circumstances may occur in which bills still continue to be drawn in great quantities, or greatly to exceed the bills on the other side, although there is no trade; as in the present circumstances of this country; when no trade is allowed with *France*, but yet there is a necessity of making remittances to persons detained in *France*. In this case, to transmit goods without a licence is impossible, and to convey money must be very expensive: the exchange must therefore be greatly increased in its rate above *par* or the true equality of exchange; and this must be greatly increased where there is a demand for some commodity of great necessity, as corn, and the owner of the corn will be paid for it only in money; or rather, where the government of the country will not allow of any export except corn and wine in exchange for gold. The gold will then become very dear, and bills on *France* must rise in price very high.

17. Commerce is said to be the exchange of one sort of surplus commodity against another, and where gold is remitted, that may be considered also as a surplus commodity exported, the bill of exchange being the first medium of the commerce. It is injurious to commerce then, as it must, when very high, throw some difficulty in the way to impede the exchange of commodities; but exchange always implies an equality, and must be left to its own course; and whether coin or bullion is exported or not, can be very little material. But when paper money is the only circulating medium, it is obvious, that it is quite unnecessary to regard the high price of bullion, or whether foreign goods are paid for in bullion or commodities; for the bullion must have been previously purchased with commodities, and it is absolutely of no use, unless it is exchanged again.

18. Exchange is of two sorts, the one the exchange of money for money, coin against coin; and the other the exchange, technically so called, which consists in the sale of a foreign bill of exchange for a sum of money current in the place where it is drawn. The exchange of money for money, is invariably conducted upon the consideration of the relative quantity of bullion in each; and, with a very small al-

lowance, any coins of equal purity may be purchased in any commercial country by giving some other coin for them weight for weight in the like metal. Thus at *Paris* twenty shillings new from the *English mint* would be equal to twenty-four francs and ninety-one cents of the new coins of *France*. If more or less were given in exchange it could only happen from the defect of some of the coins not being perfectly fresh, and of the standard weight and purity. This is called the intrinsic *par*, or the ratio of equality between the two coins or monies of foreign states. To furnish a complete view of the intrinsic *par* the following table is extracted from the Report of the Bullion Committee. See the next page.

INTRINSIC PAR of EXCHANGE between England and Amsterdam, Rotterdam, Hamburgh, Paris, Genoa, Leghorn, Naples, Lisbon, Cadiz, and Venice.—By Dr. KELLY.

	By Mint Regulations.		By Assays.		
	In Gold.	In Silver.	In Gold.	In Silver.	
Amsterdam Banco *	*s. d.* 35 11,6 Flem.	*s. d.* 36 7,5 Flem.	*s. d.* 35 10,5 Flem.	*s. d.* 37 2 Flem.	For one Pound sterling.
Amsterdam Currency	37 5	38 1	37, 3,75	38 7,75	Do.
Rotterdam	guil. stiv. 11 4,5	guil. st. 11 8,5	guil. st. 11 3,8	guil. st. 11 11,8	Do.
Hamburgh Banco †	*s. d.* 34 3,3 Flem.	*s. d.* 35 ; Flem.	*s. d.* 34 1,4 Flem	*s. d.* 35 1 Flem.	Do.
Paris, old Coins	liv. s. den. 25 9 11	liv. s. den. 25 1 9	liv. s. den. 25 10 3	liv. s. den. 25 10 3	
Paris, new Coins	25 10 6 or 25 fr. 21 cents	25 0 9 or 24 fr. 73 cents	25 11 6 or 25 fr. 26 cents,	25 4 5 or 24 fr. 91 cents.	Do. Do.
Genoa	pence sterling 45,52	pence sterling 46	pence sterling 45,5	pence sterling 45,92	For the pezza.
Leghorn	49,1	46,67	49,1	46,25	Do.
Naples	42,57	43,5	43	41,3	For the ducat.
Lisbon	67,4	69,4	67,4	69,5	For the milree
Cadiz	37,3	39,22	37,16	39	For the dollar of exchange.
Venice	lire piccole 46,28	lire piccole 47,5	lire piccole 46,38 Reckoning the Sequin at 22 lire.	lire piccole 48,97 in old coin 57,3	For the Pound sterling.

* Reckoning the gold ducat at 5 guilders 5 stivers, and the Bank agio at 4 per cent.

† Reckoning the Ducat of Gold at 6 marks Banco, and the Bank agio at 23 per cent.; but these data are subject to variation, as in Amsterdam.

19. A bill of exchange may be considered as representing the precise sum of money which it imports upon the face of it; and if that be only an imaginary money or money of account, it yet has some actual coin with which the money of account corresponds or is synonymous, and this effectual or real money must be put in the place of the nominal money; as a bill, for £50 sterling, corresponds with 1000 shillings new from the mint, and ought to produce a full equivalent for them. If by any change in the currency by wear, or otherwise, the bill will either not produce so many shillings, perfectly good, or gold of equal value with so many shillings; which can only happen from the wearing and deterioration of the coin, or from the legal tender being in some degree violated or neglected, and a paper currency being paid in place of the shillings; in this case, an allowance must be made for the loss, in order to make the exchange at the true or intrinsic *par*.

20. When there is no currency in coin, and the bill is to be paid in bank notes, or paper currency, the drawer abroad, when he is to estimate the value of it, must consider what quantity of bullion the bill will produce, without regard to the nominal value of it. This

he will estimate entirely by the paper price of bullion where the bill is payable. He will then consider the value of the bill at its destination as settled by the bullion in ounces and grains which the paper will purchase, and comparing this with the money of his own country, he will be enabled to form a new *par* or ratio of equality, by which to estimate the value of his bill. Thus every thing exchangeable is to be valued in money, and every coin, and every substitute for money must be ultimately valued in gold and silver, which is the material of every coin in the commercial world. Whatever passes for money must be either something material, or something representing another article, which is material or convertible into a material substance at the instant at which it is valued. Immaterial essences can never be exchangeable in commerce; abstract qualities can be weighed in no commercial scale of value, and an abstract currency is an abortive conception of metaphysical absurdity. A pound sterling is synonimous with twenty shillings in silver, twenty parts in twenty-one of a guinea, 123.273 grains of gold, and 1858.060 grains of silver; but a pound note, no longer in fact exchanging for a pound sterling, is worth only 1513

grains of silver of the standard of the rix dollar, from which the *Bank of England* tokens are coined. While therefore a pound note will readily exchange for dollars at this rate, there will continue a ready and fixed standard of value, for the present currency of *England*, which it is quite absurd to consider as composed of the ancient pound sterling, or of guineas, or half guineas, or even of legitimate shillings. The currency is a bank currency composed of circulating credit, and of silver tokens of the standard of the Spanish rix dollar, which differs considerably from the true *English* standard.

CHAP. VI.

Practical View of Exchanges.

1. THE price of bills of exchange is governed by exactly the same laws and necessities, as the price of every species of goods.

2. How can it be otherwise; (says a practical writer from whom we extract here largely,) seeing that bills, and bullion must form one side of the account of each particular transaction of business with foreign parts: one of these must be debtor for all goods imported, and creditor for all goods exported: and it rarely happens, that the imports and exports are the same to any one country.

3. The exports of Great Britain of goods to, are either more or less valuable, than the imports from a given country. This naturally produces a greater or less demand for bills of exchange in each country, so trading with us. Therefore, as it is with goods of all sorts; if a greater quantity be

brought to market than is wanted for its natural consumption, it must fall below its natural price, for the purpose of either increasing its consumption, or encouraging speculators to lay it up, against a time when a smaller quantity shall be brought to market than the natural consumption will take off, in order that all may be sold that is brought for that purpose to market:—so it is with bills of exchange. When bills to a greater amount are brought to be sold in the market, for goods exported to any certain place, than there are to be found buyers of bills for goods imported from the same place; before a sale can be made of all bills in this predicament, the prices of them must be sufficiently lowered to encourage the speculator in exchanges to buy. Of the regulation of such speculations in exchanges, we shall have occasion to treat hereafter; suffice it here to add, to what we have said, that when any course of exchange is come down, (as of goods) to a speculative price, there are no bounds to the demand; and that when large purchases are made, they naturally raise the price again above the common course.—For these reasons, as it is with the most speculative articles of goods; we see the courses of exchange in every part of Europe continually unequal and fluctuating; and that, very considerably.

The author then supposes that a merchant wanting to remit to Amsterdam according to the most advantageous exchange, finds good bills at London, and the quotations at Amsterdam also as follows, viz.

Bills On Hambro'	at 37	10 quotations	$33\frac{7}{8}$
Cadiz	33		$90\frac{1}{4}$
Leghorn	$43\frac{1}{4}$		86
Lisbon	$66\frac{1}{2}$		$52\frac{1}{4}$
And Amsterdam	39s.	6d. at sight	

He enquires which of those bills will be most profitable for him to remit, and by how much per cent each will be better than the other.

Then he finds that to remit bills on				Which is more advantageous than bills on Amst. at 39s. 6d.			
Hambro will produce	39	.	$7\frac{1}{4}$	-	-	+	.26 per cent.
Cadiz do.	39	.	$10\frac{1}{5}$	-	-	+	1.00
Leghorn do.	39	.	$9\frac{1}{6}$	-	-	+	.68
Lisbon do.	39	.	8	-	-	+	.42

5. Having thus reduced these differences to so much per cent. it will be easy to deduct from them the expences that will attend the extra negociation of such bills at Amsterdam: which are more or less to different persons, according to their different connexions, and the extent of their business in this way. Then by combining all these circumstances together, the merchant determines at once to make this remittance in bills on Cadiz. The obtaining there-

fore these differences by the per cents. is the grand object of enquiry in the business of exchange.

6. Another object of trade is, when a merchant sends goods or effects of any sort, on his own account, to foreign parts, and wants remittances made to him in return: great advantages may frequently be made by desiring his correspondent to remit him such good bills as he may have an opportunity of getting cheapest; and which, at the same time, may be most in demand at his own place, and consequently may be sold best there; and this may be seen by the quotations of exchanges of both places compared together in a manner similar to the above.

7. For instance, suppose a cargo of goods were sent to Hambro', to get returns from thence, in the most advantageous way by bills of exchange: when the correspondent quotes, that he can buy satisfactory bills as under:

viz.	At Hambro'	And that at London the exchanges are
On London at sight at	37 10	
Amsterdam	33⅞	at 40
Cadiz	85½	33
Lisbon	50⅛	66⅔
Paris	21¼	22
Hambro'		38 2

8. In this case the property lies in banco marks at Hambro; and the enquiry is, how to obtain a pound sterling in London for as few of these marks as possible: or whether by any circulation of exchanges, a pound sterling can be got for less than 37 10 Fl. the exchange, at which he could remit bills on London, at sight, or in proportionate time, without the trouble of any such circulation—For this purpose, by enquiring what bills will do best, it will be found, that one pound sterling will be

On London	37	10
Amsterdam	37	9½
Cadiz	37	7
Lisbon	37	9½
Paris	38	8⅞
Hambro'	London to draw on Amsterdam at 38.	

9. But there are numerous mercantile operations, by investments, accommodations, and speculations, by means of which, a merchant may have to remit large sums of money to Amsterdam and Paris; and it may be convenient for him, to appropriate the money which he has in Hambro', to reimburse his friends, in either or both of these places, as the exchange may be the most favourable.

10. A further question here arises, to which of the three places, London, Amsterdam, or Paris, will it be most for his interest, to order his Hambro' friend to remit, and in bills, upon what places? To enable him to make the most advantageous remittances to Amsterdam and Paris; he must have recourse to the Amsterdam and Paris quotations, on the places quoted from Hambro', and therewith form the following table of quotations altogether, viz.

Quotations from

On	Hamb.	London	Amst.	Paris.
Hambro'		38s 2d	$38\frac{1}{2}$	$21\frac{1}{4}$
London	37 10		39s 8d	$22\frac{1}{8}$
Amsterd.	$38\frac{1}{8}$	40		43
Paris	$21\frac{1}{4}$	22	44	
Lisbon	$50\frac{1}{4}$	$66\frac{1}{2}$	$52\frac{1}{4}$	320
Cadiz	$85\frac{1}{2}$	33	$90\frac{1}{4}$	92

11. To effect this comparison, he must state the following positions to find the most profitable bills for this purpose.

1. To be remitted from Hambro' to London.
2. idem - London to Amsterdam.
3. idem - - London to Paris.
4. idem - Hambro' to Amsterdam.
5. idem - - Hambro' to Paris.

12. And then by comparing the different exchanges that will be produced by such bills; he will find the most advantageous course to take. For the 1st—We have already found, that bills on Cadiz are most profitable to be remitted from Hambro' to London, producing 37 7.

13. To render this more clear: it will be necessary to draw together the issue of these five positions, as follows: viz. the best bills for

1. Hambro' to remit to London, are on Cadiz 37 7
2. London do. to Amsterdam, do. Paris 40
3. London do. to Paris, do. Lisbon $21\frac{1}{4}$
4. Hambro' do. to Amsterdam do. Cadiz $33\frac{15}{16}$
5. Hambro' do. to Paris, do. Lisbon $20\frac{1}{16}$

Which proves that bills on Lisbon are best yielding $20\frac{1}{16}$.

14. Yet, before we can come at the solution of the whole question, there still remains to be asked,

Sixthly, which is the most advantageous, for Hambro' to remit direct to Amsterdam at $33\frac{15}{16}$; or for Hambro' to remit to London at 37 7, and London to remit to Amsterdam at 40s. as above?

It will be found by stating,

If 1 Dr. : 64d. Fl.
451d. Fl. : 1l. sterl.
1l. sterl. : 480d. Fl.
2d. Fl. : 1s. of Amst. 1 Dr. will be $34\frac{1}{2}$

Consequently better than $33\frac{15}{16}$ by $\frac{9}{16}$.

And likewise, Seventhly, which is most profitable, for Hambro' to remit to Paris, at 20 $\frac{1}{16}$, or for Hambro' to remit to London at 37 7, and London to remit to Paris, at 21 $\frac{1}{4}$?

This will be found, in like manner, by stating,

If 1 Ecu : 21 $\frac{1}{4}$d st.
240d st. : 451d Fl.
2d Fl. : 1s lub. then 1 Ecu will be 19 $\frac{3}{32}$
And consequently better than 20 $\frac{1}{16}$ by $\frac{3}{23}$.

15. Thus the whole question is solved, that it will be most profitable to receive in London remittances

From Hambro' by bills on Cadiz, - - as per 1st position.
And to remit to Amsterdam, bills on Paris - as per 2d do.
And to remit to Paris, bills on Lisbon - - as per 3d do.

16. Such calculations as these, of the circulation of exchanges, are in general neglected by all but brokers, as being too tedious, but it is said would be very profitable.*

17. The effect of the competition which must

* See *A New System of Mercantile Calculation*, &c. (Leigh and Sotheby, 1795.) from which the above is entirely extracted. We have omitted the calculations as too extensive for the present work; but must observe, that these calculations are usually made by what is called the chain rule, or continued proportion as above, sect. 14. The subject is now admirably treated by Dr. *Kelly*, in his excellent work, the *Universal Cambist*, to which we must refer; and could have wished to have extracted all that he has said on the various *items* which form the *par* of exchange; as he appears to have explained them better than any other writer extant.

arise from the general knowledge of exchange is obviously to reduce the profits and equalize the exchange; but of late, the exchange has been very unfavourable with England and France: so that on the 15th of March 1811, it was stated that the exchange being at seventeen livres for the pound sterling, and gold at four pounds sixteen shillings the ounce, which sells at *Paris* for ninety-six *livres*, a merchant by exporting bullion would gain clear thirteen per cent. in bank of England money. For he would give four pounds sixteen shillings for the gold, and about four shillings for the expense of freight, insurance, and other charges, which altogether amount to five pounds; and the gold being remitted to *France* would give him a right to draw for ninety-six *livres*; then, by selling his bill on the exchange at *London*, at the rate of seventeen livres for the pound bank of *England* currency, he would receive five pounds and $\frac{1}{17}$ths of a pound, or about 13s. bank currency: that is, he would have given one hundred shillings bank currency for his French bill, and sold it for 113, which is exactly thirteen per cent. Exchange has since risen to twenty livres for a pound bank currency; and the same bill which costs five pounds of like money, if bullion is remitted for it, will sell only for four pounds

sixteen: whence it is clear, that the bullion is not remitted; that the exchange between *Paris* and *England* is at its real and intrinsic *par*, and that a shilling bank currency, is just equivalent to a French *livre*, or somewhat more than ten pence sterling. It should seem also from this statement, that when the exchange had appeared to have fallen from 25 livres to 17, which was the difference of the par between the pound sterling and the *livre*, it had only fallen from twenty, which was the true par of the bank currency.

18. To account for the high price of gold in *England*, many fanciful causes have been assigned, such as that the great want of gold abroad to pay the armies, made gold dear there; but it will appear, that the French currency being in coin, gold could not be of higher value than the coin, or it would not be converted into French coin to pay those armies. It is also apparent that the real high price of gold is paid in *England*, and the loss by exchange suffered in *England*; whereas, if the dearness of gold occurred in *France*, from any difference in the currency there it would occasion an adverse exchange in *France*, and an exportation of gold from that country; a fact which

the reasoners upon this subject frequently overlook. It is demonstrable, therefore, that the real cause of the high price of gold in *England*, is the predominant and almost exclusive, not to say excessive, currency of bank money; and the steady rise in exchange to a par of 20 *livres* for the pound bank currency probably arises from the issue of the dollar tokens which afford an obvious and certain estimate of the value of a bank note in silver bullion; wherefore we see that the same *par* is preserved between the bank note and the *livre*, as between the bank note and the third part of a three shilling token; or that the French and English silver currency are exactly equal in value.

19. A question here naturally arises after settling the intrinsic par between two nations in any given quantities of currency, what is the ultimate cause of the fluctuation in that *ratio* which constitutes the commercial *par* in the exchange; what constitutes the true cause of the frequent variations in the course of exchange? and it is a question of no small difficulty. The ordinary writers upon this subject, including all the arithmeticians, the practical merchants and calculators, and even the great

Montesquieu have a ready answer, and pronounce in a sort of trite apophthegm, that the course of exchange proves the excess of the bills drawn by one country against the other; and that the country which has the greatest sum to pay, will find the exchange against it, because the greater quantity of bills must render them cheaper, as increase of quantity lessens the price of all commodities. But an inquisitive theorist would wish to go further; and will immediately inquire what makes the quantity of bills greater against the one country than the other? The answer is again prompt and short; namely, the one country has a greater surplus produce to dispose of than the other; or, in a different phrase, the quantity of commodities which are importable into the country, paying the excess of the bills and losing by the exchange, is greater than that which can be purchased to advantage by the country having the exchange, as it is called, in its own favour; that is, converting the terms once more, there is a greater variety of goods relatively cheap between the one country than the other. And here again, the inquirer is met by another question, what causes the relative cheapness and dearness of commodities between two countries? To

which it may be answered, varieties in production, greater or less progress in manufactures in the particular instances, and in general, the greater or less relative quantity of money in circulation, which must alternately affect all prices, and has, as we before observed, a general tendency to produce a level of prices every where. The course of exchange is therefore the direct means by which this level of prices is preserved as far as possible, and for the most part, will explain the comparative value of money in either country.

20. In this view of the case, we must consider the whole exports and imports of the two countries, including the bullion remitted, and perhaps the foreign expenditure which has been vested in goods and bullion, to be set mutually against each other, as the exact equivalents placed in a commercial scale, balanced and trucked one against the other, in exchange, upon a due and mutual sense of equality. For the wealth, the commodities, the bullion, or the labour, can alone be effectively exchanged between the two nations; the bills merely serve to keep the accounts, and if they did not represent commodities or valuables of some kind, would have no existence. Here is no coin passing between the two nations, for they

have no common mint, and the medium of their exchange has been the bills which in this respect perform the office of abstract currency and ideal units. The things actually exchanged are the equivalents that are equal in exchangeable value, for this purpose; however unequal in weight, quantity and utility, and however unequal in the nominal value, when estimated in the currency of either of the two nations, as they always are in tables of imports and exports. The bills have on each side exactly balanced the goods on the other, and having performed their office, are mutually destroyed; for like all abstract qualities and ideal units, they exist only for the purpose of calculation: come like shadows, so depart.

21. But before the process of mutual destruction can be performed on the bills, they also must be exchanged and pass from nation to nation: for the destruction does not take place, till they are paid by the transmission of the goods or valuables, whether in labour or bullion which they have represented. Whatever may be their nominal amount the bills must be exchanged as equivalents, for the goods have generally gone before them, or will follow soon after; and as the goods balance the goods, the real exchangeables the real exchangeables, so must the bills in foreign commerce balance the bills upon a fair sense of equality, notwithstanding the inequality of their reputed value in currency. In order to do this, the bills are set off against each other, by the repeated operations of exchange-brokers, and in each country respectively the bills of both are trucked against the other. In each country there is a buyer and a seller of a bill, who give and receive a price for it, which is called the rate or course of exchange, and by this dealing which passes in the creditor country, as to each bill, the account is adjusted, and the gain and loss by exchange occurs. Thus A. in *England* draws on B. in France for 1000 livres, the exchange being at 20; A. then sells it to C. in London, who gives him 50 pounds in bank notes for the bill; and C. remits it to D. in Paris for a credit, or in payment for some commodity; but before C. had occasion to remit, he had ordered that commodity, and agreed to pay to the pecuniary value of 1000 *livres*, or 50 pounds for it in some shape or other. Thus we readily perceive how the equality of exchange or barter is preserved by the intervention of bills, money and the course of exchange. For 50 pounds mul-

tiplied by 20 livres, give 1000 livres on one side of the account, and 1000 livres divided by 20 livres give 50 pounds on the other; so that each bill which formed the estimation of the money price on the credit side of the account in the ledger of each trader is found to be equivalent; and the goods or whatever the *corpus debiti* may originate in, are of course equivalent; because they are each equal in commercial value to the bills by which they were balanced. The difference, in the quantities, or the nature or character of these valuables, is a thing wholly foreign to commerce. On the one side it may be a draft for a subsidy, and on the other a quantity of grain: on the one it may be a ransom for a captive prince, and on the other a cargo of sugars; things which have no similarity or point of comparison in nature; but which by the intervention of money, and by the arts of exchange are reduced to a perfect equivalency in commerce.

22. It has been seen that the cause of exchange rising and falling is the greater or less number of bills, which are increased or fall by the greater or less number of purchases; and they must increase or diminish by the greater or less quantity of goods which are cheaper in the creditor than the debtor country:

wherefore it is clear that the variations of exchange arise from the relative value of money, and its relative quantity, that is, the quantity of real money; for no other money is considered as fixing the par between nations; whose standard of currency in exchange is invariably the mark of refined silver or gold. Hence also by the effect of exchange the relative power of money is rendered nearly equal all over the world, as far as is consistent with the facilities and the freedom of commerce, and bullion is made the universal equivalent.

23. Do we wish to know how the balance of trade is preserved, therefore, we must not look to the tables of the custom house, but to the desks of the exchangers; and we shall there find every debt credited by a bill, and the bills drawn on each country will shew the commerce or actual trade and dealings with each country. As these are unknown quantities, call the one set of bills x, and the other y: put a for the money unit of account of one country, and b for the money unit of the other. Then will x and y represent also the real imports and exports, or amount of bullion, commodities, and debts exchanged on each side; for it is the amount of the bills in the monies of each country. Also put c for the course of exchange which is used as a multiplier on one side and a

divisor on the other. Then, by the supposition x is given in exchange for y, and x is equal to y in exchange; so also is the total of the bills expressed in the money or currency a, to the bills expressed by b, and they may be expressed by any coefficients as $50\,a$, and $1000\,b$, according to the nominal value of the bills on each side; and by the course of exchange $a = b\ c$ and $b = \frac{a}{c}$. Now $50\,a$ is the value of x expressed in one coin, and $1000\,b$ the value of y expressed in another coin; therefore c or the course of exchange, is equal to 20, and expresses the relative value of money, which fluctuates with the rate of prices in either country.

24. Thus we have attempted a brief demonstration of that theory which Mr. *Wheatley* has with such persevering labour more thoroughly discussed in his *Essay on the Theory of Money, and Principles of Commerce;* a work which has established the philosopher *Hume's* curious theory of money upon the most convincing principles and conclusive evidence.

25. This theory we have already alluded to *; but as Mr. *Wheatley's* doctrines will require occasional reference throughout this work, we shall

* Book I. Chap. IV. § 33. p. 54.

briefly state what he considers to be the true functions of money, namely, that an increase of the national stock of specie is an increase of currency and not of capital; that an increase of currency is not an increase of wealth; and that no one nation can possess a greater relative currency than another: which latter position must be considered as applicable so far only as the currencies consist or are estimated in metallic coin. These he considers the peculiar functions of money, and they will deserve a brief inquiry in our next chapter: although they have been at least enunciated if not strictly proved and rigorously adopted in our previous chapters. *

* See Book I. Chap. VIII. p. 77.

CHAP. VII.

The three Functions of Money taken as national Currency and not national Capital, augmenting itself without increasing wealth, and not permanently possessing a greater effect in one place than another; considered according to the principles of Mr. Wheatley.

1. THE first of the principles just stated in the last chapter may be otherwise expressed, that money is not a part of national capital; but the currency which circulates in the exchange of capital labour and commodities; a truth which is perfectly obvious when the money or the currency consists of paper, the increase of which is plainly no increase of wealth. But it has been said that in ancient nations when cattle were money, they were certainly valuables and a part of capital. * They were for the greater part capital as being consumable commodities; and so is gold capable of becoming in some part an useful and

* See Brit. Crit. Vol. 23. p. 119. an article in which the reviewer, who signs himself J. B. has displayed considerable skill and knowledge of calculation.

consumable commodity; but, whilst either of these circulated as money they were not consumable commodities; and even cattle might, though not very easily, be so increased for purposes of exchange as to be really less valuable as commodities. What is true however as to cattle is not true in an equal degree as to coin, and by no means applicable as to paper currency, not representing an actual deposit of money.

2. The money in a country, as money, represents only that part of the capital, and other exchangeable articles of the country which at the time are in the market, and in process of being exchanged. It is, as money, a mere symbol of these things; a measure and unit to estimate their reciprocal values; and therefore adds nothing to them any more than the symbols, or the measures, or the units employed in any other purposes add to the things themselves. Notwithstanding it is true that the quality of money passing in exchange is originally derived from its intrinsic value as bullion, in which shape only it is capital, either useful and consumable at home, or capable of being exchanged for new capital from abroad. But the money of an individual it is argued is part of his capital; which is true, because he can exchange it for goods; but while it circulates in the nation, the

nation gives up its use in exchange for goods as regards the national stock; and its property as capital, in this sense is lost, just as much as when the miser turns his guineas in his pocket, or shakes them about in his box. That part of the gold and silver of the nation, however, which is applicable to the purpose of foreign exchange is capital; and hence arises an additional reason why in the order and according to the law of nature no restraint should be laid on the exportation of coin and bullion.

3. The second principle, that the increase of currency is not an increase of wealth, appears to be sufficiently established by *Hume;* who puts a supposition that each man in the nation should suddenly find his money doubled at the same instant, when, immediately as this should be discovered, the price of every thing would be doubled. It must be admitted however that as money can only be increased by foreign trade, which cannot occur unless commodities are relatively cheap, money has not generally increased, except in *Spain* without an increase of wealth; but by no means in an equal proportion. Nay even with respect to paper money in England, as it has increased in great measure by the arts of commercial men who employed it for the aid of commerce and manu-

the increase of wealth with the increase of currency is not wholly to be overlooked; but this, though inconsistent with *Wheatley's* theory, is not so with that of *Hume.*

4. The former on this subject advances the following positions, namely, that all persons retain the same relative wealth in society under whatever increase of currency; that a nation is just as rich with five as with fifty millions; that an increase of money has no other effect than to cause a depression of its own value; a result which was sensibly experienced in the reign of Queen Elizabeth; and that money is the effect not the cause of wealth, and therefore no stimulus to industry independently of wealth.

5. The third principle, that no one nation can permanently possess a greater relative currency than another, must be understood with the supposition that all nations are connected by a free commerce; which is in great measure practically true, and would conduce to the mutual advantage of all mankind, if it were more completely effectuated. But it is impeded by the absurd views of foreign policy, commercial restrictions, and fiscal exactions amongst all

the nations of the world. For statesmen have yet to learn that the natural end of all true government is to preserve the peace of society and of the world, and to leave commerce as much as possible to its natural course; or in other words to leave the actions of all men free in every thing which does not tend to introduce violence and fraud.

6. To establish this last principle, however, Mr. *Wheatley* argues that nations make the same exertions as individuals to preserve equality in the measure of value, by dealing where goods can be bought cheapest, or sold dearest; and that no particular town or district can possess a greater relative currency than another, except what arises from the difficulties of conveyance in bulky and perishable commodities. Competition operates in the case of nations as much as in different districts or counties, and against this there are only two principal impediments, namely the difficulties of conveyance and commercial restrictions. As an example of the impossibility of retaining more money than is necessary to circulate the exchanges at the ordinary level of prices, he mentions the instance of *Spain*, where money is as scarce as in any other part of *Europe*; although there is an annual importation of at least four

millions in specie, the exportation of which is strictly prohibited. He then endeavours further to establish it by inductive evidence; shewing by the authority of *Young*, and others that prices are nearly upon a level all over *Europe*; and that, where it may appear that labour is cheaper, the labourers and the military class also really submit to greater privations than the labourers in *England*; the earnings of labour being greater by seventy-six per cent. in this country than in *France*; a difference which also appears in the pay and actual alimentary subsistence and clothing of a British and a Sepoy regiment.

7. Thus Mr. *Arthur Young* states the average prices of Europe in 1790 as follows.

	Beef, per lb.	Bread.
England	4	$1\frac{3}{4}$
France	$3\frac{1}{2}$	1
Spain	$4\frac{1}{2}$	$1\frac{1}{4}$
Italy	3	$1\frac{3}{4}$

8. Mr. *Young* indeed considers the prices as really equal, because of the differences in the quality, in favour of the higher prices; and by comparing the prices of labour in *France* and *England* with the relative prices of food

it will appear that the labourer in France possesses a smaller portion of the means of sustenance than in *England*, in the same degree as his labour is rated lower. Thus labour in France was 9½d. a day, and bread and meat together 4½d. while in *England* labour was 1s. 4½d. and meat and bread were 6¼d. From all which he clearly deduces that the increase of money in a country, is no increase of wealth: since had the wealth of *Europe* declined in articles of production instead of increasing, while the money augmented as it has done, prices would have been really much higher. However, we must not omit to repeat that the increase of real money has been constantly attended with an increase of commodities, by the necessary operations of foreign commerce and domestic manufacture, and the increased production of every branch of industry requisite to support commerce. And we should also suggest that by the effects of commercial intercourse, since the price of labour influences greatly the price of goods, the price of labour itself, and consequently the condition of the labourer, in a free state of commerce, would have a tendency to equality all over the world.

9. In conformity to these principles he considers that the course of exchange is the practical means by which the equivalency of money

is maintained; and its fluctuations are proportionate to those in the value of money. That merchants distinguish the variation in the value of money by the variations of prices; which is self-evident from the definition of the term *price;* and that a relative excess of currency occasions a premium, and a relative scarcity a discount on a foreign bill; wherefore the course of exchange between any two countries is nothing more than the amount of the difference in their respective prices. As, for instance, if, by a partial augmentation of currency in this country, 100l. in *London* were worth no more in corn or other goods generally than 95l. in *Hamburgh*; then, as all produce which sold in *Hamburgh* for 95l. would in this country sell for 100l., the holder of a bill upon *Hamburgh* would naturally refuse to sell it in the *London* market for less than 100l.; because the investment of its amount in *Hamburgh* produce, for importation into this country, would from the superiority of British prices return 100l.

10. The course of exchange, therefore, he contends, affords an accurate criterion of the relative value of money all over the world, and enables merchants to deal upon a fair equality, by affording them a standard or rather a measure of that equality; without which their inter-

course would receive frequent interruptions. But the credit which each exporter receives in a foreign country for the commodity transmitted is always equalized by the course of exchange; as for instance, if money at *Hamburgh* is as 100, and at *London* as 95, the credit allowed to the *Hamburgh* merchant for 100l. in *Hamburgh* produce, is by the exchange at £5 per cent. equal only to £95. And when bills are by this means reduced to a discount beyond the charge of the transit of money, they are purchased by the bullion merchants for investment in specie, and thus the surplus specie is imported into other countries to restore the level.

11. This relative excess of currency, he says, may be occasioned by paper as well as specie; and the conditions upon which the paper is issued, are of no avail to check this equalization of money. For, if the paper is convertible at option into specie, the paper is, when excessive, returned upon the bank which issues it; and, if the paper is not so convertible, it is reduced to a discount proportional to its excess. Again, upon a reduction of the value of money to any extent, beyond the charge of transit, by the relative excess of the paper, specie becomes of a different value, or, as he terms it,

separated from the paper, and is restored to its level by the annexation of a premium. The paper of course is then reduced to a relative discount, two prices, one in paper and the other in specie, are introduced, and two rates of exchange for the bills drawn by foreigners; in which last case the rate for the orders in specie does not vary considerably from the real *par*, and the rate for the orders payable in paper is lowered as the quantity of paper increases.

12. The discount on the paper he proves to correspond with the discount on the bills drawn from abroad; and the same real uniformity of prices is maintained by the course of exchange, notwithstanding the excessive utterance of paper. This he establishes by examining the state of the circulation in *France* and *Ireland*, during the currency of the assignats, and the excessive issue of paper. For he proves by tables, which give in one column the value in specie of an assignat for £100 in *London;* that is of a French bill payable in assignats; and of a like assignat, or bill in *Paris;* that between *August* 1789 and *April* 1793, they fell from the price of £94 to £41 sterling, gradually in *London*, and from £98 to £43 sterling in *Paris*; affording an average difference in each place of about £4 per cent.

which, though it was little above the charge of transit, produced a great remittance of specie from *Paris* to *London*, and a very lucrative traffic to the bullion dealers.

13. In like manner the premium in *Dublin* on English bills from January 1799 to December 1803 gradually rose from 15s. 10d. to £7. 18s. 4d. while the premium in *Dublin* on specie also rose from 15s. to £9; making the estimate on the bills exclusive of and in addition to the £8. 6s. 8d. per cent. on British money or the actual par. But the statement of the exchange between *Belfast* and *London*, during the same period, satisfactorily attests that the rate for specie never fluctuated from par to any extent beyond the charge of transit, which is about 10s. or one half per cent. In like manner, when the rate of prices is affected by the alteration of the standard or debasement of the coin, the course of exchange speedily shews the difference. Thus when in 1767 the *Turkish piastre* contained the same quantity of silver as 2s. 6d. English, the par of exchange between *London* and *Constantinople* was 800 piastres for £100 sterling; but, the piastre now containing no more than half the same quantity of silver, the par is altered to 1600 piastres for 100l.

14. Hence, he says, it is manifest that to

whatever variety of artifice a partial variation in the value of money is owing, the course of exchange will not only announce the difference, for the purpose of preventing the inequality that would otherwise ensue in the interchanges of trade, but it will instantly apply the appropriate remedy. If it arise from excess of specie, the redundancy will be removed; if from excess of paper, it will be returned to the banks, and reduced; or if not convertible, the course of exchange will cause it to be at a discount proportioned to its excess. If it arise from an alteration in the denomination or purity of the coin, the course of exchange will strike a new par, correspondent with the difference: and thus exchange operates in every instance to make the same sum or specific grains of gold or silver measure the same value.

15. He then argues that the course of exchange is not connected with the favourable or unfavourable balance of trade, or that it does not vary as the difference of imports and of exports. If, for instance, at the time that a considerable balance was due from *Hamburgh* to *London*, or that *Hamburgh* had imported more goods from *London* than she had exported thither; £100 sterling in coin, in *London*, were, from the difference of currency, worth no more

in goods than £95 in *Hamburgh;* and, in conformity with the principle of exchange depending on the balance of trade, the course of exchange should be £5 per cent. against *Hamburgh*, then it would appear, contrary to the fact, that £100 in *London* was worth £105 in *Hamburgh*, and a merchant there would give £5 per cent. premium for a bill upon this country, which ought to be at five per cent. discount, and *vice versâ*. But if £100 in *London* were really worth no more than £95 in *Hamburgh*, what cost £100 in *London* would really sell for no more than £95 in *Hamburgh;* and no *Hamburgh* merchant would give £105 for a bill on this country, which when vested in produce would return only £95.

16. In other words and pursuing Mr. Wheatley's argument in our own manner, suppose the balance of trade is against *Hamburgh* £5 per cent. that is *London* has exported £5 per cent. more in value, estimated in pounds sterling, than she has received from *Hamburgh;* but commodities are dearer by £5 per cent in *London* than in *Hamburgh*; the commodities exported will have given rise to bills to £5 per cent. more in amount than the bills for the imported goods, and the money amount in bills will then be £5 per

cent. against *Hamburgh*; therefore convert the goods into bills, and the bills into money, reckoning in each by the same currency, and the value of the goods, or the amount of the bills, or the money in the bills, will be £5 per cent. against *Hamburgh*; according to the theory of the balance of trade, or difference of exports and imports. But, suppose the value of money or the difference of prices as above, then, by the reverse process, calculate the money amount of the bills which have been drawn, and measure the value of the money which they express, by the quantity of the goods which they will purchase, and then the exports from *London* must of course be less than the imports from *Hamburgh*, which is contradictory and absurd.

17. These two things, therefore, cannot depend upon each other; but it is evident that the difference in the value of money would naturally create a premium on bills in favour of that country where the like quantity of money would purchase the most of commodities; and therefore the premium and discount upon foreign bills, or the rate of exchange, must depend upon the rate of prices, or the value of money or relative state of currency, estimated in gold and silver.

18. Mr. *Thornton* considers that a low value of

money, or high prices, necessarily conduces to an unfavourable balance, by encouraging importation; and thence occasions an unfavourable exchange, by causing the bills that are drawn upon the debtor state to be reduced to a discount from their consequent excess; and *vice versâ*.

19. It was upon this supposition that we made our calculations in the last chapter; but Mr. *Wheatley* contends that no such encouragement on either side can take place from any variation in the general state of their prices; as the course of exchange announced the disparity, and prevented the necessity of a casual interruption to reestablish their correspondence. We will therefore re-examine this position, and see if there is any real difference between us in opinion. First, then, we must observe that a bill is never created, but upon the exportation of goods or money, or with a view to the future exportation of one or other of these articles, since mere credit will never satisfy a bill; and that the course of exchange is always a multiplier on one side of the equation, and a divisor on the other, or operates in an opposite way; and that in effect it goes for nothing in the accounts as between the two nations, because it is always added to the amount in drawing or making the bill, and it

is deducted in selling it, as far as the mere nominal value is concerned. Thus *A.* in *Morlaix* is directed to send a cargo of corn to *B.* in *London*, and to value on him for it, which he does by calculating the price, and all the charges of shipment and the duties in *livres*, drawing a bill according to the exchange at 17 or 20, as the case may be, and the next day sells his bill to *C.* at the same rate of exchange, who remits it to *D.* in *London* to purchase broad cloth. *D.* also calculates at the very same rate of exchange, or a very small fluctuation, and sends broad cloth at the *London* price, after allowing for the exchange, which is either at *par* or otherwise, and *C.* will receive more or less broad cloth as exchange is high or low. Money is more or less valuable as it purchases more or less goods; and if bills or nominal sums of money purchase more or less goods, as exchange is high or low, exchange will express the relative value of money: and it is apparent that *C.* the owner of the bill, and then of the broad cloth, can get nothing by his exchange purchase, except by selling his broad cloth in *France*; whither he would not import it, if broad cloth were not dearer than in *England*. Or if he takes his return in bullion, it will be, because the amount of the bullion which his bill expresses, will not purchase so much of

commodities as it would in France. If, on the contrary, it would purchase as much or more, he must conduct his business ill if he did not convert his *English* bill into *English* commodities and turn them into bullion by importation to *France*. Whatever be the cause of the bill when created, whether a foreign subsidy, the pay of an ambassador, or an army, or the support of a prisoner, it is created at first by credit; but must, in the end, be paid, as between the two countries, in specie or in merchandize. It should seem therefore that the difference of exports and imports arises from calculating the values of the goods without reference to exchange, without estimating the bullion which passes, independently of the custom house, and without reckoning the money or its equivalent, which must be paid at home to the merchant who transmits goods or money, in exchange for the bill; which though drawn by the agent of government abroad, is accepted and paid by the agent here.

21. Thus we see that on either supposition the course of exchange expresses the ratio of prices or the value of money; for the *par* of exchange is absolutely as nothing on either side: because in the progress of traffic or commerce it means identically the same quantity of bullion reckoned on each side of the account. And thus

also we may perceive that the balance of trade is altogether a fallacy, and that bullion passes only just where it is needed; and goes from the place where it could no longer be of service, but would tend to destroy the equality of the measure of value, were it not by the course of trade instantly attracted elsewhere.

22. There is only one case in which bullion is constantly increasing, and of course constantly tending to disturb the measure of value. That is in its production at the mines; from whence it is attracted by the exchange of commodities, and thus dispersed all over the commercial world. But as population and manufactures, or production, must go on increasing also, it is probable that it will very gradually increase the relative stock and decrease the relative value of money. In other words the depreciation of money from this cause is now likely to be very slow.

CHAP. VIII.

Of the Amount of the circulating Medium, and how far Bills of Exchange may be considered as circulating Medium, with an Estimate of the total Amount of the Money Transactions in Great Britain.

1. In the fifth chapter of our first book, in treating on credit and bills of exchange, we have stated that "the effect of these instruments is, greatly to increase the apparent quantity of money; and to render a very much less quantity of coin necessary to carry on the exchanges."* This is of so much importance that by some persons, private bills of exchange have been considered as a part of the circulating medium. In our opinion, however, it must be taken with a considerable limitation; for that article only is a true circulating medium, or money, which supplies the place of coin, passes from hand to hand in all exchanges, for money, and is ultimately paid as the consideration upon the discharge of any debt. As, however,

* Ante page 61.

the circulation of bills of exchange, facilitates commerce greatly, and renders less money necessary, it may without prejudice to our inquiries be considered in some measure as blended with the circulating medium, and as rendering a less sum of money actually necessary to carry on the same extent of dealing; as hath already in part been explained, in Chapter the Seventh, of Book the First, on Circulation and Prices.* Wherefore it will appear obvious that the same rate of prices may obtain in two countries where the masses of money are very different, the stocks of commodities and circulation being equal, provided the state of credit and of bills of exchange in each country differ inversely as the masses or aggregate stocks of money.

2. Some estimate of the circulating medium in Great Britain will become necessary in many parts of our future inquiry, and as we find it already made by an author of considerable acuteness and ability, we shall adopt for the most part his account; guarding the reader not to consider bills of exchange strictly as circulating medium.†

* Ante, p. 73.

† See Observations on the Circulation of individual Credit, &c. (Longman and Co. 1812.)

3. Mr. Rose* says nothing of country bank notes, and states the circulating medium of Great Britain to be,

In 1798, Coin . . .	£35,000,000	
Bank of England Notes	11,278,000	
		46,278,000
In 1811, Coin . .	3,000,000	
Bank of England Notes	23,000,000	
		26,000,000

Mr. Johnstone points out this omission, and shews, † that Mr. Rose should, on his own grounds, make our currency to be,

In 1798, Coin . .	£30,000,000	
Bank of England Notes	11,000,000	
Country Bank Notes . .	7,000,000	
		48,000,000

and at this time,

In 1811, Coin . . .	5,000,000	
Bank of England Notes	23,000,000	
Country Bank Notes .	32,000,000	
		60,000,000

Mr. Bosanquet ‡ calculates the medium,

In 1810, Gold . .	£2,000,000	
Bank of England Notes	21,000,000	
Country Bank Notes .	27,500,000	
		50,500,000

4. Mr. Johnstone considers the country bank

* Rose's Speech, p. 95, 96.
† Johnstone's Speech, p. 50, 51.
‡ Page 125.

notes of 1l. and 2l. to amount to 12 millions, * and he thinks all the country bank notes current to be

In 1807	£26,500,000
1808 . .	24,500,000
1809 . .	29,500,000
1810 . .	33,000,000

And Mr. Richardson says they are 30,000,000l. including Scotland. † At the same periods were current, Bank of England notes,

In 1807 .	£17,500,000
1808 . . .	17,500,000
1809 . .	20,000,000
1810 . .	23,000,000

5. The number of country banks, including those in London and Scotland, in 1810, is shewn, by particular enumeration, to be 796; and, reckoning the circulation of each at an average of 40,000l., their notes would amount to 31,840,000l.

6. Mr. Johnstone, founding his calculation on the number of stamps issued, makes the sum of the circulation of these banks to be 32,000,000l. By the same calculation, Mr. Johnstone considers the sum circulated by country banks in 1808 to have been 24,500,000*l.* The num-

* Page 12.
† Rep. Bull. Committee, p. 149.

ber of such banks in 1808 was 600 and upwards :* and as the calculation at 40,000l. each, brings a similar result, it is reasonable to believe that the circulation may be safely assumed to be in that ratio.

7. Mr. Tritton, in his evidence before the Bullion committee, states his opinion to be, that the average of each bank might be 30,000l.; but Mr. Johnstone† appears to go on stronger ground; as will appear from the following calculation of the amount, estimating by the number of banks, viz.

		£
In 1793 . .	280 at 40,000l. each	=112,00,000
1797 . .	230 . .	= 9,200,000
1805 . .	517 . .	=20,680,000
1808 . .	600 or more	=24,000,000
‡ 1808 . .	796 exactly	=31,840,000

8. Mr. Johnstone says, "combining the issues of the bank of England with the issues of pri-

* See the Report of the Bullion Committee, p. 214.
† Evid. Secret Com. 1797, fol. 121.
‡ See the Report of the Bullion Committee, p. 214.

vate bankers, the whole paper circulation of the kingdom will be,

In 1807 . .	£44,000,000
1808 . .	42,000,000
1809 . .	49,500,000
1810 . .	56,000,000

but he omits to consider any other description of paper circulation.

9. In 1797, it was stated, on good evidence, that few bank of England notes circulated more than 30 miles from London.* It would follow, that, at that time, bank of England notes did not afford the convenience of circulating medium to 1-10th part of the empire; and, with the exception of 1l. and 2l. notes, which did not then exist, the same circumstances continue.†

10. These references will sufficiently shew, that the circulating medium of England has been understood by high authorities to include, in its utmost latitude, coin, bank of England notes, and country bank notes only.

11. Mr. Blake considers bills of exchange, in a

* Evid. Secret Com. 1797, p. 137, 127, 54. Thornton, p. 74, &c.
† Bull. Com. p. 64. 197, &c.

very limited degree, as circulating medium; but the amount of "paper circulation pro- "vided for, independant of bank notes," will apppear deducible by calculations from the evidence before the bullion committee. In this report* it is shewn, that every day a sum of four or five millions of paper in circulation is paid, with the use of only 220,000l. of bank of England notes, in fractional sums and balances, by forty-five bankers living in London; and that, there are twenty-one bankers in London, with the bank of England, who separately discharge their engagements without attending at *the clearing house*. But if the daily balances were carried forward to one annual settlement; these bank notes could only be necessary for a single day in the year; and, it might happen, that the balances of demands would be of themselves equal. The whole sum of this private circulation may therefore become, in fact, wholly independent of the bank of England notes; and the following calculation will afford some proofs of the importance of this medium.

Calculating 300 days in the year at $4\frac{1}{2}$ millions, the sum of paper engagements discharged daily at the clearing house by 45 bankers, will be annually 1,350,000,000

* Page 236.

Amount brought forward	1,350,000,000
These 45 bankers will pay at their counters,	150,000,000
The 21 bankers who do not attend, will pay	400,000,000
The bank of England, which had in 1810, as generally believed, 15 millions of discounted paper at or under 65 days' date, will receive back from individuals about 230,000l. per diem, or nearly per annum,	70,000,000
The different traders in London, who have no bankers, and all the acceptors in the country, which last in some parts of England, the city of Bristol particularly, are numerous, will pay very considerable sums, to be computed at	100,000,000
The bills drawn and made payable at the bank of England, by the agents of government, &c., and circulating till their maturity may be*	10,000,000
Other sums in bills paid at the bank on acceptances at their house, for the banks of Scotland, and their private customers, may be	5,000,000
	£2,085,000,000

* It appears by the Evid. Com. 1797, that from Jan. 1, 1795, to Feb. 26, 1797, the bills paid by the bank, by orders of the Treasury, were 13 millions. (Appen. No. 12.)

This amount, say 2,000,000,000, comprehends all bills of exchange paid in Great Britain, foreign and inland, and at all dates, from a few days to several years. But if farther calculation would be desirable, it may be grounded on the issue of stamps for bills of exchange and promissory notes, not payable on demand. In the Appendix to the Bullion Report, there is an account of the town duty paid on bills and notes not re-issuable for the years 1806, 1807, 1808 and 1809. From this document has been formed the following table, (see the next page), which is sufficiently correct for the purpose of a calculation like the present; which can never aim at perfect accuracy. The chief object of it is to shew the proportional increase or decrease of the circulation of such bills, and for the purpose of comparison, the stamp duty is supposed to have remained unaltered. This table will establish also the increase or decrease of our home trade, since the bills represent the greater part of all our domestic transactions in trade, and will give a clear and accurate view of their relative amount. In this table, it should be observed also, that it is probable many of the bills of five pounds were issued for country bank notes, and that the bank discounts are granted only on bills of 100l. value and upwards.

TOWN STAMPS.

1806.						1807.						1808.					
No. of Stamps	Duty.		Amount.			No. of Stamps	Duty.		Amount.			No. of Stamps	Duty.		Amount.		
	s.	d.	£.	s.	d.		s.	d.	£.	s.	d.		s.	d.	£.	s.	d.
18,147	0	8	604	18	0	23,982	0	8	799	8	0	65,898	0	8	2,194	12	0
29,591	1	0	1,479	11	0	28,741	1	0	1,437	1	0	551,964	1	0	27,598	4	0
548,690	1	6	41,151	15	0	523,092	1	6	39,231	18	0	302,644	1	6	22,698	6	0
586,479	2	0	28,647	18	0	271,503	2	0	27,150	6	0	282,955	2	0	28,295	10	0
274,947	3	0	41,242	1	0	254,323	3	0	38,148	9	0	189,274	3	0	28,391	2	0
172,047	4	0	34,409	8	0	160,745	4	0	32,149	0	0	174,873	4	0	34,974	12	0
143,451	5	0	35,862	15	0	140,138	5	0	35,034	10	0	85,619	5	0	20,904	15	0
50,692	7	6	19,009	10	0	56,698	7	6	21,261	15	0	59,107	7	6	22,165	2	6
31,437	10	0	15,718	10	0	35,231	10	0	16,615	10	0	5,817	10	0	2,908	10	0
1,555,481			218,126	6	0	1,492,453			211,827	17	0				190,130	13	6

1806.		1807.		1808.	
	Sum.		Sum.		Sum.
	£.		£.		£.
Circulation.	5	Circulation.	5	Circulation.	5
90,735	20	119,910	20	197,995	20
591,820	40	574,830	40	2,745,160	40
21,947,600	75	20,923,680	75	19,202,120	75
21,485,925	150	20,362,725	150	21,059,725	150
41,249,050	350	38,148,450	350	35,546,550	350
60,216,450	750	56,250,760	750	58,671,200	750
107,587,650	2500	105,103,500	2500	98,572,500	2500
126,730,000	4000	141,745,000	4000	150,225,000	4000
125,748,000		132,924,000		148,204,000	
505,640,230		516,152,815		531,897,240	

11. These stamps do not include those sold in the country, of which there is not a particular statement; but as the nett amount of country duty received, considerably exceeds the town gross receipt, we may conclude that the duty is paid annually on bills and notes of this description amounting to more than 1000 millions. But we must add to this, all foreign bills of exchange, drawn from foreign parts, but remitted for payment, and circulating till paid, in England without stamps. Goods imported are in general paid for, in such bills; and the bills drawn on government, and on the East India Company, together with Exchequer bills, are mostly of a like description: we may therefore calculate upon 200 millions of such paper circulating in the year, without any payment of duty.* An inland bill of exchange of sufficient credit to be discounted at the bank of England is, therefore, at the present day, a circulating medium for almost every commodity in commercial dealing; and in the county of Lancaster, the population of which is equal to London, it is among the mercantile part of the community, nearly the only respectable medium in use.

* Mr. Vansittart rated the sums circulating on individual credit in 1793, at 200,000,000, and it is probable that amount is not now diminished.

12. The whole of the circulating medium, is calculated to serve two different purposes; first, in the transfer of land, or real property, and financial business, which required formerly a medium of coin, and now of bank notes: secondly, in commercial transactions, which require chiefly, and in many parts entirely a circulation by bills of exchange. In the payments to government, however, the concerns of which may have been considered too many, and in those of the landed proprietor, whose concerns are perhaps too few, to admit of bills of exchange, they have not hitherto come into general use.

13. Assuming, that the landed and financial circulating medium and the commercial are kept each distinct, the daily circulating medium of this country will be divided by the following round numbers:—

FIRST, commercial medium, consisting of bills of exchange and paper, circulating on the credit of individuals . .	£200,000,000
Bankers' notes not privileged, payable at different fixed dates or on demand, ...	30,000,000
SECOND, landed and financial circulation sale and rent of land, with hire for labour, and collection of taxes, consist-	

Amount brought forward	200,000,000
ing of bank of England notes as a substitute for gold	20,000,000
Gold and other coin	5,000,000
	£255,000,000

14. In certain instances, even government taxes are received in inland bills of exchange; and, in payment of labour, and generally in payment of small amounts, the use of notes is common alike to all.

15. The Report of the Bullion Committee says, that "4½ millions of bank of England notes "and country notes were, in 1809, added to the "circulation of Great Britain, an amount little "short of all the circulating coin added in all "Europe in any year since the discovery of "America," (*Report*, 70)—Mr. *Bosanquet* in his *Practical Observations*, &c. contests the opinion of the committee, which is founded upon the calculation, (see Report, p. 69.) of the amount of the number of the stamps in 1808 and 1809. Accordingly it makes the number of stamps for the former year exceeding two, and not exceeding five guineas 666,071, and of the higher class 198,473, making a total of 854,544 stamps, and it estimates the smaller stamps for 1809 at 922,073, and the larger at 380,006 to which it adds of stamps exceeding 20l. and not exceeding 30l. 2,425; those of 50l. 674, those of 50l. and upwards 2611. It therefore makes the excess of country bank notes of the latter years above the former £3,095,340 excluding entirely the country bank notes under two guineas, the amount of which must be very great. Mr. *Bosanquet*, however, observes, that these notes are reissuable every three years, and therefore the account should be taken by a comparison of each third and not each successive year. He, therefore, makes the following calculation:

Notes exceeding	1805	1806	1808	1809
£2.2 and not £5.5	£623.460	832,940	666,061	922,073
5.5 and not 20	302,100	323,100	138,473	380,006

From which it appears that the excess of 1809 beyond that of 1806 is only £512,000 instead of £3,095,000. We cannot now enter very minutely into these calculations, but must observe that it is probable the great increase of currency was made in the country bank notes for one pound; which do not appear to be taken into either calculation. But we are enabled accurately to state, that in the same year, so far from an addition to the circulation of inland bills of exchange, there was a very considerable diminution. This will clearly appear by a comparison of the duties on stamps taken from the official documents pub-

lished from the stamp office of the gross receipt of town duty, and already mentioned.

The Number of Stamps was		Amount of Bills drawn on Town Stamps.	Amount of all Bank of England and other Bankers' paper, according to Mr. Johnstone's calculation.
In 1806	1,556,000	£505,640,230	
1807	1,492,000	516,162,835	44 millions
1808	1,568,791	534,417,240	42 ditto.
1809	1,716,091	368,042,255	49½ ditto.

Whence it follows, that in 1809, the circulation by bills of exchange decreased 166,374,985*l.* in the bills drawn on stamps sold in town only; upon which is grounded the greater part of the advances of the Bank by discounts; yet, while the total amount of bills of exchange thus decreased, the sum employed in discounting bills, or, in other words, that portion which was required to be discounted, was greatly higher than it ever was before. The exact sum of the Bank discounts, is, for no very obvious reason, concealed; but the scale of discount in 1797 was represented by 241; in 1799, by 251, and in 1810 by 688; and in the *Monthly Magazine*, vol. IV. p. 250, it is shewn that the number 241 means 4,176,080*l.*

16. That the circulation of bills of exchange diminished, while that of Bank of England notes and other bank notes increased, in the year 1809, is probable; and the sum of

the discount of mercantile bills by the Bank of England, although its amount is not precisely known, has increased rapidly in 1809, when the total amount of such bills rapidly diminished. Any evils arising from the excess of paper circulation, cannot, therefore, be attributed to the excess of inland bills of exchange, which are not supplied "as means of extensive and general circulation" in a greater degree than is required by prosperity and thriving trade; but are naturally at all times supplied as far as they are so required. Of this medium it may be truly said, that, when unadulterated, it is, in the ordinary course of business, incapable of excess; and if, in the several stages through which raw materials pass into manufactured articles, property is, in certain instances, converted, so as to admit of its being represented by more bills than one, the advantages of the system are still such, as much more than to counterbalance the objection. Let us suppose a merchant in Liverpool to receive from America, on commission, a bale of cotton, and, that for the value, a bill of exchange is drawn upon him at 60 days' sight. That bill and the cotton which it represents, will arrive, if not by the same vessel, nearly at the same time. The cotton, says our author, is sold to a dealer, who in ten days gives for it his bill

on London, at three months date, or a bill the value of which has been received there, not in this bale of cotton, but in a former transaction; or if not so absolutely regular as this, the bill, to say the least of it, has two securities. The dealer sells the cotton to a manufacturer, and gives him two months' credit, during which period no bill exists on account of this stage in the progress. At the expiration of the credit, he receives from the manufacturer a bill at two months; which, if the manufacturer has been successfully expeditious in manufacturing the cotton into goods and selling them, might undoubtedly represent the cotton so converted. Most probably the fact will however be, that the goods if sold, are sold to the exporting merchant at a credit of four months; and as during this period there is no bill in the transaction, the manufacturer's bill to the dealer at two months will, equally with the dealer's to the importer, represent other property. The merchant sends the cotton again to sea, exporting the goods manufactured from it, and receiving after the stipulated credit, a bill from his customer in payment; which bill, if drawn upon this country, will represent other property also.

17. These transactions form a short and simple

history of the regular bill circulating medium. The exporter has at the close paid the importer virtually, as if the transaction had been only between two parties; and the useful machine of bill currency has filled up an intermediate chain of dealing, which has given profit to a numerous class of traders, manufacturers, labourers, bankers, and others.

18. Each party had, says our author, a different banker; but by the transfers at *the Clearing House* the whole is conducted as it would have been if managed by a single bank; and the result is, not that the bills are paid in cash, but the balances, or the amounts by which each succeeding bill exceeds the preceding, and which consist of the expences and profit of the business done. It would be the literal fact, that not one of these bills would be paid in cash, if, becoming due at the same date, they could appear together at *the Clearing House*. But although the identical bills do not so appear, the operation is the same substantially; for other bills, though not belonging to the same parties, yet in the hands of the same bankers, answer the purpose as completely on any given day, and produce eventually the same effect to the parties, as would have been accomplished by their own bills balancing each other.

19. And while one individual is ready to receive in exchange for goods a regular bill of exchange, payable at a future time, with which he can buy goods from another person, the medium of circulation is created. As long also as bills paid on *bona fide* transactions are allowed to remain in circulation, and the profit of discounting does not lead to the fabrication of them, there must be a circulating medium in due proportion only to the prosperity and increasing wealth of the country.

20. But it appears by the cases decided in the courts of law, that abundance of accommodation paper is fabricated, and that crimes nearly allied to forgery, coining, and swindling, occur, so that the good, whatever it may be, is not unmixed.

21. We hear, also, of various sums, in one instance 100,000l. being lent by the bank of England, not on bills for *bona fide* transactions, but on bills avowedly originated for the purpose of borrowing, without any transaction of real business.* Individual traders raise money upon such bills, and carry on great speculations without capital; and in one day, in July 1810, five houses connected together in

* See Mr. Huskisson's pamphlet, p. 129.

this mode of raising money, stopped payment for 1,766,602l.

22. This increase of discount certainly does not grow with the growth of trade, nor strengthen with its strength: on the contrary, it exists in the greatest degree during commercial distress and national calamity. In proportion as the demand lessens, and the goods are less valuable bills should decrease, notwithstanding which they are still forced into circulation, by a mistaken notion that the bank should by their discount support the credit of merchants in times of difficulty. But they do not stop here; the discount of such bills begets a gambling for time, which requires them to be renewed indefinitely, to put off the evil day.

23. If indeed bill discounters, like the bank, give credit, when others will not, and prop up a vitiated excess of paper currency, there will be a periodical return of the interruptions to trade. Thus as there were convulsions in the mercantile world in 1772, 1788, 1793, 1799, and 1810, they may be expected to visit it again, so long as the improvident trader is injudiciously befriended by this system.*

* See Observations on the Circulation of Individual Credit. (Longman.)

24. As the foregoing statement appears to come from one who is well acquainted with the practice of commercial dealings, as well as with the law of England concerning inland bills, which, he truly observes, were for a long time viewed with much jealousy by the courts of law, we have ventured only to abridge it without alteration ; but in addition to our former observations, we must remark that the chief effect of an increased circulating medium, whether of coin or of paper, supplying the place of coin, and called paper money, is to increase prices. As we have said, increase of bills and of credit, has a tendency to increase the apparent mass of the money in circulation, and under the existing circumstances, with regard to the bank of England and the country banks and their discounts, it is now obvious that these bills of exchange actually increase the quantity of paper money or bank notes, and must have a more than ordinary effect upon the prices of all commodities; and that,as trade, speculation and accommodation bills increase under the present system, prices must rapidly increase, as bank discounts, and bank paper circulation are augmented, in a degree which could by no means take place while the currency remained in coin.

25. In the case of accommodation bills, this is more mischievous than upon real transactions of business, because, in the latter case, there is a greater certainty of increasing wealth and commodities, by which the effect of increased circulation upon prices, may be counterbalanced; whereas accommodation paper, like the sums raised in advances to government or upon exchequer bills, tends, directly and without check or remedy, to augment prices ; that is to diminish the value of the circulating medium or currency in exchange.

26. The author of the Wealth of Nations has clearly established, as in our first chapter we have already noticed, that in the estimation of price it is the demand and ability to pay, or the effective demand,on the part of the purchaser,by which ultimately the price is fixed. It is, therefore, that part only of the currency which circulates as cash among consumers that constitutes effective demand ; and this explains the reason why credit amongst traders, and the circulation of individual credit on bills amongst the manufacturing and commercial part of the community, set loose more circulating medium amongst the consumers and thus raise prices. It will also shew how the impediments to circulation, caused by

new taxes and imports, must affect prices, and render an increase of money necessary, at least for a time, to sustain the circulation at an equal rate, although possibly it might happen that some counterbalance would be found to this, in the end. However, it is most probable that taxation, especially on commodities, has a general tendency at present to raise prices and to increase the demand for currency, which when introduced must have an effect upon prices; or if on the contrary new currency were not introduced, taxes would be raised with greater difficulty, prices fall, and circulation and commerce languish.

27. That taxes must have an effect upon circulation is clear; but the full extent of that effect must be referred to future investigation. *Canard*, a modern French writer, has, indeed, examined this subject with great ability; and has demonstrated that the burthen of any new species of taxation upon commodities ceases altogether, after a time. This opinion is confirmed by considering the operation of depreciated currency; but we must observe that it is probable a tax on income is a burthen which must be continually oppressive.

CHAP. IX.

On the Amount of Coin circulating in England, during the greater part of the Eighteenth Century.

1. It is a point of considerable importance to ascertain the actual amount of the coin or specie in this country at any given time, because many calculations with regard to money hinge mainly upon this question.

2. The Earl of *Liverpool* and Mr. *Rose* estimate this entirely from the returns of the mint, and make the amount either 44,000,000l. or 30,000,000l. But this is a vague calculation, without due attention to the particular circumstances which regulate the continuance of coin in circulation. Mr. *Wheatley* however has stated these with great accuracy, and arguing from them has reduced the amount to a much lower estimate. But it is obvious that at no former time could so great an amount have been circulating in England; for the circulating medium must have equalled or exceeded its amount at the present time, and it is then absolutely certain that with the increase of population, of agri-

culture, of commodities, and of taxation which has since occurred, the price of all commodities must have fallen greatly, instead of having risen so enormously. It is morally certain, therefore, that the amount of specie and of currency formerly must be rated much lower.

3. Mr. *Wheatley* in examining the evidence of Mr. *Newland* before the lords in 1797 observes, that in the payment of 14,000,000l. of dividends, about 1,300,000l. or a tenth part, was employed in gold; while 100,000l. was found sufficient to make all the payments at the Treasury. Also that in 3,000,000l. paid by the customs, the bank did not receive above 5,000l. cash; and out of 7,000,000l. by the excise, not more than 60,000,000l.; while in the instalments of a loan to a much larger amount it did not receive 1l. per cent. in cash, and the payments at the banking-houses in London did not afford an average of 1l. in ten: so that if the paper issued by the bank amounted to 20,000,000l., and were confined to the circulation of the metropolis, the specie could not exceed 2,000,000l. But it is obvious that both of these sums are too large to be confined to the circulation of the metropolis.

4. With respect to the country bank notes he

estimates the numbers of banks in 1806 at 549; and their average profits at 2,000l. a year each, would give an issue of 22,000,000l.; whereas Lord King states it at 40,000,000l. Mr. Wheatley, however, concludes that their average gains are more nearly at 800l. or 900l. a year; and the total profit, being 400,000l., would give only 8,000,000l.; which is a very low estimate of their paper, compared with the documents we have already produced.

5. Taking the proportion of coin to paper in 1806 at one fifth instead of one tenth, it would amount in the metropolis to 1,500,000l., and the aggregate amount, by the same computation in the whole kingdom, would be 3,500,000l. which would allow 1000l. for the stock of coin in the hands of each country banker, and 4000l. to each of the London bankers. To this Mr. *Wheatley* would add the deposit in the bank, which some precipitately have estimated at nine or ten millions, but which we have seen was in 1796 only 1,272,000l.; and in Nov. 1797, from the same authority, the New Annual Register for 1797, we may state it at about 6,000,000l.

6. To explain how the coin has vanished from circulation through the agency of the

melters and the bullion dealers, he observes that 3l. 17s. 10½d. the twelfth part of 44 guineas and a half, constitute one ounce of gold, and 100l. or 95 guineas and 5s. constitute 2 lb. 1 oz. 13 dwts. 15 gr. which the bank previous to 1796 were compellable to give for an 100l. bank note; and whenever the price of gold was above mint price, which it was frequently as high as 4l. and 4 guineas an ounce, the goldsmith by melting them and selling them to the bank could obtain 107l. 17s. or a profit of 7l. 17s. per cent. as was stated by the bank to Mr. *Pitt* in 1795. In consequence of this it appears that 32,000,000l., out of 57,000,000l. coined during the present reign, have been coined from ingots melted from guineas, and only 25,000,000l. from Portugal gold. Therefore as the three proclamations of 1773, 1774, and 1776, brought in only 15,563,593l. in light guineas, it is obvious, that 16,000,000l. have been recoined by the confession of the officers of the mint from guineas so converted into bullion by the goldsmiths; and, great as this sum is, it is necessarily much underrated. Although much gold is said to be melted from light guineas it is more probable that on all such occasions it is made from the heaviest pieces; or, what is equally probable, one class of dealers having

fraudulently reduced the coin, another class purchases it, at an underrate, of the persons whom they have defrauded; so that in all states of the bullion market, the coining and remelting of guineas may proceed with considerable regularity. It appears, indeed, that the greater part of the 15,563,593l. of light guineas were coined for the purpose of taking advantage of the liberality of government, which allowed new guineas of full weight to be given for them.

7. The 25,000,000l. of Portugal gold is probably overrated, and great part has been withdrawn during unfavourable exchanges, perhaps by the remittance or connivance of the government. The necessity to which the bank has been driven of purchasing gold to make into coin above the mint price could not have happened, except for the purpose of preserving the proportion between the coin and their paper; which had been altered by such exportations of coin withdrawing it from circulation. And this is very much confirmed by the fact that, although 62,945,866l. have been coined during the present reign, in gold, no more than 63,419l. 6s. 8d. or 1,268,386s. and 8d. have been coined in silver; of which sum 55,459l.,

or more than 1,000,000 of shillings were coined in 1785, and immediately disappeared, by being reduced to a debasement equal to the value of paper. Hence it should appear that the gold coin has been repeatedly in a state of alternate change from gold coin to bullion, and from bullion to gold coin again; from all of which arguments Mr. *Wheatley* concludes that the stock of coin in 1806 was not more than 5,000,000l. Mr. *Rose* expresses great surprise at this, as he had the mint returns before him; but it is obvious that the knowledge of the mint returns has afforded Mr. *Wheatley* the very ground of his argument: and if we consider that the bank have supplied the entire circulation of coin as well as the greater part of that of paper, and that their profits during the low price of bullion have not probably exceeded their loss during the high price, it will be obvious that the whole of their coinage has been occasioned by the perpetual drain of coin from circulation, and has afforded no accumulation to the coin. In fact it was only as paper drove the coin out, that the bank has been compelled, in order to sustain their own credit, to coin probably a much less quantity, to support the appearance of a circulation in coin rather than the reality.

This as it was their interest was the probable course of their practice.

8. It appears that the average price of gold from 1757 to 1773, being 16 years, was 3l. 9s. 2¼d. per oz. or 1l. 14s. 6¼d. per cent. above mint price; and from 1777 to 1797, 3l. 17s. 7¾d. or 2¼d. below mint price; but Mr. *Wheatley* calculates that at 3l. 16s. 6d. a price which does not appear to have occurred in practice, and silver bullion at 5s. the bank would gain only 1l. 15s. 11½d. per cent. on the gold; which, allowing 6s. or 8s. for loss of interest per cent. would not make above 10s. But purchasing silver at 5s. and issuing it at 5s. 2d. the bank would gain about 6s. clear per cent. after allowing 2l. per cent. for coinage, and 1l. for loss of interest, the gross profit being only 3l. 6s. per cent. This is not a profit to induce the bank to become the principal agents of coinage, and therefore it is obvious that their being so has arisen wholly from necessity, and not from views of profit.

9. It may not be improper cursorily to remark on this subject, that all the statements of the price of bullion in Mr. *Vansittart's* resolutions, as adopted by the House of Commons, 1811, apply very ill to the argument for which they were adduced; because in all the

instances given they were attributable to known and obvious causes, and were of so trifling a nature as to constitute no rule of comparison with a rate of price continually increasing, and a state of exchange constantly adverse, to an extent wholly unparalleled, but which is easily to be accounted for as above upon fair principles of exchange and the known properties of exclusive paper currency.

10. "It is evident," says a critic on Mr. Wheatley's work, (see *Brit. Crit.* vol. 23, p. 120.) "that from the revolution to this time, product, currency, and prices have been each on the increase, but with several degrees of celerity. At the Revolution we had a population of about $5\frac{1}{2}$ millions; and in 1800, of 9,300,000 nearly. Our quantity of specie was also, by the best authorities, $14\frac{1}{2}$ millions in the year 1688; and, as the credit of paper, of which there was a great quantity before, according to Davenant, was, in a manner annihilated by the events of that time, this was then nearly the total amount of our currency. Suppose it, in any period of time, to have been augmented in the great proportion of 4·2423 to unity, or to have become 61,514,000l. if the national product had continued fixed, it must be admitted that the average price of

commodities would have increased in the same proportion: and if, in the first period, it had been as 224, the rate to be deduced from the table of Sir Geo. S. Evelyn, in the latter, it would have been as 950. But this deduction is true only in the case assumed, that the product of such a country remains absolutely fixed: if it increase or diminish, the prices will be directly as the currency, and inversely as the product. Let it be now taken, that, in this period, the product had increased in the ratio of 1,69 to unity; the ratio of the prices at two periods will become that of 224 to 950 + 1·69; or of 224 to 562, the ratio of prices in 1688 and 1800 by Sir G. S. Evelyn's table; and, if the average consumption of the people of this nation per head had been nearly the same during that period, the total increase must have been derived from the circumstance, that the number of the people had been increased in the above ratio of 1·69 to unity, or that of $5\frac{1}{2}$ to $9\frac{3}{10}$, which is the proportion in which it appears that our population increased from 1688 to 1800. It is, however, tacitly supposed, in this reasoning, that our currency, at both periods, performed the same number of functions in equal times; or, as it is commonly expressed by an ill-chosen metaphor (which, being too literally understood, has

produced much unintelligible discussion) that it has circulated with the same celerity."

11. "King and Davenant particularly distinguished the reputed balance of trade, paid annually in the metals, from the yearly addition to the coin. The former was estimated by Mr. King, in 1688, to have amounted to 700,000l. and the latter to 2,401,200l. We contend not, however, that the yearly balance of the ledger of the inspector general, with all the corrections which have been recently made to apply it to actual use, will enable us nearly to approach to the annual import of the precious metals into Great Britain; but it is evident, that we do annually acquire some part of the yearly product of the American mines. Now this receipt is divisible into four parts; the augment of coin, of the trading stock of bullion, of plate, and the precious metals wasted in the arts and the manufactures. If it be supposed, that our gold and silver money amounted in 1798 to 45,450,000l. and the computation of Mr. King for 1688 be admitted, its increase will be 30,950,000l. in 110 years, or barely 281,000l. a year. The beauty and elegance of our porcelains have much restrained the increase of plate in opulent families; and an annual addition to the stock of 100,000l. is as much as can probably be made. Adam Smith says it is very small. The same writer states the waste of the precious metals at Birmingham to have been, in his time, 50,000l. a year; it is now increased; and may probably be taken always to exceed one half of that of the kingdom at large: whence that waste may be now taken at 150,000l. a year. Our total yearly balance of bullion does not, therefore, probably exceed 631,000l. and the annual augment of our stock in plate, bullion and coin 481,000l."

12. In addition to the above, we may state from Anderson's History of Commerce, the following general account of the coinage: by which it appears that the coinage of England from the registers of the mint for 100 years, viz. from 1558 to 1659, was, according to D'Avenant's Dials. (1711) p. 71, as follows: viz.

Of gold in the reign of Queen Eliz. . . .	£1,200,000
Ditto, James 1st.	800,000
Ditto, King Charles 1st. . . .	1,723,000
Carry forward	3,723,000

	Brought forward	£3,723,000
Of silver in the reign of		
Queen Eliz. .	4,632,032	
Ditto, Jac. 1. .	1,700,000	
Ditto, King Charles .	8,776,544	
Common wealth .	1,000,000	
	16,109,476	16,109,476
		£19,832,476

13. But this coin was not co-existent at the same time, for Elizabeth called in all the silver of the three preceding reigns, but varied the standard frequently, and the same bullion was coined over and over again. So that in 1600 there were not more than four millions, and in 1711 about 12 millions existing in the total; and Anderson estimates that in 1762 there might be about 16 millions in circulation. He also gives the following estimate for the year 1675; vide Anderson, vol. ii. p. 533.; and states the coinage thus, viz.

			£	s.	d.
19 ½ years	1599 to	1619 money coined	4,779,314	13	4
19 years	——	1638 ——	6,900,042	11	1
19 years	——	1657 ——	7,733,521	13	4½
18 ½ years	——	1675 ——	2,238,997	16	0½
		Total in 76 years	21,651,876	13	10

14. Sir W. Petty says at the restoration the

money coined during the usurpation amounted to 800,000l. or one-seventh of the whole, or 5,600,000l. or allowing for hoarded money six millions.

15. In the year 1696, (see page 620 of vol. ii. of Anderson's History,) the coin is there estimated at 5,600,000l. of which 4,000,000l. were clipped; so that although 100l. in silver ought to weigh 32lbs. 3oz. 1 dwt. 22 gr. it was found to weigh at a medium 16lbs. 8oz. 8 dwts. being only one half, and the actual loss was found to be 2,200,000l. sterling instead of four millions as was expected. Silver was then 6s. 3d. per oz. Guineas were at 30s. and all commodities were raised in price. They were then gradually reduced to the same value as in foreign parts, and sunk from 30 to 29, 28, 25, and lastly to 22 shillings, at a cost to the nation of 3,000,000l.

16. *D'Avenant* however says there were 9,000,000l. of clipped money, and 4,000,000l. of guineas current.

17. And it appears that in 1696 there were recoined 5,725,933l.

18. The old broad pieces and jacobuses of gold, and the fine silver money of Car. 2. &c. was at that time about 10,276,000l.

19. In the year 1716, there were coined of gold 1,542,155l. and of silver 7,000l. and two kinds of gold were melted down from French louis d'ors. This happened soon after Law's scheme. In 1717 there was a great scarcity of silver, the gold being rated too high: Sir Isaac Newton advised guineas to be rated at 21s. instead of 21s. 6d. and at this time it is stated that 3,000,000 ounces of silver were in one year exported to the East Indies.

20. In the same work, under the date of 1723, it appears that between 1701 and 1723 there were coined of silver 175,464lbs. weight, or in sterling money 526,392l.

21. And under the same date, 1723, the gold coined from 1701 is stated to have been 241,183lbs. which at 44 guineas per lb. make 10,612,052l. This vast coinage of gold was owing, it is said, to the putting of too high a value on the gold in England, viz. 6d. in a guinea; and gold was therefore imported in exchange for silver; to which as a principal acuse must be added also, the effect of Law's scheme in France, which tended to banish the coin. In the same work, under the date 1734, it is stated that from 1727, the accession of King Geo. II. were coined 43,540lbs. of gold

or at 44l. each, 1,955,330l. sterling; add to which of silver 8,742lbs. at 62s. which gives 27,100l. 4s.

22. In the 1774 it appears that deficient gold money in the bank was 348,960l.; and in 1775 that the gold coined between that time and 1772 was 13,000,000l.

23. In 1778 it is stated that the gold coin brought into the mint from Great Britain and Ireland was, in 1773, 3,806,435l. 7s. 2d.; in 1774, 4,876,171l. 18s. 3d. and in 1776, 6,880,986l. 5s. 3d., making a total of 15,563,593, 10s. 8d.

24. Mr. *Wheatley* extracts from Mr. *Chalmers* a chronological table, by which the great increase of the commerce of this island will be found to have kept pace nearly with the increase of money and of the coinage; although it is by no means necessary to consider them as operating like cause and effect; for co-existence does not prove the relation of cause and effect. By this table it appears that from 1663 to 1669, the tonnage outwards was only 142,900l. which in 1800 amounted to 1,924,942l. But as our chief concern here is not so much with the increase of commerce as of coin, we shall observe that it appears that Charles II. coined in his reign 7,524,105l.; James II. 2,737,639l.;

Will. III. 10,511,963l.; Anne, 2,691,626l.; George I. 8,725,921l.; George II. 11,966,576l.; and George III. 62,945,863l., of which 32,480,932l. were coined between the years 1780 and 1800; and during this latter period it will be curious to see the progression, as well of commerce as of coinage; for which purpose we have extracted the following table.

Epochs.	Ships cleared outwards.	Value of cargoes exported.	Balance of trade.	Net customs paid into the exchequer	Money coined.	
					Gold.	*Silver.*
1781	711,363	11,332,996	——	2,791,428	£. 876,794	£. 62
82	761,362	13,009,459	2,823,143	2,861,563	698,074	
83	953,638	14,681,495	1,757,027	2,848,320	227,083	
84	959,419	15,101,275	52,909	3,326,939	822,125	202
85	1,055,259	16,770,928	862,650	4,599,091	2,488,106	
86	1,098,903	16,900,725	775,624	4,076,911	1,107,382	
87	1,256,954	18,296,166	845,935	3,673,807	2,849,056	55,459
88	1,365,138	18,124,092	383,939	3,780,770	3,664,174	
89	1,445,658	20,013,297	2,435,082	3,710,343	1,530,711	
1790	1,404,960	20,120,180	1,442,267	3,782,822	2,660,521	
91	1,511,157	22,731,994	3,747,907	3,952,527	2,456,566	
92	1,565,154	24,905,000	5,776,615	4,027,230	1,171,863	252
93	1,281,447	20,390,180	1,542,154	3,978,645	2,747,490	
94	1,457,077	26,748,083	4,818,273	3,565,117	2,558,894	
95	1,400,946	27,123,338	4,677,977	3,569,360	493,416	293
96	1,563,105	30,518,913	7,793,480	3,651,757	464,680	
97	1,351,371	28,917,010	8,179,016	4,111,105	2,000,297	
98	1,508,666	33,591,777	5,968,419	5,599,087	2,967,504	
99	1,585,926	35,991,329	9,590,856	7,538,355	449,961	
1800	1,924,042	43,152,019	12,581,413	6,799,755	189,936	90

By George III. before the 31st Dec. 1780,	Gold, £.	30,457,805
	Silver,	7,126
	£.	30,464,931
		32,480,932
The total of the present reign.		62,945,863

CHAP. X.

Of the mutual Value of Coin and Credit Notes.

1. Coin, it has been seen, is money or bullion weighed and stamped by authority of the state, to ascertain its real quantity and purity; and therefore the value of coin in exchange, at home and abroad is, in a fair state of things, as the value of bullion.

2. It is also as the price of commodities, which can be ascertained only by exchange, and cannot be fixed by law; for prices vary as demand and the quantity of money.

3. Credit notes are acknowledgments of an obligation to pay a sum of money in coin, and therefore the value of a credit note in coin is, as the expectation of its payment. That is, as the expectation that the thing which it professes to represent is forthcoming, and this value may be called the convertibility of a note into money. But as the increase of money is definite, and the increase of credit notes indefinite, notes may be so increased as to render

this expectation or convertibility almost null or impossible; for the credit notes may bear such a proportion to the actual quantity of the coin, that the coin may be comparatively as nothing to the credit notes.

4. This convertibility, however, for any given time, may be expressed by a fraction; of which the quantity of coin forthcoming at the given time is the numerator, the quantity of coin expressed in the credit notes is the denominator. And from this *datum*, in order to ascertain the real value of credit notes in coin, we may put some cases, by which that value will be demonstrated mathematically and by the rule of three.

5. Thus---if the credit notes existing in any state represent 50 millions, and the actual coin forthcoming is only two millions of pounds sterling, (as is now the case in England, omitting the coin in the bank,) the proportion of convertibility to credit is found thus; as one pound credit note is to one pound sterling, so is the sum of credit notes to the sum of pounds sterling, in existence or forthcoming, at any given time, or within a given period. Call a pound sterling P; a pound note *p*; then,

As P. : p :: 50,000,000 : 2,000,000.

$$\frac{P.}{p.} = \frac{50,000,000,}{2,000,000} = \frac{50}{2} = \frac{25}{1}$$

6. The proportion of credit notes existing in England in 1811, with respect to pounds sterling, is, therefore, upon the above supposition, as twenty-five to one.

7. The value of a credit note, or its actual convertibility is found thus, upon the same supposition:

As p : P :: 2,000,000 : 50,000,000, $= \frac{2}{50} = \frac{1}{25}$

8. The intrinsic value of such credit notes, upon these data, will, therefore, be as one twenty-fifth part of a pound sterling, or somewhat more than ninepence halfpenny; or, calculating the coin at five millions, it will be as two shillings.

For as p : P :: 5,000,000 : 51,000,000 $= \frac{5}{50} = \frac{1}{10}$

9. The real intrinsic value of a credit note is, therefore, directly as its convertibility. But the real value of a credit note is not publicly ascertained, till the faith which has been given to it is destroyed, and it is discredited. For credit notes are exchanged, either at their nominal value, or full credit; or at their intrinsic

value; which may either be, when at a full value, or at a discredit.

10. While they are exchanged at a full credit, they increase the apparent quantity of coin and money; but when discredited, to the actual convertible value only, they do not increase the apparent quantity of money. For they are valued by their actual convertibility, and represent money forthcoming, but not in circulation. When discredited partially, however, they increase the apparent quantity of money.

11. No profit, it has been seen, can be gained by the issue of a credit note, which is immediately and actually convertible, at all times. For the money which it represents must, in that case, lie dead and useless; while the note is employed as its substitute. And where a duty is imposed upon the issue of a note, the issuer must lose the amount of the duty; if the notes are constantly convertible. Or where no duty is imposed, the loss of the individual or company issuing such note will be equal to their expence in trade.

12. The expence of a banking establishment being 1l. per cent. on all issues; if it main-

tained a circulation of twenty million of notes per annum; which 20 millions would be issued and reissued in loans on discount, at two months periodically; the amount of issues would be 1,200,000,000l.: the interest gained one million, at 5l. per cent.; the expence of the trade, 1,200,000l.; and the loss would be 200,000l. sterling, per annum. Hence it is obvious, that the convertibility of any bank paper, at any given moment of time, is impossible; unless the bank is founded upon the basis of the Hambro bank; and is a mere place of safe custody. Bnt the more notes any banker can circulate, with the least deposit of coin, the greater profit he will necessarily make. Indeed, the profit of a banker being gained by lending his notes at 5l. per cent. per annum; the excess of his circulation beyond his capital may be ascertained by his profits.

13. Thus if his expence of trade is 1l. per cent. on his circulation, and he divides 10l. per cent. as profit, his notes must exceed his capital stock, in the proportion of five to two; and their value, would be as two to five; or two-elevenths of a pound sterling; or about eight shillings. Whence it is clear that whilst a bank divides a profit of 10l. per cent. the immediate convertibility of its notes, or their intrinsic value, cannot exceed eight shillings in the pound.

14. The *assets* of any trader or banking company are the property which he possesses, and his credits, to be set off against his debts; such as commodities, land, bills of exchange, book debts and cash or money.* And the converti-

* The assets of the bank of England were stated in 1797, as follows:

Dr.		
Bank notes in circulation	8,640,250	
Drawing account audit Roll and other debts	5,130,140	
	13,770,390	
Balance	3,826,890	
	17,597,280	
Cr.		
Advances on government security		10,670,490
Other credits, including cash, bullion, bills discounted, &c.		6,924,790
		17,597,280

In the New Annual Register for 1797, will be found the particulars of this account, and also the state of their discounts, and an estimate, by which it will appear that the cash and bullion in the bank was 1,272,000l. Therefore,

bility and value of the notes in money depend upon the convertibility and immediate value of the assets in money.

had the bank been compelled to divide its bullion amongst its creditors immediately, its first dividend would have been as 1,272,000 is to 8,640,250, or not quite one-eighth, or 2s. 6d. in the pound. The creditors must have waited till its assets of other kinds were converted into coin. The actual value of the bank note was then 2s. 6d. in the pound nearly; with the addition of the expectation of converting about fifteen millions of credits into gold and silver money. The intrinsic value of this expectation depended upon the quantity of coin in circulation in England at the time, and the demand which would be created for bullion upon the stoppage of a circulation of 8,640,250l., in bank notes. This would have created a great difficulty in making their payments amongst all the debtors of the bank of England, and caused many failures.

The actual value of their notes in coin it is quite impossible to calculate; but by the month of November 1797, they had raised about six millions in coin, and issued eleven millions of notes. The notes were then worth somewhat more than 10s. 6d. in the pound. The mode of collecting this quantity of coin may be easily explained.

In the payment of taxes coin and paper were received. The bank, after the restrictions, issued no coin, or a very small quantity; but paid the dividends on the funds in their paper. By this means, in a few years, nearly all the coin might be collected in the coffers of the bank. It is therefore

15. While any bank issues notes payable on demand, and is compellable to pay all notes immediately on demand, in coin, it must either lose money, or be in continual apprehension of failure; which may happen either by an actual failure of credit, or an accidental or malevolent run.* All credit notes are, therefore, insecure and dangerous to the issuers and the holders; as the value of them may be reduced below *par* considerably, by the causes stated above; whether they arise through fear or malevolence. And it is, therefore, clear, that a bank which is not liable beyond its capital, and pays 10l. per cent. profit, may have its notes, by malevolence or fear, reduced, at any time, to an immediate discount of twelve shillings; or a value of eight shillings in the pound; or to ten shillings at the highest value.

probable, that the bank possesses, at present, the greatest quantity of gold coin ever collected, and this is a circumstance which must be most satisfactory to the nation; as it will enable the state, by declaring an equal dividend upon the pound note previous to the funding of its new debt to the bank, to restore coin generally at a lower standard, and avoid the inconvenience and confusion which would arise from the partial distribution of coin amongst individuals.

* A sum of 10,000l., vigilantly applied, might be made to ruin a bank possessed of ten millions of money.

16. As it is impossible for any prosperous or profitable bank to pay its notes on demand; either at any one day, or in any given number of successive days; should the desire of leaving off business occur, it must cease to issue notes, and wait for the return of the issues; until the stock of notes in circulation equals the cash in hand. But as money can only be purchased with commodities, or labour; or obtained by credit, by notes or loan; or by taxation, or plunder in war; and as a banking company has only the means of credit notes, to raise money; it follows, that, when its original stock of coin is gone, it can only raise money by credit notes. And, as increase of credit notes increases the apparent quantity of money, they must increase prices, and the price of bullion as well as of other commodities.

17. In order, however, to convert all the notes of a bank into coin, at their nominal value, it should seem that the following process must be adopted. The bank must issue notes in exchange for coin or bullion, at *par*, and, at the same time, in the like quantity, reduce its issue and notes on loan. For every hundred it raises of money in exchange at *par*, it must diminish its issues on discount, or on loan, by one hundred. By which process gradually

and slowly it may reduce its issues, till they equal its assets in money. And then, and not till then, it may safely offer to pay all its notes in cash, on demand.

18. Before any bank can pay its notes thus gradually, they must circulate, at *par* with bullion uncoined, or be above *par*. But, bullion being the measure of value, and value depending on demand, the circulation of notes at *par* is not possible; while there shall be a great competition for bullion to be paid for n bank notes. For, upon a sudden demand, the holders of bullion will take advantage of it and raise the price. Now the demand for bullion consists in a demand for home consumption in plate and watches, and other articles, with the like for foreign trade; and also in a demand for home circulation as coin. But, where credit notes have long circulated at *par*, with coin and bullion, the credit notes will wholly, or almost wholly, occupy the circulation; and there will be at first little demand, then less and less, and at last no demand for coin in domestic circulation. The coin will therefore gradually be melted into bullion, as occasion may require; and be used in consumption at home, or exported, in exchange for commodities. At length the credit notes will not circulate at *par* with bul-

lion; and a credit note for a pound sterling, will not purchase a pound sterling in bullion.

19. The ratio of the difference between the sum given in credit notes, for a pound sterling, or other nominal quantity of bullion, is the ratio of the discount of such note; which is wholly different from discredit, and on the contrary arises from the credit of the note, and its being considered a measure of value.

20. The ratio of the discount depends on the value of commodities in foreign countries, and the profits of commerce. For, as credit notes wholly occupy the circulation, or nearly so, and are considered the measure of value in domestic trade: bullion is a commodity, the value of which rises and falls by its commercial demand, as an object of commerce in foreign trade and home consumption, and must be affected by the ordinary profits of commerce.

21. Whatever, therefore, may be the price of commodities in the home trade, they will not be exported, generally, to be sold at a loss. And when commodities are exported for bullion, in exchange, which is the only mode of procuring bullion, or any other article of foreign production; the commodities being purchased in notes;

on the return of the bullion, the importer must add his profit, together with his charge of freight, when he converts his bullion into notes again.

22. The same thing happens also, when bullion is measured with commodities and coin. For, if one hundred yards of broad cloth are exported, at twenty shillings per yard cost price, the merchant must add to this cost price the charge for freight and profit, say five per cent. each; and must receive one hundred and ten pounds in bullion. But he will add to his charge on the cloth the price also of the freight, and insurance of the bullion; and receive, probably, a profit of twenty-four pounds sterling in bullion. He will import, therefore, one hundred and twenty-four pounds sterling in bullion, for one hundred yards of cloth. The hundred yards of cloth, at one hundred pounds, are thus converted, by commerce, into one hundred and twenty-four pounds, in bullion; and if the merchant buys cloth again at the same price, he converts, by the operations of commerce, h stock of cloth from one hundred into one hundred and twenty-four yards. If, indeed, he purchased the hundred yards of cloth, with a note for one hundred pounds, he must of course convert his bullion, imported in exchange for his cloth, first into one hundred and twenty-four pounds in

notes, affording a profit of twenty-four pounds; which surplus or profit will purchase twenty-four yards of cloth, at his first cost price. But unless this return and profit is made to an adequate extent to bear the charges and profits of trade, commerce must wholly fail: and it is quite immaterial whether the returns are made in bullion or sugar, or any other article.

24. Whilst a paper money is the only money in circulation, and continually increasing, bullion is a mere commodity, and notes are the measure of value, in domestic exchange; therefore, as commodities cannot be imported without payment of freight, insurance, and other charges, and the ordinary profits of commerce; bullion cannot be imported, as a commodity, without paying these charges, and a profit.

CHAP. XI.

Of the Price of Bullion, as a mere Commodity, when it ceases to be Money.

1. PAPER money, being the measure of value, under the circumstances mentioned in the last chapter, the profit on importing bullion is the excess of the nominal value of the note, beyond the real quantity of bullion given for it. Thus, if three pounds seventeen shillings and sixpence be the real value of an ounce of gold, in sterling money; and an ounce of bullion sell for four pounds seventeen shillings, in bank paper; nineteen shillings and sixpence make the difference. And the real value given for notes, of the amount of three pounds seventeen shillings and sixpence, will fall short by nineteen and six-pence of the nominal value; which is also the profit upon bullion, as a commodity, computed in this new measure of value.

2. For bullion being a commodity, and paper notes the measure of value; then bullion not

being imported, except on the ordinary profit of trade, the price of bullion, measured in any commodity, must exceed the nominal value of the bank note, by the amount of freight, insurance, and the ordinary profit of trade. This will probably not be less than three or five per cent. on the freight and insurance of the bullion; to which add five pounds per cent. freight and insurance on the goods, and five or seven per cent. on the profit or commission; and it cannot be less than fifteen per cent. in the gross. It seems therefore probable that whatever be the quantity of paper money in circulation; where there is no coin, and the paper money is still increasing; the value of bullion, in exchange for goods, must exceed it by fifteen per cent. or thereabouts. Whence it follows that coin being once driven out of circulation, it can never be restored, except at a loss; without repeated reductions of paper currency.

3. The impossibility of keeping notes and bullion at par, is, therefore, demonstrable from the nature of foreign trade; since the notes in circulation in any increasing quantity must measure the value of all the goods, and other articles on sale at home; and it is obvious, from what has been already stated, the bullion must

bear a higher price than the goods, the value of which the notes still continue to measure.*

4. As bullion is made into coin by coinage or minting, and coin is reconverted into bullion by melting the coin; they are in reality the same thing, and of the same intrinsic value. But when coin circulates at *par* with notes, the value of the coin varies as the notes, in exchange for all commodities: although, coin being instantly convertible into bullion it can only differ in its real value, in exchange for bullion, naturally, by the price of melting or conversion. And as laws are easily evaded in the melting of coin; it will always be melted into bullion, when a profit is to be made. Now the quantity of bullion contained in any coin is the exact quantity for which it exchanges with coin, at the mint; and is called the *mint price* of bullion: which in *England* is 3*l*. 17*s*. 10½*d*. per oz. for gold bullion, paid in silver; while the mint price of silver is 5*s*. 2*d*. per oz. paid in

* In the whole of the foregoing argument, bullion is taken for a commodity, purchased and imported in commerce. In truth it ordinarily comes in by exchange for money; and it will be seen under the head of exchange how its price is ordinarily affected. In the present inquiry, a novel view of it is introduced; from considering that, paper being money, bullion is a mere merchandize.

gold. When, therefore, gold bullion exchanges at a higher rate than 3*l.* 17*s.* 10½*d.* per oz. and silver bullion than 5*s.*2*d.* per oz. in credit notes, the coin will be melted into bullion; the melter of bullion constantly obtaining guineas for notes, at 3*l.* 17*s.* 10½*d.* per ounce, or 44 guineas and a half to the pound. Thus a note for one hundred pounds would, at the mint price, purchase of the bank of England, before the year 1797, the quantity of 95 guineas, and 5s.; or 2lb. 10 oz. 13 dwts. 15 grains, in weight, of pure standard gold; and when the market price of bullion was 4*l.* 4*s.* the owner could convert it into bullion, and re-sell it to the bank in ingots for 107*l.* 17*s.*, obtaining a profit of 7*l.* 17*s.* per cent. Whenever, therefore, the market price of bullion rose, the bank, being obliged to pay in gold, was frequently compelled to submit to this loss. And were it now to pay in coin, gold being at 4*l.* 17*s.* per oz. (in 1811) ninety-five guineas and 5s., paid by the bank in dividends, at 100*l.* value, in the month of July, would produce 2lb. 10 oz. 13 dwts. 15 grains of gold, or about 24*l.* per cent. profit to the bullion dealer.

5. While, therefore, gold bullion is at a higher price in notes than the mint price, (whatever the price may be) it will be impossible to renew the circulation at par with paper money. For, no sooner will the bullion be coined, than it will be melted, and re-converted into bullion, and again sold to the bank company, which is compelled to issue it in exchange for its paper, at the mint price.

CHAP. XII.

Of the Rights and Duty of the State over Paper Money, as correlative with its Rights and Duty concerning Coin; with Considerations on the Nature of various Contracts, and their due Performance; particularly with regard to Rents. Also of debased Currencies.

1. THE duty of the state in coining, we have previously observed, is to ascertain the quantity of bullion in a given quantity of coined money, and adapt the number of its pieces to the demand of circulation and frequency of payments; for the facility and justice of exchange. In providing for large payments, it therefore forms large pieces of great value and few in number: while for the purpose of small payments, it forms small pieces of small value, and many in number. But, although some variations may occasionally be required in these coins, and their relative value, the state having once ascertained the standard, will have few just occasions for altering it. It may be observed also, that out of this

duty arises the authority of the state over its coins or monies, and the criminality of counterfeiting or debasing them: and as the true limit of the authority of the state is to be found in the nature of its duty, so when the duty is similar, the legitimate authority is equally limited by it. Indeed exercise of power, beyond the limits of duty, constitutes injustice in one degree, and in another tyranny. And when the duty is known, and the deviation from its limit palpable, abuse of power and tyranny is imputable; although where the deviation from duty is not palpable, it may arise from error, and, notwithstanding some injustice ensue, tyranny is not imputable.

2. The state, therefore, though it may by its authority, alter the nominal value of the coin, doing no injustice, should never alter the real value of the coin in payments, where it may work any injustice.* Now value, in money, varying as the weight of bullion, the value of a coin, in exchange, is obviously varied, by altering its weight of bullion. And as stipula-

* A slight deviation from justice may be tolerated: reparation should, however, be immediately attempted, and the injustice should not be continued; for the maxim, *summum jus, summa injuria,* is not to be applied often.

tions for payment of a given sum in money, in tale, are stipulations for a given weight in bullion, estimated by a given value and number, in tale, of the coin; justice requires, that, when the coin is varied in weight, between the stipulation and payment, the weight of bullion and the value of the sum in coin, and not the number of pieces, in tale, should be observed, and payment made accordingly; as is noticed by Puffendorff, in his Treatise on the Law of Nature and Nations, book 5, chap. 7, § 6. Otherwise indeed the rule of the English courts, that '*equality is equity*,' which is a rule of universal justice, will be violated, and inequality in the exchange of the money paid for the money lent or stipulated, will be introduced; whereas equality is essential to exchange.

3. Now, coins are diminished in value by preserving their weight and nominal value, diminishing the weight of bullion, and increasing the alloy; yet we have already seen that frequent diminutions in the value of the coin in all countries have taken place; sometimes with injustice, and sometimes without. Of this many instances occurred during the time of the Edwards and the Henrys, and down to queen Elizabeth, by which great injustice was wrought; payments, by the English law, being made in new upon stipulations in old coin. For

which reason such debasements have wholly ceased in modern times: it being apparent that when a state debases its coin to pay its debts with, it gains little; because the unjust consequence is palpable and cannot be continued. The knowledge of the means of defeating power here is the counterpoise of authority; and the knowledge of the true value of money defeats all attempts of power to introduce unequal exchanges: for, exchange can never take place except on a sense of equality; and where the inequality is known the exchange necessarily ceases. Monies which are unequal, therefore, cease to be exchanged at par, and one of them becomes of a less value in exchange or at a discount. But if the discount between unequal monies is prohibited by law, they will cease to be exchanged, or the law be secretly evaded. In this case all unlawful exchanges transacted secretly are made for great gain by both parties, as happens always in the case of contraband trade; the risk of detection increases the profits of the contrabandist; and the trade is carried on by a distribution of the gain, in proportion to the division of the risk.

4. Restraints upon the equality of exchange, therefore, operate as premiums upon secret exchanges; and money unexchangeable at its

true value, must be hoarded or converted into bullion. In truth therefore the destruction of the equality of exchange in any two monies nominally equal, becomes by lapse of time, the destruction of the money of a superior value. For, as hoarding is a loss of the use of money and interest, hoarding, long continued, terminates in melting, if exchange continues to be prohibited: otherwise, by the loss of the use of money, at any given per centage, the possessor, in process of time, would lose the whole value of the money. So that, if, by compulsion of law, exchange is prevented, and the use of any money, in effect, prohibited, the state itself is deprived of the value of the money.

5. The injury done, in this case, may be estimated by the quantity of money lost from circulation: and if the state drives money out of circulation, without supplying its place, a public injury is effected. But if the money so driven out is replaced by other money, private injury is effected; in every case where the party is compelled to hoard his money.

6. When the state diminishes the value of coin, prices immediately rise. If the alteration of money is periodical, prices must rise periodically, or rather continually; and if the alteration of money is periodical, and the alteration of prices continual, and old stipulations are performed by payment of the same number of pieces, and not by the equality of their weight and value, creditors are injured.

7. Thus, if any stipulation is made for a rent or annuity, and debasements occur periodically, during the payment, each payment is lessened in value, and the creditor repeatedly injured. So if changes in money repeatedly occur, sums borrowed at one amount are paid in a less. Stipulations for prompt payment, indeed, are not affected by changes in the value of money; because there is no interval between the sale and payment to allow of any material alteration in the value of money. Trade and commerce, therefore, suffer little or not at all by changes in the value of money: commercial payments being short, and allowing no interval for repeated changes. Besides, in commerce, what is lost by the creditor side of the account is gained by the debtor: and the balance of profits is therefore little, if at all, affected.

8. When, however, repeated changes occur

in the value of money, stipulations for rent or annuities must naturally cease, or rents and annuities be reserved in some commodity. For, a stipulation for rent, is an exchange of land, for rent for years: and an annuity is an exchange of one sum of money in gross, for payment of a smaller sum for years; which is in great measure the case with loans at interest. Equality being essential to exchange, exchange will not occur, where equality is not preserved, and inequality palpable. Such grants and reservations in exchange will not therefore be made; or otherwise a true equality will be preserved, by the terms of the stipulation. As, for instance, when stipulations in monies numbered, or in tale, become liable to inequality and injustice, the equality may be preserved by making the stipulation for a payment in so many ounces of pure silver or gold bullion, or in foreign coin; which will be valued differently in courts of law from the current coin of the realm.

9. The contracts or stipulations in which such inequality and injustice can alone take place are those in which payments occur periodically, at distant times, such as those for rents, annuities, and interest upon long loans. Now a rent is defined in law a sum of money or other consideration (as spurs, capons,

horses, corn,) issuing yearly out of lands or tenements; and may be reserved in services, as to plough land. But, when money rent is uncertain in value, rent in corn, or services becomes necessary to preserve equality: indeed such a rent is always most equitable on long leases; owing to the necessary and perpetual change in the value of money. For which reason college leases are by stat. 18 Eliz. c. 6. to contain a reservation of one third of the rent in corn; a wise provision which was introduced by *Sir Thomas Smith*, to obviate the inconvenience of the repeated debasements of the coin. How just and necessary this was will appear, not only from the fact, that such rents exceed the money rent nearly as four to one; but from considering, that by law the rent is regarded as issuing out of the lands, and as produced out of the profits of lands and tenements, as a recompence for being permitted to hold or enjoy them; and the reason, that it ought to be reserved yearly is, because these profits, as Lord *Coke* has it, do annually arise. All rents are, therefore, stipulations for the whole use, or all the profits of lands, in exchange for a part of the profits, for a term of years; in consideration of the labour and expence of cultivating them. Therefore, if the rent paid bears not a fair proportion to

the due share of profit, the exchange is unequal; and by the laws of equality, exchange must cease or be restored to equality, or be continued by unjust force, or some strange delusion. Hence, if a rent be reserved in money, bearing a certain proportion to the profit, on the day of the grant, payment should be made in the same money, or injustice will ensue. In confirmation of this we must observe that the profits of land are sold by the farmer for prompt payment, and ready money articles are not altered in real value by the rise in the price of commodities, through legal debasement of money by the state; so that the farmer's produce keeps its value under all such changes; but, the rent of land stipulated in money, being paid at stated times and at a distant period from the original agreement, is altered in value by a legal debasement of money. To preserve, therefore, the due proportion between the rent, as a share of profits received by the lessor, and the remainder of the profits granted to the lessee, equality in the value of the reserved rent should be maintained: and, if either by law or collusion, directly or indirectly, the legislature interferes to prevent this equality, injustice is done. More especially where a court of law or equity interferes to support an unequal division of the profits of land,

and one not according to the spirit, or law of the contract, it departs from the law of exchange, which is founded on equality, and violates its own principle, that "*equality is equity.*" Wherefore such a court must justify itself upon the strict observance of the rule, *summum jus, summa injuria*, and prove universal right to be, in the particular case, wrong.

10. From this review of the ill effects of any alterations in the value of money which the state can prevent, it will appear obvious, that the duty of superintending the money of the state, in every particular, belongs to the state itself, essentially, and should be performed strictly: and, being essential to justice and the equality of exchanges, cannot be delegated to irresponsible persons, over whom the state has no controul; for to delegate power, without responsibility, is to desert an essential duty. In performance of this its duty, as superintendent of all coins and money, the state therefore affixes a standard for their purity and weight; and enacts severe laws upon the counterfeiting, debasing, or diminishing of the coin. Also, to facilitate exchanges and the payment of debts, and performance of money stipulations, it enacts, that pieces duly stamped,

and of the due standard, shall be accepted in payment, which is called, as we have seen, the lawful tender. To provide a standard and lawful tender, is likewise the necessary duty of the state, which cannot be justly neglected.

11. Neither can such standard be justly destroyed, or such tender impeded, or altered, without providing new ones. By which is meant a tender and standard, strict and definite; and not one, which is a tender to one purpose, and not to another; for when the standard and lawful tender, by which money stipulations are legally regulated, become uncertain, the performance of contracts is uncertain, and the law itself rendered imperfect and uncertain, vague and insecure.* When, therefore, the standard is unsettled, exchanges will be impeded or prevented, as equality in exchange is either wholly and irremediably, or partially destroyed.

12. It is also the essential duty of the state, to declare, as part of the legal standard and tender, what quantity of one coin shall be given for another, and to settle the equality

* There is no maxim more frequently enforced by the best law writers, than the following—"*Miserable is the "servitude where law is vague and uncertain.*"

of coins in exchange. But, if this equality be settled arbitrarily, and without regard to real value, measured by a given standard, the exchange will not be observed, but will be either violated, impeded, or finally stopped.

13. Now, the rights and duties of the state as to coin being thus clearly established, it will be easy to deduce from thence its rights and duties as to paper money, which is a substitute for real money. For it must be obvious, that, when paper is introduced to supply the place of real money, the power and duty of the state over it, is the same as its power and duty over the coin.

14. Thus, while this new money is issued by the state, its duty is to preserve the lawful standard, and maintain the legal tender and equality in exchange; and, when issued by private persons, on private credit, the duty of the state is to enforce the performance of the contract by which credit is obtained. For by enforcing payment of paper money in coin, it is converted into coin, and the standard preserved; which would also happen by allowing it to circulate at a discount, by which means it is reduced to equality in exchange with the coin. But it cannot be maintained on an equality

with coin, while gold is above mint price, without a discount upon paper and two prices.

15. The most certain preservation of the standard is effected by enforcing payment of notes in coin, or by their circulation at a discount. But if notes are not payable in coin, equality in exchange can be produced only by the means of reducing notes and paper money periodically, as is shewn already, according to the fluctuation in exchange and the price of bullion. If however these precautions are not observed, the standard is violated, a legal tender is not preserved, and the duty of the state runs into neglect. And if notes public or private be reduced to a standard of value in real exchange below the standard of lawful coin, while they circulate nominally at par, the state acts unjustly; whether it connives at, or enforces the tender of them, upon equality with the standard coin. So if, by delusion, the equality is not observed, the state ought not to assist the delusion.

16. As it is obvious, that two standards of unequal value cannot consist with the equality of exchange, no laws can enforce their equality. The superior standard must give way to the inferior, in all tenders and stipulations, and

depart from circulation. It is therefore impossible to enforce the exchange of dollar tokens and guineas, at 5s. 6d. per dollar; because of the inequality of their real value. They will cease gradually to be exchanged, and it is obvious, when a dollar token exchanges at 5s. 6d. with a pound note, this is an acknowledged standard of value; and, as it differs from the value of 20s. sterling; or $\frac{20}{62}$ of a pound of silver, or $\frac{20}{21}$ of a guinea; neither the guinea, nor $\frac{20}{62}$ of a pound of silver, will be justly and *bona fide* given for a pound note, while the due sense of value is observed. Persons interested in paper credit will boast of exchanging them at equality, upon the same principle that a starving garrison would offer a peck loaf to a besieger, for a quartern loaf; but the principle of such exchange is mere *bravado*, or banter.

17. The statute of exchanges was in the beginning, and so has remained ever since, a dead letter. For laws to produce universal injustice, can never be fully enforced: and all departure from the principles we have just stated, must be justified by some pressing necessity, and must be speedily remedied. This happens in the case of a town besieged, when *obsidional* money is issued, and

may justly be said to happen now, when, to avoid a pressing evil in the conflict of paper currency with coin, statutes have been enacted, which, although necessary for the occasion, can justly be considered as founded only in a complete neglect of the equality of exchange, and can only operate to drive all the real money out of the country. Upon this subject we may again observe, that debasement of money consists essentially in the mere diminution of its intrinsic value, in a fair exchange, below its nominal value; that the evil of counterfeiting money, with debasement, essentially consists in the diminution of value, in fair exchange, with the fraud of concealing the real value; and that by whatever arts the intrinsic value of money, in fair exchange, is diminished, and the nominal value preserved, the evil of counterfeiting money is produced. The subject is equally injured, therefore, by the issue of an artificial money, bearing a nominal value greater than its value in fair exchange, as if a debased or counterfeit money were imposed upon him. Now, in the regulation of money it is the duty of the state to superintend the issue of paper money, so as to avoid the tendency which an increased issue may have to produce effects similar to those of counterfeit and debased money; and this can only be effectuated by

enforcing the strict performance of all credit stipulations, and preserving the single standard of coin, and the legal tender.

18. We have already argued, that a debased and counterfeit coin, and a paper money not immediately convertible into coin, are essentially the same thing, and equally injurious to the subject; and we may illustrate this further, by supposing, that by the art of a fraudulent coiner, all the coin were debased, at the mint, one tenth; the exchangeable value of the coin would then be diminished one-tenth. So if coin were deposited in a bank, as at *Hambro*, and, by a dereliction of its duty, the bank were to allow of nominal entries to one tenth beyond its real deposits, the effect of fraud would be the same. If, also, by false credit, or any artifice, credit notes are brought into circulation, to the amount of one-tenth beyond the sum which it is possible to turn immediately into coin, the effect and deception will be the same, although the fraudulent intention should not appear. Indeed all credit beyond the actual possibility of performing its stipulation, is a delusion, and mischievous in its effects, though not accompanied with the intention of fraud, and should be restrained by the state.

CHAP. XIII.

Evidences of the Depreciation of Money, and its Effects.

1. As prices can only be increased by increase of money real or nominal, while population, effective demand, and production continue the same, or increase; the rise of prices, in that case, is evidence either of the increase of money, or its debasement, or the excess of credit, beyond the actual convertibility into coin. Indeed by a table of the value of money estimated in the increased price of the necessaries of life, and some other commodities, the progressive debasements of coin, or excess of credit may be ascertained; for it has been seen already, that the real increase of money by commerce, can have but a very slow operation upon prices in the regular course of commerce; since population and production will probably more than keep pace with the introduction of money by commerce. Such a table has been constructed with great labour and ability, by the late *Sir George Shuckburgh Evelyn*, from which it appears, that during the last century, and from the year 1700 to 1806

prices have increased, and money has fallen in value in the proportion of 238 to 630; that is to say, that two hundred and thirty-eight pounds, in the year 1700, would purchase as many of the necessaries and conveniences of life, as the sum of six hundred and thirty pounds would purchase in the year 1806. This is an enormous alteration in the value of money, which, considering the great increase of manufactures and population is not to be accounted for, except by the unnatural increase of currency, by debasement; or its equivalent, the necessary depreciation of an extended paper currency, and abundant circulation of credit.*

2. When the amount and progressive increase of paper money is known, its real and comparative value, in exchange, is immediately discoverable; and as this happens, when such paper is issued at the immediate direction

* This table of Sir *George Shuckburgh Evelyn* has lately been examined with great critical severity by *Arthur Young*, the secretary to the Board of Agriculture; and as he affords a new view of prices, we shall discuss his pamphlet in a separate chapter, after we have concluded our elements. Till then it is sufficient to repeat what every one must admit, that prices are continually rising; and as *Puffendorff* says, it is easy to know whether the rise is attributable to increase of money, by comparing it with the prices of land and its immediate produce.

of the state, the effect of such issue is nearly similar to that of an issue of coin debased by the state. Persons making new contracts in trade may, in that case, estimate the value of the credit money, nearly at its just rate, and raise their prices in the first instance accordingly. But all the servants of the state, and other creditors receiving annual or other payments, on stipulations previous to such increase, are deceived or obliged to take the paper at its nominal value. And hence it has been found extremely difficult in all countries to support the credit of a paper money, issued directly by the state. But when the state does not issue paper, but permits credit notes to be issued by public companies on private faith, and by individual credit, the amount of the paper money not being truly known, its true value is concealed, until it has circulated completely and increased prices. The only check, therefore, to the undue increase of such paper money, is to enforce the strict performance of the stipulations contained in the credit notes and require payment in coin on demand.

3. By the admission of credit notes without compulsion of payment in coin, any quantity of artificial money may be created, notwithstanding any pledge or security required. For

when the security of a real bill is required for the issue of a credit note on demand, the real security is either mere credit or goods sold, and in the possession of one of the parties; but, upon every successive sale of goods, a bill may be given and discounted according to the mercantile credit of the parties, and this may be repeated twelve or twenty times over, and the goods not remain in the possession of any of the parties on the bill, so that the security is in these instances mere credit. Or should even land be demanded as the security, notes might be issued for the present value of all or any part of the land; but the increase of paper money would speedily, if not immediately as it obtained circulation, raise the value of the whole land in such money, and the land would then become an available security for a greater quantity of such money.

4. By an issue of credit notes, not immediately convertible into coin on demand, therefore, money might be created to any amount. So that, suppose a globe equal to the earth of solid gold, then by the natural effects of increased currency, a nominal quantity of money might be circulated, in any insular state, to equal, in nominal value, 300 or any assignable number of times its amount, in pounds

weight or in pounds sterling; although the impossibility of converting such notes into real money is obvious. Credit notes not convertible into coin on demand, are therefore in effect mere counters, having no definite actual value; and are as capable of denoting any actual value whatsoever, as the nine digits and their repetitions and multiples.

5. In any insular state or besieged town, there is no necessary limit to the circulation of paper money not convertible into coin. For, the state can assume the entire controul, and expel all coined money for a time; and demand for money will for ever increase, whether it is in paper or gold. But in a continental state, it should seem that paper money cannot be quite so universally adopted; for it will not pass in foreign exchange or in neighbouring states; and, on the borders communicating with other nations, there must be some interchange of coined money, which will gradually circulate at its real value further within the state, and, in the end, expel the paper money or reduce it to its true discount or below it. This will account for the absolute impossibility which the French government met with in attempting to prevent the discredit of the assignats and mandates, which were founded upon national security and standard property; whereas, in *England*, there is no limit to the currency of a paper wholly founded on personal credit.

6. In an insular state the limit to the issue of credit notes upon the security of the government and of merchants is the actual demand for circulation, in the payment of the excise, customs, and taxes, and the demand for circulation in the making of mercantile payments. Thus the issue on the security of the government is limited only by the demand to meet the excess of the annual expenditure above the actual receipts of the revenue, and the occasional anticipation of those receipts. This demand is increased by one-twentieth, being the necessary interest paid on all those issues at 5*l.* per cent. and is in fact without limit.

7. By an increased issue of credit notes or paper money on government securities, as navy and exchequer bills, a new quantity of money is thrown into circulation; by which, the actual land stock, trade and consumption remaining as before, the rate of prices must necessarily be increased; for it is most obvious that these articles which constitute the remaining elements of price cannot be so rapidly increased as this apparent and unreal money.

But by increase of prices the exchangeable value of commodities is increased, and also the demand for money; whereby the mercantile securities rise nominally in value, and paper issued on mercantile security increases with the increase of the government paper. Besides which, in order to meet the increasing demand for money, which makes men necessitous, the spirit of speculation and adventure is universally increased, goods are more frequently exchanged, and discounts procured. By this means also apparent or unreal money in paper is further increased.

8. Whilst, however, the issue of paper money not convertible into coin is limited by the regular demands of the merchants, thus acted upon and increased by those of the government, it cannot be denominated excessive, under all the existing circumstances. Excess can only occur in the demand created by the expenditure of the state, which is limited only by its wants; for the wants of a state are limited only by the extent of its ambition and the necessary demands for war and foreign expenditure. But the excess created by over speculation has some tendency to correct itself by the frequent failure of speculators,

and the consequent depression of the value of their saleable property.

9. If, under such circumstances, the issue of a paper money be diminished, in any degree below the effective demand, prices must fall: whereby revenue will be diminished and taxes fail, and much embarrassment ensue to commerce and the state. For, when the taxation and expenditure of the state are calculated upon any given ratio of prices, and value of national stock, capital and currency, in paper or real money, the support of the rate of prices and extent of currency is necessary to the support of revenue. Because, the revenue being estimated by the general measure of the value of all the stock of commodities, that is to say by the value of the whole currency, the altering of the measure of value, renders it necessary to alter the revenue.

10. The supply of real money being limited by the annual produce of the mines, and that produce being estimated at 45,682,803 dollars annually, the true limit to the increase of real money in any state, is its due proportion of that sum, or so much thereof as it finds means to purchase by its surplus produce; but this is limited by other causes

mentioned already, and by the state of its prices as relates to other nations.

11. Direct taxes, for a time, take money out of circulation, but the expenditure of the state returns money again into circulation to an equal amount; and the circulation is preserved in nearly an equable state, except where it is affected by foreign subsidies, and expenditures.

12. Imposts or duties upon foreign goods raise the prices in the market, but cannot raise them beyond the price of the like goods of home produce; because foreign goods cannot be imported unless the importer can sell them at as low a rate as the home productions. But when they are re-exported, unless the drawback equals the original impost, increased demand for circulation is created. Imposts upon goods of domestic production raise the price of all such goods, and also of foreign goods of the like kind, by allowing the importation of them with a profit at higher prices than before the impost. Imposts or duties upon all goods, therefore, raise prices; and, circulation remaining the same, the expenditure of the non-productive members of society must be reduced in other articles, the vendors of which seeking

to raise their prices, the non-productive members and persons of fixed income must diminish expenditure. By re-action, however, on the expiring of leases, rents are raised, when a new tendency to the rise of prices is given, as repects the owners of land; while mere annuitants, who have nothing of which to raise the price, can only diminish their expenditure, and sink in the scale of society.

13. Circulation and money continuing the same, prices however can never rise generally. But circulation and money continually increasing, taxes and imposts on goods, by constant action and re-action, perpetually increase prices, and the demand for currency. This, by constant circulation, divides the burthen equally; except as to those persons who, from poverty, the effect of severe laws and want of combination, are impeded in their just demands for the rise of the price of labour. The price of labour ought, however, to bear a constant proportion to the necessary support of a man and his family; since it may be considered as a decree of nature, to adopt the notion of a late margrave of *Baden*, that the right of subsistence is invariably connected with the duty of labour. "LE DROIT DE SUBSISTER

" *est invariablement lié, par l'ordre naturel, au* " DEVOIR DE TRAVAILLER*."

* See "*Dictionnaire Universel, par Robinet, Art. Eco-*" *nomie Politique*," tom. 17.

CHAP. XIV.

Of the Moral and Political Effects of the rapid Depreciation or Debasement of Money.

1. The increase of prices is the depreciation of money, which, if it occurs rapidly, either by the debasement of real money, or the increase of credit notes, injures all persons whose income consists of a mere annuity or stipend, and, by reducing the effect of their expenditure, reduces them in the scale of society.

2. Such persons consist, principally, of annuitants in the public funds, servants of the public, together with all officers of the excise and customs, officers in the army and navy, soldiers and sailors; except, in as much as some of these are, partly, supplied with food and clothing in camp, quarters, and garrisons, or in hospitals and at sea. Add to these all clergymen living on small benefices, perpetual curacies, and rectories, supported either by tythes, under a *modus*, or a fixed stipend.

3. This depreciation of money, however, does

not much affect traders of any kind, particularly the greater merchants; for the reasons stated already. Nor does it much affect those officers of state, whose salaries are accompanied with fees of office, and a per centage upon taxation.

4. It affects owners of land also, during the continuance of their leases. But they have a partial remedy, at the end of the lease, and, by reserving rents in corn or produce, will constantly be placed on an equality with all dealers in agricultural produce. It is probably, indeed, with the view of preserving to themselves the fair share of such produce, that so many gentlemen have been compelled by the continual and rapid increase of prices, to become cultivators of land themselves. This will sufficiently account for the increase of agricultural pursuits amongst the gentry, and is a circumstance of no small importance.

5. This increase of prices occasions also an universally increasing demand for money, since every man finds his income daily less and less effective for the purpose of providing him with a supply for his support. It is in effect universal necessity, and brings with it all the virtues and all the vices of necessity.

The latter probably far outbalance the former; for this increase of prices and of necessity breeds disquiet in every mind, and engenders speculative adventure in commerce, arts, war, politics, letters and religion.

6. It may indeed be well conjectured that such an increase of prices and disquiet disturbs the calm retirement of the religious establishments, which can exist only in tranquil and philosophic habits. For, by depressing the state of the clergy, it diminishes their influence, and gives encouragement to the innovation of more adventurous sectarians, who are frequently paid by contributions, and generally earn a decent subsistence, while many of the regular clergy are reduced to a state of great poverty. How much the depreciation of money must have effected this, will appear from the simple fact, that the value of 50l. a year at the reformation, calculated in our present prices would be as 100 to 600 nearly, or perhaps 650; and, allowing 50l. a year for each living, which was the actual value of the majority of them at that time, it follows, that, in order to maintain the clergy in their relative rank, no living or curacy should be below 300l. a year. That it is almost impossible to defend the church establishment against the influence of the great

class of dissenters called methodists, will appear from considering the diminished value of church livings, and the activity of persons who with the fervour of zeal, or enthusiasm, conbine in some instances, habits of gainful speculation.

7. It is clear, that this rapid increase of prices, by producing universal necessity, must operate many political and moral changes in the state. Its effects are, indeed, most severely felt by those who have the least means of increasing their incomes, by productive labour; such as the female part of society, the aged and the infirm. And hence arise not only the increase of poor rates, but that disquietude, restlessness and repining at our condition, which produce extravagance and luxury, gambling and adventure, in a greater degree, perhaps, than any other known cause.

8. In such an increasing state of prices labourers and workmen demand more wages; and, as they cannot meet upon equal terms with their masters; who have a capital to support them, while their manufactories stand still; they enter into combinations, or form mobs and commit violences, which always give

occasion to severe laws against such combinations, or laws to maintain a maximum of prices in labour.

9. For, it may be remarked, that such laws are found to have occurred, chiefly, when the currency was undergoing perpetual debasements; particularly, in the reigns from Edward I. to the 43d year of the reign of Queen Elizabeth. And now, when money is, in effect similarly debased, by the issue of paper and the alloy of excessive credit, beyond the possibility of its convertibility into coin, their necessity and severity will increase.* The

* The above predictions were written in the month of August 1810, long previous to the breaking out of the disturbances in the manufacturing counties in the north, and the very severe laws which have been since passed against the hungry and riotous mechanics, who, by the stoppage of commercial intercourse with Europe, have been deprived of bread, and driven by famine to depredation and rebellion against the laws.

It is a lamentable consideration that the severity even of martial law is rendered necessary to subdue that violence which nothing but a disordered state of the common wealth, and an interruption of the regular course of the exchanges of society, arising out of the calamities of a long protracted war could have produced.

evil is corrected in some measure, however, by the demand of men for the army and navy, particularly the former. These are the depositories of all the necessitous and turbulent spirits amongst the lower classes, who, in other states of society, would form private bands of plunder, and be driven to absolute depravity. The more degraded, however, necessarily become infamous in society, and make up in all states the gangs of robbers and petty thieves.

10. The increasing necessity of the times, as it is justly called, or the unnatural depreciation of money, offers temptations to clerks and persons in offices of trust, of all ranks and conditions public and private, to commit frauds. These are driven to great necessities, by having at first agreed to accept a bare sufficiency for support; necessity then increases, and frequently overcomes the sense of duty; added to which, by having the confidence and use of large sums, their estimate and measure of value is very deceptive, as to their own affairs,

Statesmen, before they commence any wars, should look to their end, and consider whether it is possible for war and commerce long to subsist in union together. At the moment in which we are writing, it is publicly stated that rebellion amongst the starving manufacturers is marshalling itself for nightly trainings on the moors of the north; (see the *Times*, June 22, 1812,) and that to prevent these infuriated bands from procuring arms, government has authorised the magistrates to seize all the arms belonging to peaceable individuals. It is not difficult to predict how such a state of things must terminate.

CHAP. XV.

Of the Depreciation and Debasement of Money as it affects Agriculture.

1. The effect of the depreciation of money on agriculture is plainly perceptible, and requires to be detailed particularly.

2. By the law of equality in exchange and commerce, money prices rising in any state, importation from abroad will take place, when the prices are above the due level of prices in other nations: and this importation will occur chiefly in respect to articles of necessity, when they afford a profit.

3. Corn is the first of these articles; and the other produce of land, as butter, cheese, eggs, poultry, sheep, wool, and all kinds of meat, follow in their order. Now in order to encourage merchandize and manufactures, strict restraints are very easily enforced to prevent importation of manufactures; but, of necessity, no such restriction is applied to corn, and of course corn will be imported or exported freely, as the real

money price affords a profit on the export or import of it, in the ordinary course of commerce. But, finding prices increase, and corn to be imported to the prejudice of agriculture, corn laws have been framed, prohibiting importation, except at certain prices, and allowing bounties on exportation.

4. By the depreciation of money, through credit notes, however, these prices are no longer a just criterion of the actual increase of price from scarcity; but merely a nominal price from increase of paper money, which is not current amongst foreign states: and, by this means, corn is imported in competition with English corn, in years of no actual scarcity, and the profits of agriculture are unequally depressed. But some indemnity is made to the farmer on the profit on breeding stock and other commodities, which cannot be imported. Hence, the loss by corn, is laid on the stock, and arable converted to grazing land; bread corn is kept at a moderate level, but the country more and more diverted, as far as possible, from tillage, and rendered tributary to other nations for support.

5. Thus, also barley, wheat, and oats, being

necessary to be raised in alternate successions, and the price of barley being frequently depressed by the necessity of distillation from sugar, of course, tillage is proportionably injured. Hence, the just complaints of the landed proprietors and their farmers: for these considerations will sufficiently account for all the occurrences by which it has happened, that, during the last fifty years, wherein the debasement of money by excessive credit has operated so extensively, *England* has been compelled to import corn; instead of exporting, as formerly, and raising an extensive, or indeed excessive supply to provide against occasional deficiencies of the harvest.

6. To explain our views upon this subject, we must premise, that by the 44 Geo. 3. c. 109. foreign wheat is not importable when at a price less than 63s. per quarter, and then a duty is added of 24s. 3d., making the price at which it can be sold here 87s. 3d.; but, that when it is 66s. per quartern, it is allowed to be imported at a duty of 6d., making the price only 66s. 6d. Now, while these prices are calculated on both sides, in real money, no deception can occur. But, the moment that the real value of money differs, as it long has done from the value of

notes, whether it appear in the price of bullion or not, it will soon be felt in the price of such articles of necessity as corn; and, though the exchange, while gold continues to circulate, will not betray the true cause of the rise of prices, these commodities will sensibly bear a nominally higher price in this country, though possibly not a really much higher price in true money, than in other countries. Hence, while probably the productive state of the agriculture of the country has been equal to that of any in Europe, it has appeared to us, that the price of wheat has been more than usually rising, and the importation of grain has been allowed, when in reality it should have been checked; and, on the contrary, the exportation has been checked, when it should have been allowed.

7. The price of 66s. is obviously now a price which offers no correspondence with the reasonable price of wheat, which cannot be expected to be below five pounds, or production must cease for want of encouragement.

8. In our opinion, all restrictions on commerce are in the main injurious. The whole world should be considered as one garden, and one manufactory for the use of all its inhabitants;

and then, by the mutual exchanges of commerce left free to itself, the deficiency of seasons in one place would regularly be supplied by the excessive bounty of heaven in another; and the arts which are most peculiarly fitted for each particular region, would find encouragement where they were most wanted, and could be pursued with the greatest advantage. Thus would every nation afford a surplus of exchangeable commodities, without which commerce cannot be supported; for, as *Chaptal* has said in his *Chemie appliqué aux Arts*, the nation which would possess, within its own limits, all varieties of productions and of manufacture, must have nothing to receive in exchange, and may shut itself out from all the commerce of the world.*

9. But upon the principles which we have established, in order to give due encouragement to agriculture, so long as commerce or manufactures are encouraged by restrictions on importation, it is necessary that the productions of agriculture, should bear a relative price with regard to other commodities, or it must

* On the subject of the corn laws, see "*an Essay on the Impolicy of a Bounty, &c.*" (*Baldwin*, 1804.)

languish; we should advise, that, to ascertain the true price for the importation of corn, since 1797, we should convert paper money into bullion, at the price of bullion; assume the average rate of prices for three years; and add 10 or 15*l.* per cent. to the price for a profit; which will give the true price, at which importation may be allowed, without danger to agriculture.

CHAP. XVI.

Effect of Debasement of Coin and Paper Money as an Engine of the State, and of its supposed Cheapness.

1. It having now been proved, in the course of the foregoing discussions, that a paper money raised upon credit, beyond its actual convertibility into coin in a short time, is, in effect, a debased money, and operates by the same cause of general deception; it follows, that no more advantage can be immediately gained by the state, from having a supply of paper at hand, than would be gained by the use of a mint for debasing money; and that the advantage thus given, whatever it may be, will be temporary. The advantage gained by debasing the coin, at the government mint, would however be wholly counteracted, if, at the same time, other private mints were allowed to be set at work, without controul, in every city and market town in the kingdom. For the private minters would, by their debasements, raise the prices of commodities perpetually against the government.

2. In like manner, the creating of paper money upon the discount of government securities, exchequer and navy bills, at the metropolitan bank, is wholly counteracted as an engine of state, by the creation of paper on mercantile discounts not only in *London* but at every town in England; except as it facilitates the negotiation of loans and countenances an increase of the national debt. Indeed, while the metropolitan bank creates about 12 millions of paper money for the use of the state and 8 millions on mercantile discounts, (May 1811,) the country bankers, at a moderate computation, create from 30 to 40 millions of paper money on mercantile discounts merely. Whatever effect, therefore, the creation of such money at the bank of England has upon prices, the same effect must be produced, in a greater degree, by the country paper.

3. The disproportion is evidently in this case against the state, and will, by the operation of money and increase of demand, through the paper of the state, be always kept at and have a tendency to rise above the present rate. Indeed, this disproportion, there being no controul over the country banks, may be raised beyond any assignable limit, within the demand for circulation, created by taxes, excise, and customs,

and circulation employed in trade; and, hence, the obvious disadvantage of such a system is in this respect, clearly established. If it have any advantages, they must arise from some other causes, which we will explain hereafter, but which have been slightly noticed above. The principal advantage is indeed, that paper currency affords an immediate means of borrowing an unreal and deceptive money, which afterwards is funded with great facility.

4. It must not, however, be supposed that in the present state of things we would complain, in strict justice, of the issue of country notes; for they are necessary to give the country traders an equal facility of obtaining a capital with the London merchants. And this will explain the cause of the general prosperity of trade throughout *England*, so long as either through *Germany* or *America*, she could procure a mart for her colonial produce and domestic manufactures in *Europe*, and particularly in *France*.

5. Were it not for these country bank notes, those of the bank of England must be enormously extended by means of agents, clerks or discount brokers; the issue of which would be absolutely without controul. Whereas at

present, the country bank notes being payable on demand in bank of England notes, they are checked in their issues by the necessity of payment on demand, and also by that competition which they afford against each other. It however may be suspected that the individual restraint becomes, by general competition, a general increase, if not an universal excess.

6. The temptation that arises to increase this circulation, may be estimated from the profit that attaches to it. This we shall endeavour briefly to illustrate, by considering the nature and amount of it; and as in estimating the capital of a bank of circulation, we deduced it from its profits compared with its circulation, so we may deduce the probable profit from the probable capital, compared with the probable circulation.

7. Thus we may establish as a first principle, that the profit on capital employed by a country banker, or other bank of circulation on discount, may be estimated by the proportion which the capital bears to the circulation.

8. The capital of such a banker in England is bank of England notes. The proportion of these cannot be supposed to belong to the

country bankers, in a greater amount than as one fifth of the whole issue, or about 4,000,000l. and the whole issue of the country bankers united is 30,000,000 or 40,000,000l. This produces invariably 5l. per cent. per annum; for, although the profit of discount is somewhat more than 5l. per cent. the excess probably only pays the expence of trade, wholly or in great part. Now 4 is to 30 in the proportion of one-seventh and a fraction, and to 40 in the proportion of one-tenth. Of the whole discount received, the interest of the capital sum therefore is one-seventh; the profit of trade, by repeated exchanges, is also, as 6; and $6 \times 5 = 30$. This gives a clear profit of from 30 to 35 per cent. on the capital, according to the first supposition; but on the supposition that the issue of these banks is 40,000,000l. the profit is 45 per cent.

9. The inducement, therefore, to increased speculations in banking is very great. Yet all these banks are at the mercy of any one, who with a few thousand pounds worth of their notes should create a run upon them. Damages might perhaps be obtained for malicious proceedings; but malice might probably shelter itself behind impenetrable secrecy, and ruin to the banker and neighbourhood might immediately be produced. Perhaps even the

emissaries of a foreign government might effectuate this mischief, and escape before they were prosecuted civilly.

10. It is asserted by the great political economist, *Adam Smith*, that paper is a cheaper commodity, as money, than gold, and that, where stipulations on credit notes are enforced by law, no more paper can circulate, than there would be money, if coin alone were in circulation. This appears, in all respects, a fallacy; since from the known effect of credit, and the increase of value and prices by increase of money, and from the considerations, stated in this work and by Mr. *Wheatley*, p. 285, it is more than probable that money might be increased beyond this limit; but whether it may or may not is immaterial to our present consideration. For the prime cost of the money is the goods by which it was purchased at the mines, and its annual cost is its wear and tear, which are estimated by Mr. *Hatchett** at a very inconsiderable

*Mr. *Wheatley* says, p. 153, that as an assertion was made by the dealers in bullion that guineas became light by wear, it was thought necessary to investigate the fact; and Mr. *Hatchett* and Mr. *Cavendish* by a train of masterly experiments have fully proved its utter impossibility. See Transactions of the Royal Society for 1803. Not having the original paper, we suppose they did not prove that gold

portion. Now if the money is only displaced by paper, its original cost is not saved: but, if a greater quantity is introduced, that is, if it is created anew, prices are only lowered, the value of money diminished, and the owner of any coin is, at the same time, deprived of so much, in value, as paper credit has taken from the value of his money.

11. The cost of coinage paid by the nation, is about 1l. per cent., and is not necessary to be repeated in 100 or even 300 years. Twenty shillings divided by 100 give about nine farthings per annum, per cent. or one in ten thousand; that is, the coinage of 10,000l. will be afforded for one pound per annum. But the circulation of paper is made at a discount of 1 in 20, or 5l. per cent; 10,000l. will therefore cost in paper 500l. per annum; and 50,000,000l. will cost 2,500,000l. per annum. Whereas, in coin it will cost only 5000l.

12 If it is contended that this supposed cost is interest, and money bears an interest also; it must be answered, that money pays no interest in the

would not wear, but that it would not, in many years, lose so much of its substance, as to render a guinea below its current weight.

hands of the real possessor; but that notes are continually issued and renewed on loan, and are never created without a loan: whereas, in fact, the interest paid on a credit note is paid for the credit and not the real money.

13. It must also be observed that a loan is, in law, the withholding of a present demand; but a note is itself a promise to pay on demand. Now as the person into whose hands it passes, withholds a present demand, the process of circulation is the means by which the demand is withheld.

14. Interest also is payable by law, and usury or unlawful interest is received upon, the forbearance, or the withholding of a present demand. The circulators of all notes, payable on demand, therefore, are the actual lenders of the money payable on them. And these, by forbearance of money, are, in the true spirit of interest and use of money, though not by law, entitled to the interest; since, by forbearing to demand the payment, they lose the use or interest of their money.

15. The borrowers on credit are the bankers and tradesmen; the first of whom take the interest on credit notes; while the lenders are that part of the community who are not engaged in

trade. And all these persons are injured by the increase of prices through credit notes; their real money, or their share of the money which would actually circulate, and may be called potential coin, being depreciated thereby. Some palliative is indeed found in depressing the lawful share of the other part of the community; and, in the end, while perhaps no one else gains much, the bankers divide the 2,500,000l. at the lowest computation, as the profit of their trade.

CHAP. XVII.

Of Taxation and Prices during a State of Currency in Coin.

1. PAPER money increases prices and depreciates itself, as does all increasing currency; except inasmuch as the effect is checked by increased production and the diminution of the rate per cent. of profits by the effect of commercial credit on the actual price of a commodity.

2. Taxation would not so highly increase prices if currency did not increase: while it would occasion state expenditure amongst the subjects of the state; which is in the end the circulation of money from one to another, by the interchange of labour, stipends and commodities. So that, in a settled currency, the state would be merely the hand which circulated the money so raised; provided it should raise within the year, or by previous accumulation of one year's taxes in advance, just as much as it expended.

3. By foreign expenditure, also, trade would,

in some measure, be promoted and manufactures encouraged; while by the importation of bullion, the cost of foreign expenditure and also the necessary quantity of bullion would be supplied and prices kept on a level. Foreign expenditure cannot indeed be long maintained, without foreign as well as domestic trade, or conquest and plunder.

4. War and taxation would, then, have not so unequal an effect, if it were not for the increase of circulation, or of taxes ill devised and unequally assessed.

5. But, by the increase of circulation through war and taxes, and by means of excessive credit, the burthen is thrown upon all annuitants merely, who are without remedy, and upon stipendiaries, labourers and others, who cannot raise their incomes, but must diminish their real expenditure in commodities.

6. As also the interest of money is, by law, fixed at one-twentieth or 5l. per cent. those who live on the interest of money have no means of increasing their incomes, except by savings.

7. By depreciation of currency, however, interest of money is lessened in value, and capital on loan diminished in value daily.

8. The capital which is advanced on loan is advanced on short securities, such as on the discount of bills of exchange, or on the purchase of annuities or on mortgage; or on the state securities by exchequer bills, navy bills and annuities; which latter are either terminable and irredeemable, or perpetual and redeemable at par.

9. When a private debtor pays interest at 5l. per cent. for 10 years, if, as hath happened for the last 10 years, the value of money falls at least one-tenth, this interest is diminished from 5l. to 4l. 10s. per cent.* and what the creditor loses the debtor gains. In like manner, he repays at the same rate, and gives back 90l. for each 100l.†: by which private injustice is effected. So, when the state borrows and pays interest, and money depreciates, the repayment is made to the injury of the creditor. The receiver, in this latter case, is the part of the community which

* By the income tax it will be reduced to 4l. 1s. 0d..

† Mr. Thornton, in his speech (1811) says that depreciation since the war is estimated at 60 to 70l. and is at least 40 or 50l. per cent. By borrowing 1000l. in 1800, and paying back in 1810 a debtor would pay 500l. interest.; But, by investing it in land or successful commercial speculation, and selling his land or goods in 1810, he would find that he borrowed at two or three per cent. his land selling at 1200 or 1300l.

has placed confidence in the state and assisted its necessities; while the payer is the same part of the community, together with that part from whom also the taxes are raised. But public injustice is thus effected by depriving the state creditor of his real due, and it appears also that all taxes upon the public funds directly are distressing to persons, who, being mere annuitants, are rendered daily more necessitous by the depreciation of money. For they are held permanently by the widow, the helpless orphan or the wife; who has perhaps little aid from her husband, and many children to support. These persons cannot sell their stock, and taxes on stock are, therefore, unequal and oppressive upon those who, by depreciation of money, are in time, made to bear the greater part of the burthen of the state.

10. To estimate the extent of the injury produced to persons who have advanced money on long loans, we must observe that, from the table of Sir G. S. Evelyn, it appears that eight and sixpence in 1770 was worth as much as 1l. in 1800.* And that this has happened

* The same table gives the following comparative values of the pound currency of 1800, as estimated by the price of commodities at different times. In other words, the following sums are equal to each other, in real value, at the respective periods following, viz.

entirely by depreciation of money, through increase of paper currency is plain; because population and manufactures have at the same time increased.

11. Also we find that 12s. 2d. in 1760, or the commencement of the present reign, is equal to 1l.; wherefore it is obvious that 1l. advanced at interest at either of those periods, being repaid by a nominal 1l. of 1800, will in fact be repaid by 8s. 6d. in the one case, and 12s. 2d. in the other; and to this extent are all those persons injured, who have advanced money in the funds, or who under wills or settlements possess money locked up for that length of time. This is indeed peculiarly the case with many charities which have had money so invested, by their original institution. The original capital of the bank also, amounting to 11,000,000l.

	£	s.	d.
In 1700 . .	0	8	5½
10 . .	0	8	9½
20 . .	0	9	1
30 . .	0	9	8
40 . .	0	10	2
60 . .	0	12	2
70 . .	0	13	7¼
80 . .	0	15	2¼
90 . .	0	17	7
1800 . .	1	0	0

was so advanced, first at 5l. per cent, and afterwards at 3l. per cent. interest; but, by the profits which have been made, what has been lost to the holders of bank stock in the one way has been gained in another, so that as traders they have been very successful. But money belonging to infants or other suitors is always invested by the court of Chancery to remain at interest in the public funds, in preference to any other security. In this there is great, though unintentional and unavoidable injustice: for it would be the same if laid out on mortgage. However, in future, it would be well worthy of consideration, not so much by the court as by all those who have the settlement of property on marriage or by will, whether the interest of orphans, widows and others does not demand that, in order to settle their annuities, with any thing like a fair equality, land, to be let on a corn rent, should be purchased and transferred, instead of stock.*

* The amount of these sums has increased amazingly, since a regular investment of them in the bank has been required. This appears by the following statement of the amount of the balances in the hands of the receiver general of the court of Chancery, at the following periods, viz.

1730 . . .	£1,007,298	1790 . . .	£10,948,770
1740 . . .	1,295,251	1800 . . .	17,565,912
1750 . . .	5,153,901	1810 . . .	25,162,430
1789 . .	7,120,537		

It is, therefore, obvious that those who would regard the interests of a large and, in a great measure, unprotected class of persons, would do well to consider the effect of a very rapid depreciation upon so vast a fund.

In like manner, it appears, that large sums belonging to suitors are vested in stock and funds by the registrar of the high court of Admiralty and of prizes, Lord Arden; the account of which stood as follows for the years 1810, 1811, and 1812;

	1810. £	s.	d.	1811. £	s.	d.	1812. £	s.	d.
Cash	146,264	0	0	139,355	14	2	84,150	7	0
Exch. bills	191,750	0	0	80,400	0	0	102,500	0	0
Navy 5 per cent.	102,641	11	8	82,131	3	5	66,148	13	2
4 per cent.	15,478	11	10	49,886	18	9	3,137	5	6
3 per cent.	15,629	9	6	42,976	10	0	6,523	19	11

The floating balances of both these funds, as well as the purchases of the commissioners of the sinking fund, must tend greatly to keep up the price of stocks.

CHAP. XVIII.

Of Usury and Interest.

1. The real use of money is like that of land, a capital to be employed to advantage and improvable by labour. For the possessor of money on loan, on bond, may purchase land or houses, or goods, and may raise the money again by mortgage of land, or pledge of goods; and with care constantly deal at a profit. If he fail, the lender loses his security, and is obliged either to imprison him without advantage, or receive a composition for his debt. The risk of loss is therefore divisible between the borrower and lender, either wholly or in great part; and by the bankrupt laws, which compel an equal division amongst creditors, wholly so. The profit by the use of money should, therefore, be divided fairly; as the rent of land, which is described as issuing out of the land.

2. The rent of land is about 3 or 4*l.* per cent. upon the improved or real value, though sometimes more or less upon the purchase money, and

is as well as money lent on mortgage always secure. The rent paid for land is, therefore, the bare produce of capital employed without risk, and both the profit of land and the rent might reasonably be expected to be greater, were it not for the checks given to agriculture, by importation of foreign corn.

3. Money is now not generally lent upon mortgage, but very frequently upon annuity secured on land, which, by means of insurance, affords a sure return of capital, but is not redeemable at the will of the purchaser. This permanency of the loan is a disadvantage of perhaps one or two per cent.; but the money is lent at a clear profit to the lender of about 7½ or 8 per cent. at the lowest, the borrower paying most frequently 10 or 12*l.* per cent. Loans might also be afforded on personal security at a high *per centage*, half on annuity, half on bond payable on demand. By this means the interest might be equalized and the loan in effect redemanded by calling in one half. For if the whole is not repaid, the other half continues as on annuity at high interest. Thus annuity at 15*l.* and loan at 5*l.* give 10*l.* per cent. interest securely; which sufficiently proves that the laws against usury, or unlawful interest, derived from the law of *Moses*, are in effect easily evaded,

because they oppose the law of nature, and are founded in absurdity.*

* Mr. *Sugden*, an eminent conveyancer of the present day, who has illustrated the science of that branch of the profession by several very able and learned treatises, has recently published "a Cursory Inquiry into the Expediency of repealing the Annuity Act, and raising the legal Rate of Interest;" which is well deserving of the attention of the legislature.

It is inconsistent with our own views of the perfect freedom of all contracts without fraud, between persons of adequate capacity, to admit of the legality in *natural jurisprudence* of any restraint upon the fair profit of money on loan, and we could wish that the learned writer had gone to the same extent as Mr. *Bentham*, and argued for the repeal of the statute of usury, as well as that of annuities. But in steering the middle, he has probably adopted the more prudent and practicable course, which may we hope lead him to his end. No one is better able to expose the futility of the act practically than Mr. *Sugden*, who shews clearly that it has produced, in his extensive experience, little else but extravagant charges, cruel frauds, and oppressive exactions from those who, possessing only life estates, could afford no adequate security on mortgage, and, by the advantages which it affords to the lender, has almost entirely destroyed the practice of mortgage security. An enquiry at the insurance offices for lives would, as we are credibly informed, expose the necessities of most of the first men in the state.

Mr. *Sugden* has also published a small tract, which for its

4. Loans on bond would probably also bear justly a higher per centage than 5*l.* per cent. which is the interest allowed by law; but interest is fixed at this maximum, merely for the convenience of securing for the state the payment of a low interest. For all the other reasons which have been given are palpably absurd, as hath been most ably demonstrated by that truly excellent reasoner and admirable jurist, *Jeremy Bentham*, in his Treatise on the Law of Usury.

5. By fixing interest of money at a maxi-

general utility we are happy to notice. It is entitled "Letters to a Gentleman of Landed Property;" and as it is written in a pleasing and easy stile, and is very concise, deserves the attention of all persons who have leases to let or to take; lands to sell or to purchase; estates to devise or to inherit, and what will doubtless attract the attention of the fair sex earnestly, marriages to contract, or families to provide for. His object, he expressly declares, is to enable all persons to doubt a little of their own self-sufficiency to direct their affairs, in matters where a little law is dangerous, and a great deal generally unknown, and where it is of no small consequence to know properly how to give instructions, as they are strangely called, to our legal advisers.

When a man of really great skill devotes his leisure hours to such undertakings, he condescends to do much service without the ostentation of abstruse erudition.

mum, in order to monopolise the borrowing of money, the state, however, does injury to all capitalists, and gives no aid to the industrious borrower, who might wish to employ it for useful purposes. By the discounting of large sums the bankers, however, afford great facilities to the greater merchants; but if money could be fairly advanced on loan at just rates, according to the risk run, there would be greater inducements to small savings, and more facilities to borrowing small sums for useful purposes. But no law can protect spendthrifts, unless like the *Roman law*, it considers them as insane, and appoints curators of their property.

6. The state, by laws against usury, not only checks the use of money; but, as in the case of all contraband trade, affords a high premium on the evasion of a law, which is not founded in equity. And by the intervention of annuities lawful means of evasion are discovered, and the whole law is actually frustrated.

7. The notion that it was immoral to make interest of money has happily long been exploded. *Paley* justly smiles at a provision in a statute

of James I. which, having prohibited interest to be taken beyond a certain rate and consequently allowed it under that rate, adds that this statute shall not be construed or expounded to allow the practice of usury in point of religion or conscience.* *Jeremy Bentham* also, in his able defence of usury, is very facetious on the passage usually quoted from Aristotle, that all money is in its nature barren. He justly observes, that there is a consideration which did not happen to present itself to that great philosopher, but which, had it presented itself, might not have been altogether unworthy of his notice. It is, that though a daric would not beget another daric, any more than it would a ram or an ewe, yet, for a daric which a man borrowed he might get a ram and a couple of ewes, and that the ewes, were the ram left with them a certain time, would probably not be barren. Again at the end of the year he would find himself master of his three sheep, together with two if not three lambs; and if he sold his sheep again to pay his daric, and gave one of his lambs for the use of it in the mean time, he would be two lambs, or, at least, one

* Paley's Mor. Phil. book 3. part 1. c. 10.

had no other than if he had made no such bargain.

8. The precept in the law of *Moses*, which had long been considered to stand in the way of taking any interest, was at length discovered to have related to transactions between Jews alone, and not to affect the barterings of Christians.† It is strange, however, that the Jews, to whom this law is promulgated as the absolute law of God, have in all ages been most ready to violate it. Thus clearly do they establish that all laws must be evaded which are not sanctioned by the real law of nature founded in reason, equity, and justice. And this will happen whether they are inforced by human sanction or the pretended decrees of deity; for such, without questioning the general authority of *Moses*, truth and reason must consider the law against usury. The legislator of the Jews, as by the command of God, forbids all lending at interest; yet all nations now practice it, no church holds it sinful, and *Adam Smith* declares that to reduce it below

* Defence, p. 101.

† Vide *Sugden's* Cursory Inquiry, p. 10.

the lowest ordinary market price is impossible. It is not so with the laws which the same author has promulgated against theft, robbery, and murder. No one doubts their application, no one has the impiety to declare them impossible in general execution.

9. The ancient law of usury is thus laid down by *Glanville*, who wrote in the time of Henry II. "All the effects of a usurer (whether he make a will or not) belong to the king."*

* The ancient *Romans* punished usury with more severity than they did theft. (Cato de re Rustica Proem.) The *Norman* code imposed a forfeiture of all the offender's property, provided he had been guilty of usury, within a year and a day before his death. (Grand Custum. de Norm. c. 20. By a law of Edward the Confessor, usurers were banished the kingdom, and a person convicted of the crime forfeited all his substance, and was to be treated as an outlaw.

If the reader feel any desire to penetrate into the motives that dictated this law, these are the concluding words of it. *Hoc autem asserebat ipse Rex se audiisse in Curia Regis Francorum, dum ibidem moraretur, quod usura radix omnium vitiorum esset.* (LL. Ed. Conf. c. 37.) The doctrine, as laid down by the Mirror, is, that the goods and chattels of usurers should remain, as escheats to the lords of the fee. (Mirror, c.10. s.3.) The reader will also find some curious disquisitions on the subject of usury in the Ancient Dialog. de Scaccario. (L. 2. s. 10.)

But it is not the custom for any one, whilst living, to be appealed or convicted of the crime of usury—but, among other regal inquisitions, it is usually inquired and proved, who have died in this offence, and that by the oaths of twelve lawful men of the vicinage: which being proved in court, all the moveables and chattels which belonged to the deceased usurer shall be seised to the king's use, without any regard to the person in whose hands they may be found. His heir is for the same reason deprived of the inheritance according to the law of the realm, the inheritance itself reverting to the lord. It should, however, be observed, that if any one has, during a certain period of his life, been guilty of this crime, and be publicly accused of it in the community where he lived, if he desisted from his error before his death, and was penitent, neither he, nor his property, shall after his death be liable to the penalties of usury. It ought, therefore, to be evident, that a man has died a usurer, in order that he may be so adjudged after his death, and his effects disposed of as those of a usurer."*

* We cite from a recent edition of this writer by Mr. J. *Beames*, whose elegant translation of one of our earliest text writers on the law excites in us a strong desire to see

10. The modern law of usury fixes the rate of interest at 5*l.* per cent. per annum, and is too generally known and evaded to require that we should state it here.

an edition of *Bracton* and *Fleta*, executed with equal fidelity and skill. At the same time, we cannot but recommend to the student to draw his knowledge of the foundation of our law from these pure sources, rather than from the garbled extracts of pedantic, prejudiced and confused reporters, or from superficial and unskilful abridgements. The penalty of studying a barbarous Latin is now removed, and *Glanville*, at least, has appeared in an elegant English style.

ELEMENTS

OF THE

SCIENCE OF MONEY.

BOOK THE THIRD.

Introduction.

IN our First Book we have considered the properties of money as the medium of exchange in the natural course of money transactions, and as consisting of a real commodity actually given and transferred from one to another, in exchange for some other commodity. In this sense money is, in truth, *the commodity* by way of excellence, and is itself the representative of all commodities.

In the second book we have considered the operation and effects of the substitution of credit in place of money, in exchange. Further, we have shewn that there are many inconveniences necessarily arising from the use of this representative at second hand, and that the

same advantages which arise from the adoption of real money do not accompany the use of a circulating credit.

In a general view it might be thought that the inquiry would now close, but circulating credit is so necessarily connected with the system of national debts, without which credit would not be allowed to circulate to the expulsion of the real medium of metallic money, that it becomes necessary to enter also fully into that subject. Without it an inquiry into the science of money would be imperfect: and it will therefore form the subject of our third and last book.

It was our intention to have added a further inquiry concerning the various characters of war and of hostile armaments, as they affect the pecuniary system. For the present however we shall withhold our opinions upon that head, considering them not sufficiently complete.

CHAP. I.

Of Public Debts.

1. All the injuries arising from debased or depreciated currency are produced by the necessity of supporting a forced state of money circulation, arising from the anticipations of the state upon its revenue, by means of a public debt.

2. Credit notes on demand appear, as we have seen, to have been first circulated in England in the reign of Charles II. when the goldsmiths or bankers issued notes for the sums lodged with them, and at the same time employed the money at use. And of the extent of their business an opinion may be formed, from the fact, that when King Charles II. stopped the payment at the exchequer, one goldsmith alone was found to have obtained credit for 1,320,000l. They appear also to have had some effect upon the coin and the price of bullion in the succeeding reign. But it is certain,* although the true cause was not

* See *Wheatley* on Money and Commerce.

developed till lately, that in the reign of William III. partly by clipping and partly by the effect of these credit notes, bullion was raised far above mint price.

3. In 1693 the bank of England was instituted, and it has since continued to issue credit notes upon the security of exchequer and navy bills, and also upon private bills, on discount at 5*l.* per cent.; receiving likewise a compensation for the payment of interest on the debts of the state; and being not only the principal dealer in bullion, but the only medium through which money has been coined at the mint.

4. When the debt due from the government to the bank of England had arisen to a considerable amount, William III. created a fund, as it is called, and converted the debt into annuities, perpetual or for years. Of these the former were made redeemable at par, and subject to various rates of interest: which was levied in taxes and paid, through the agency of the bank, to the owners of the different funds or stocks and their assigns.

5. By this means a debt was progressively created in the following proportions, making

allowance for some re-payments, and estimating the debts in round numbers for easier calculation; viz.

Value of £1 money of 1800. £ s. d.	A.D.	Amount of debt.	Increase.	Value of the increase in money of 1800.
0 8 5$\frac{1}{2}$	1700	16,000,000	16,000,000	37,000,000
0 8 9$\frac{1}{2}$	10	44,000,000	28,000,000	63,700,000
0 11 2$\frac{1}{2}$	50	72,000,000	28,000,000	50,100,000
0 12 2	60	88,000,000	16,000,000	26,000,000
0 13 7$\frac{3}{4}$	70	126,000,000	38,000,000	55,600,000
0 15 2$\frac{1}{2}$	80	142,000,000	16,000,000	21,000,000
0 17 7$\frac{3}{4}$	90	238,000,000	96,000,000	108,700,000
1 0 0	1800	451,000,000	213,000,000	213,000,000
			451,000,000	576,000,000

6. To pay the interest of the debts and supply the other expence of the state, the permanent revenue of the state, as it is called, or average amount of money levied annually in taxes, stood at the several periods above mentioned, in round numbers, as follows:

Years.	Interest.	Value in money of 1800.	Proportion of the value of money in each year.
1700	4,000,000	94,000,000	238
10	5,500,050	12,500,000	247
50	7,500,000	13,700,000	314
60	8,500,000	13,400,000	342
70	9,500,000	13,900,000	384
80	12,000,000	15,700,000	427
90	15,000,000	17,500,000	496
1800	30,000,000	30,000,000	562

7. On which it may, incidentally, be observed,

that the total expenditure of Queen Anne's reign was 122,000,000l.; which is equal to 277,000,000l. in 1800; and the average annual expenditure of that reign to 10,000,000l., which is equal to 23,000,300l. of the money of 1800. Indeed upon the principles of the science of money contained in this work, it would be easy to predict, that such a progressive increase of revenue in a state must be attended with the obvious consequence of increasing the relative quantity of money, and decreasing its value in exchange. For it is not to be supposed, that the state revenue bore a very small proportion to the real money of the state; and in truth, at each of the given periods, the state and its subjects were impressed with a sense of burthen, and exclaimed against the increasing necessity of the times. It, therefore, follows, that either the extent of territory supplying the revenue must have been increased, which has not been the fact, or the relative proportion of money has increased and its value fallen. Indeed it is apparent that the burthen of taxes was, at each successive period, equal to the power of the state; and that as revenue increased, money increased relatively and fell in value.

8. The consequences of this are also ap-

parent from a table which we shall give at the end of our work, shewing at different periods the income of the crown and its real value; the comparative value of 100l. annuity, whether produced by 3l. per cent. stock or mortgage of land, or by a pension: with the like value of a 50l. curacy and of a captain's pay in the army and navy, and also the money value of the pay of a common soldier, in its progressive fall, from 1700 down to 1800.

9. The mischievous consequence to all pensioners and annuitants is obvious: to whom, and to the army and navy it is irreparable. But stockholders have the opportunity of buying and selling, and otherwise disposing of their stock; and they who sell at short periods are little affected. Lenders on mortgage are mostly accumulators of savings, who dispose of them at their real value, and continue for a short time to receive 5l. per cent. interest. But all money out at interest, for five or ten years, is lent and redemanded at great loss. Widows, orphans, aged annuitants, public charities, supported by money at interest, or by stated contributions, as the chest at Chatham, are in general, reduced to great distress; because they cannot change their securities and

are daily impoverished by the unnatural depreciation of money.

10. The crown also and many of the ministers of state are equally impoverished. But the crown has found some relief by the appropriation to itself, in part, of the droits of Admiralty, and repeated applications to parliament for payment of its debts. Ministers also have increased their fees of office, and indeed by the new inventions of fees for licences, and other means, endeavoured to alleviate as much as possible their own difficulties.

11. From our view of the science of money it is plain that the state borrows notes of the bank, which, in their first circulation, pass, in exchange, at the value of the day, with a tendency to increase by the known augmentation of effective demand from the increase of state expenditure. But when the notes issued are to be funded by the operation of loans, the increase of money is perceived and prices have risen, and at the same time, in order to meet the increase of prices created by the issue on government securities, a similar increase of credit notes is made by the country bankers.

By this means money is further increased, and this process is repeated annually: so that prices are, in reality, affected by the constant operation of 760 mints, perpetually active in the secret debasement of money, as it may justly be termed. The effect indeed is the same as debasement, though the intent is probably very different; and certainly the operation is not dictated by the same dishonest and unjust views which give rise to national debasements of coin.

12. PAINE, a writer of strong intellect, but great irreligion and violent revolutionary principles,* first announced to the public, that the

* His works are more spoken of by name than thoroughly known. It was with great difficulty that we have lately procured his pamphlet, on the funds; which is a very curious production, and an evidence of very great talent. Should it appear to those who are acquainted with *Paine's* works, that much of the present argument is founded upon similar principles, they should be informed that it was unknown to the author, when in the summer of 1811, during a long vacation, he framed the analysis of this treatise, and actually composed the whole of the work from Book II. Chap. III. to the end of the Book. This fact which will not appear strange when he informs his readers that the income tax, imposed by Mr. *Pitt*, may be traced to the invention of the same author, in his celebrated *Rights of Man*. *Paine* was, however, more studious of equality in the

state debt of England increased in a certain ratio every war, doubling the debt and adding one half more to it, the expence of each war being one and a half on the amount of the last preceding. Thus the increase was, as 8, 12, 18, 27, 40, 60, 90, 135; forming a series in which the second number is produced by the preceding number 8 and half 8; and the third number is, in like manner, produced by the preceding number 12 and half 12; and so on for the rest. This alone, if it be the fact, leads to the proof, that such regularity arises not from accident, but a fixed principle; which, it is presumed, is, that the power of the state, in each war, was fully exerted, and its expenditure was in effect equal: so that the addition was, either wholly or in great part, nominal. It is also a curious fact that, upon this principle, *Paine* calculated the expenditure of six successive wars, the expences of which were known, and from that formed a calculation of the probable expenditure of six future wars. And in this he seems to have been well founded: if we may judge by the experience of the two first terms of his series, the second of which, though not completed, has amounted to his estimate very nearly.

effect of his plan than the eloquent son of the great Lord *Chatham*.

First series of six wars.		Second series of six wars.	
1	21 millions.	1	243 millions.
2	33	2	364
3	48	3	546
4	72	4	849
6	152	5	1228
	444 millions.	6	1842
			Total 5042

13. This table was compiled in the year 1796, and, though in 1812 we have not reached the end of the first war of the second series, the expence has considerably outrun the estimate. To our readers it will be unnecessary to explain the enormous apparent amount of debt at the end of twelve years of war; they will readily understand that such sums are merely nominal, and that the great evil of them is not their actual amount, but their unequal distribution, their imperfect unbalanced pressure, and the rapid depreciation of money, which such an increase of debt and of currency must produce.

14. Mr. *Daniel Wakefield*, in a letter to *Thomas Paine*, (*Rivington*, 1796,) has endeavoured to correct some errors in the above statement, and gives the following view of the national debt; on which we shall remark, that the present amount of the national debt exceeds *Paine's* predictions.

According to the estimates made by Mr. Paine from his ratio.

The increase to the national debt from the war				The amount of the national debt at the conclusion of the war	
Of	Should have been	It really was	Difference being		
1688	21½	21,515,743	15,743		
1702	32¼	37,286,375	5,036,375	Sinclair makes it - -	54,145,367
1739	48	31,631,546	16,368,454		
1754	72	67,227,134	4,772,866	1702	53,681,076
1775	108	103,211,829	4,788,171	1739	78,293,313
1792	162	135,000,000	27,000,000	1754	146,682,844
				1775	238,231,248
				1792	358,154,880
Total amount of the errors of Mr. Paine's ratio as applied to the war expences			£57,981,609	Total amount of the errors of Mr. Paine's ratio as applied to the national debt	£180,047,750

15. The terms stock and fund, made use of in all references to the debt of *England* and of other nations, are very deceptive, for they imply a heap of money or of 3l. per cent. capital. But a heap of money, wherever it lies, is dead lumber; and may be returned to the mines, since in that state it is, in the words of *Aristotle*, truly barren and breeds nothing.

16. A loan, on the contrary, is the transfer of money from one man to another: from one who has not employment for money to another who has; and the use or interest of money is a part of the profit gained by laying it out. But, in funding, the state takes money, on loan, from persons who, having no immediate employment for it, have accumulated it; and distributes it amongst its debtors in circulation. For its own part, it accumulates no store of money, and would act indiscreetly, not to say with great tyranny, if it did so.

17. In raising the interest by taxation, the state also acts differently from individuals who borrow money for their own use. They do so occasionally, for purposes of lucrative employment, which enables them to return the loan with interest upon it, for profit.

28. The state, on the contrary, having no use for money, but for mere expenditure, can only assume to itself a power over the production and future savings of its own members. This constitutes the part of the currency which would be laid out at use upon future loans; and this the state seizes and pays over to its debtors, who circulate it for consumption, or employ it, either wholly or in part as capital.

19. Borrowing therefore, whether by the state or individuals offers no great check to circulation; for it only changes the hands and the object. This it does, in some measure, by violence, and thus alters or impedes somewhat the natural course of circulation. Indeed by borrowing first of those who have to spare, and then spending money, the state, it should seem, would do no violence to circulation, but would be very limited in its expenditure. The chief evil would then arise from checking, for some time, the frequency of private loans; but no new circulation nor additional currency would be produced.

20. On the contrary, by expending large sums, and then borrowing at some interval afterwards it necessarily increases the quantity or effect of the circulation. This either

by increase of money or credit, diminishes the value of money: and to supply this diminution of value, more money is created, or credit further enhanced; which have the same effect.

21. Public debts of all kinds are mere anticipations of real revenue, and being founded on credit, increase the effect of circulation and depress the value of money. They therefore create a demand for more money in prompt payment; which must be required, notwithstanding it appears that credit ends to save the immediate use of money; for by that saving it is only meant, that money exchanges are performed with greater facility, through the means of a set-off, and paying balances after long credits, instead of repeated sums in prompt payment.

22. In the *British Critic* for the year 1804, vol. 23. p. 127, is a very able review of *Wheatley* on money; which from the signature of J.B. may be suspected to come from the pen of the Rev. Mr. *Brand*, who is said in a note to the same critique, to be the first who, in 1776, applied the depreciation of money to the refutation of Dr. *Price's* arguments on the augmentation of the national debt: and who, in observations on Mr. *Gilbert's* bill, 1776, is said also to have deter-

mined this depreciation from the quantity of commodities of the first necessity consumed in eight weeks. From public accounts, and a table of their prices for seventeen years of great detail, laid before parliament, a decrement and a law of decrement appeared to take place, which in the opinion of the reviewer was assumed too great. This opinion militates against our suggestion that Mr. *Brand* and the reviewer are the same person; but he appears however to be far better versed in mathematics than Mr. *Wheatley*, and has afforded some elucidations of a material question in political arithmetic, which ought not to be overlooked.

23. He states, truly, that supposing the value of money equal at any two given periods, and population to be increased, the pressure of any equal revenue will be inversely as the population, that is, greater in a less population, and less where population is increased; in other words, 1000 men can pay 1000l. as easily as 500 men can pay 500l.

24. To determine the effect of the decrement of the value of money, and the increase of population on the burthen of taxes, at all times, the value of money is first to be taken as constant, together with the quantity of com-

modities consumed by the individual on an average in any country. The value of this set of commodities, at their fixed rates, is what King and Davenant call the yearly expence of the people per head, which, multiplied by the number of the people, will give the national expence. Let a tax of two shillings in the pound be laid on that great total, producing a determinate sum. Suppose now the population of such a state to have been, at any assigned time, five millions. Let it, in a following period be increased to seven and a half, the prices of commodities, the consumption of each individual, and the total sum collected remaining the same; the charge on every single person, which was before measured by one tenth of his income, shall now be reduced in the proportion of five to seven and a half, or ten to fifteen; the measure becoming one fifteenth, or 1s. 4d. in the pound only. If the population had become ten millions, the charge and burthen would each have been reduced to half its former amount, or to one twentieth, that is, to a shilling in the pound; therefore the amount of a tax, or aggregate system of taxes, the consumption of the people per head, and the price of commodities remaining constant, the burthen or charge in the pound will be reciprocally as the number of the people;

and their expence per head continuing the same, if the population of such a state, after having been initially as 100, shall, in the lapse of certain periods, have successively become as 110, 120, &c. &c. and ultimately as 169; that is, shall have increased in the proportion of the population of England from 1688 to 1800;*

* We may from these elements determine the ratio of population in any two years, between 1688 and 1800. For the yearly births and deaths in a state being here taken, upon the average, to bear respectively a fixed proportion to the whole existing population, which is the constant assumption, their difference shall bear a fixed proportion to the whole population likewise; or it will be augmented by a constant rate per cent. or in successive years, form a series of geometrical progressionals; and our population having increased in the last 112 years in the proportion of 1·69 to unity, its annual increment was 47, 100dths per cent. and between the years 1700 and 1800, it had increased in the proportion of 1·5983 to unity. Therefore, had the value of money continued constantly equal, one pound would have been raised in the more populous period, 1800, with the same facility as 0·6256l. or 12s. 6d. in the less, the year 1700: or inversely, 1·5983l. or 1l. 11s. 5d½. raised in 1800, would not have exceeded in burthen one pound raised in 1700. Each of these forms of stating the proportion has its separate use. If it be inquired what payment in the year 1700 was equal in burthen to a charge of one million incurred in 1800, recourse is to be had to the first form; the sum is to be multiplied by 0·6256, the reciprocal of 1·5983, the product is 625,600l. the sum required; such multiplication by its reciprocal, being the same as an actual division by 1.5983, and the easier operation; and if we want conversely to inquire, what payment in the year 1800, was equal to one million in 1700; we must divide the sum by 0·6256, and the quotient will be 1,598,300l. Or, which is the same thing, we must multiply it by its reciprocal 1·5983.

the burthen of the tax having been at first reciprocally as 100, shall become at the end of the first, second, and last periods, reciprocally as 110, 120, and 169, respectively; the commodities consumed by equal numbers of people in the different periods being taken to remain the same in kind and quantities, and their prices constantly equal.

25. If the population and amount of the taxes be taken as constant, and the prices of commo-

The annual increment of population being 0·47 per cent. in every successive twenty years, it will be increased in the proportion of 1·0983 to unity; and taking the measure of population in 1800 as unity, that of every twentieth year in the century may be obtained by divisions, or by continued multiplications of unity by 0·9104, the reciprocal of 1·0983, as in the second column of the second following table; and the five corresponding reciprocals, or the terms of the second column of the second table, will be found by the continued multiplications of unity by 1·0983, repeated four times.

dities to vary; the burthen or charge in the pound will be at all times reciprocally as those prices, or directly as the value of money; increasing with its augmentation and decreasing as it falls; one of the principles upon which Mr. *Wheatley* proceeds: and, thirdly, if the value of money and population remain fixed, this burthen or charge in the pound will be as the amount of the taxes, which is universally admitted.

26. Hence it follows, that however, the amount of the taxes, the price of commodities, and the population of a state may vary, the burthen of the taxes will be as their amount directly and the number of the people, compounded with the price of commodities inversely. This follows from the nature of proportionals.

27. A numerical illustration shall now be given of this rule, to determine the effect of the increase of population and prices conjointly, upon the burthen of the taxes. It has been shown above,* that on account of the increase of the number of contributors, the state could collect one pound in the year 1800, with the

* See note page 414.

same burthen upon them as 0·6256l. or 12s. 6d. in 1700. Moreover, on account of the fall of the value of money, separately taken, the burthen of the payment of 562l. at the end of the century, having been no more than that of 238l. at that of the preceding, by Sir G. S. Evelyn's table, as given by Mr. W. one pound was paid in 1800, with the same facility as 0·4234l. or 8s. 5½d. in 1700, and consequently 0·6256l. or 12s. 6d. in the more recent period, with the same facility as 0·2649l. or 5s. 3½d. in the more remote; therefore the payment of twenty shillings by the nation at one period, was attended with no more burthen than that of 5s. 3½d. at the other. Or a million might have been raised upon the subject in the last year of the 18th century, with as little burthen as 264,900l. at the end of the preceding; and conversely, 3,774,000l. in 1800, as 1,000,000l. in 1700; and here the fraction, 0·2649l. is the product of 0·6256l. and 0·4234l. —and 3·774l. is the reciprocal thereof: and having given the amount of any payment to the state in the years 1700 or 1800, that of a charge of equal burthen at the other may be found in one of the following tables, as also for all intermediate years.

TABLE I.

Sums levied in Taxes in certain Years, equal in Burthen to 1l. so levied in the Year 1800.

Payment 1800 Years.	1l. or 20s. Increasing fixed.	Col. 1. 1l. Prices. Population.	s.	d.	Col. 1. 1l. Population. Prices.	s.	d.	Equal National burthen in years.	Col. 1. and Col. 2. Increasing both.	s.	d.
1700		0·4234	8	$5\frac{1}{2}$	0·6256	12	6		0·2649	5	$3\frac{1}{4}$
1720		0·4572	9	$1\frac{1}{2}$	0·6871	13	$8\frac{3}{4}$		0·3142	6	$3\frac{1}{4}$
1740		0·5106	10	$2\frac{1}{8}$	0·7547	15	1		0·3854	7	$8\frac{1}{4}$
1760		0·6085	12	2	0·8289	16	$6\frac{3}{4}$		0·5044	10	1
1780		0·7597	15	$2\frac{1}{4}$	0·9104	18	$2\frac{1}{4}$		0·6917	13	10
1800		1·0000	20	0	1·0000	20	0		1·0000	20	0

TABLE II.

Sums levied in 1800, equal in Burthen of 1l. raised in certain Years.

Payment 1800 Years.	1l. or 20s Increasing fixed.	Col. 1. 1l. Prices. Population.	£	s.	d.	Col. 1. 1l. Population. Prices.	£	s.	d	Col. 1. and Col. 2. Increasing both.	£	s.	d.
1700		2·3613	2	7	$2\frac{1}{2}$	1·5983	1	11	$11\frac{1}{2}$	3·7743	3	15	$5\frac{3}{4}$
1720		2·1866	2	3	$8\frac{3}{4}$	1·4552	1	9	1	3·1823	3	3	$7\frac{3}{4}$
1740		1·9581	1	19	$1\frac{3}{4}$	1·3349	1	6	$5\frac{3}{4}$	2·5945	2	11	$10\frac{3}{4}$
1760		1·6432	1	12	$10\frac{1}{4}$	1·2063	1	4	$1\frac{1}{2}$	1·9823	1	19	$7\frac{2}{3}$
1780		1·3161	1	6	$3\frac{3}{4}$	1·0983	1	1	$11\frac{1}{2}$	1·4456	1	8	$10\frac{1}{4}$
1800		1·0000	1	0	0	1·0000	1	0	0	1·0000	1	0	0

29. The fractional and money values, in the first section of the first table, are the same as those determined by Mr. *Wheatley*, p. 247, and are a series of sums equal in burthen on each individual, to the payment of twenty shillings in 1800, population being taken as fixed: the fractional and money values of the second section exhibit a corresponding series

of the same values, prices of commodities being constant, and population increasing: the terms of the third fractional column are the products of those of the first and second in the same line, followed by the money values of them. The first, second, and third fractional columns of the second table are the reciprocals of those of the first respectively.*

* On the construction of the table of the successive values of money for the last century, adopted from Mr. W. here, the following observations may be made.

There are two modes in which that value can be determined for any series of years: the first is, by dividing the national expenditure by the number of people in each year, the quotients will be a series of sums proportional to the mean prices of commodities, or the reciprocals of the successive values of money. One such quotient, for the year 1688, Mr. *King* exhibited; and if the process whereby he determined the expenditure be just, and it could be recovered, the whole progression would be easily determined.

The second is thus: let a list of the different commodities ordinarily consumed by a person of the middle rank of life be made out; and the quantity of each requisite to the consumption of a given number of such individuals for a given time be assigned; the aggregate price of this set of commodities for any one year will be reciprocally as the value of money for that year; but all the prices would be better taken from the average of a sufficient term of years. It must be noted, that different commodities have varied in price with different celerities, whence the proportion of

30. The application of these tables shall now be shown, to one of the numerous cases determined by Mr. *Wheatley* from his own tables, retaining his numbers. He states the revenue in 1800 at 30 millions; the multiplier to this, in the last section of the second table, is unity: the revenue in 1700 he states in round numbers at four millions; the tabular multiplier to which is 3·7743, and the product 15,097,200l. A payment, therefore, of four millions, at the more remote period, was equal in burthen to 15,097,200l. at the nearer, or the burthen of the state was nearly doubled: and here Mr.

each consumed must be taken into account; the average charge of maintaining one man for one year being the point sought. The mean variation of price of all the enumerated commodities will give a false result, resting on the tacit assumption, that the expence incurred in the year for each is equal.

The mode in which Sir G. *Evelyn* has proceeded to determine the series of prices given by Mr. W. is not explained by him. It is supposed here to be by the valuation of a set of commodities, each of the proportional quantity above described.

After these two rules, resting on one common principle, it is proper to note, that Dr. A. *Smith* has affirmed, that corn is "a more accurate measure of the value of money "than any other commodity or set of commodities." Book i. chap. 11, 8vo. 1774, vol. i. p. 293.

W. regarding increase of prices only, and omitting that of population, takes the multiplier for 1700 from the 1st column, where we find 2·3613; by which, multiplying four millions, we have 9,445,200 (9,400,000 W.;) but in the payment of each period, and particularly the latter, there is an error in his statement of the revenue; and the correcter result will be, that the burthen increased in the century by 76·73l. per cent. Again, if a similar comparison were instituted between the onus of the taxes of 1700 and 1790, the latter will be found to exceed the former by 15·45l. per cent. only. The two last results will be explained in a note below,* where the importance

* Mr. *M'Arthur* states the revenue of 1700 at 3,769,300l. (p. 24) and its permanent and temporary amount jointly in 1800 at 36,728,000l. (p. 25). The former is the income from England alone, the latter contains that of Scotland, which must be separated from it when the increase of the burthen of England is enquired after. This is here taken at 1,833,330l. that of 1789 having been 1,100,000l. (Sinclair, part 3, p. 351,) and must be deducted—2dly, the former income tax is also included in the total at seven millions. By funding the capital it was pledged to pay, the revenue was very soon reduced by about 4,480,000l. and it is only the resting part of the charge which must enter the great total; and, 3dly, the point enquired after is, the ratio of increase of expence absolutely such; money raised for necessary public expenditure. From this great total, there-

of the subject has occasioned some further exemplifications to be given of the use of the tables.

fore, money raised for a beneficial and lucrative purchase ought to be excluded; it is a levy dissimilar in kind, and cannot be mixed with the former; the sinking fund comes under this description; and its amount in 1800 is taken at 5,270,000l. These three articles together form a subtrahend of 11,583,333l. and the levy upon England, for expenditure in 1800, is to be taken at 25,144,000l. Now the annual charge in 1800, equal in burthen to 3,769,000l. will be equal to that sum multiplied by 3·7743, or 14,233,000l.; which is to 25,144,000l. as 100l. to 176·73.

Again, the arithmetical mean of the factors in the third column of the second table, for 1800 and 1780, is 1·2228, an approximation to that of 1790; dividing 14,233,000l. by that mean, the charge in 1800, equal in burthen to the whole revenue in 1700, becomes 11,634,000l. In that year Mr. *M'Arthur* states the total revenue at 15,732,000l.; which, deducting as above, 1,100,000l. for that of Scotland, and 1,200,000l. for the sinking fund, is reduced to 13,432,000l.; the ratio of which to 11,634,000l. or the proportion of the burthen of 1790 to that of 1700, is the same as that of 115·45l. to 100l.

The consequences to be drawn from tables constructed as above are extremely extensive; by such means, we are enabled to decide, on demonstrative grounds, the much debated question of the sufficiency or insufficiency of the civil list. Its amount having been at the demise of George II. in 1760, 860,000l. it was voluntarily reduced by the present king on his accession, to 800,000l.; that is, it was determined by parliament, that the services and commodities

The reviewer indeed questions the propriety of Mr. *Wheatley's* inference as to the injustice

then to be procured by that sum were necessary for the support of the dignity of the throne, if England should not become more rich and populous. In the forty years elapsed to 1800, the money would have represented the services and commodities here taken on that great authority, as necessary to the proper maintenance of that dignity, would have exceeded the original sum 800,000l. in the ratio of 16432 to unity, or amounted to 1,314,560l.

To return, therefore, to political arithmetic: we may likewise from the table determine, whether the grant of 800,000l. for the civil list, at the accession in 1760, was not a profusion condemned by the laudable œconomy of our ancestors. It appears by the table, that an annual payment of 3·7151l. (=3·7743—0592) in 1760 was no more than equal in burthen to 1·9823l. in 1700; which measures are in the ratio of 1·8741 and unity respectively. In 1702, 700,000l. was voted to Queen Anne for the civil list: that sum, therefore, was in that year the same burthen as 1,311,870l. in 1760, when 800,000l. was settled on the present king for the same purposes. The queen, indeed, contributed 100,000l. a year to the war; but the sum she effectively received, 600,000l. was equal in burthen to 1,124,460l. at the accession.

In 1742, 100,000l. a year was settled by Parliament upon the Prince of Wales; if that sum was properly assigned, a sum exceeding it in the proportion of (2·5945l.—0·0612) 2·5333l. to unity, or 253.333l. is required at this present: the allowance to ambassadors follows the same rule. But the stipends of all offices paid by the state, the number of persons exer-

of depreciating the annuities of the fundholders, and as far as they are merely a speculative fund, we have seen little injustice occurs; but to us it is obvious that as rent and interest of money are designed for the support of all those who by merit, industry or inheritance have acquired a permanent income, the hardship upon all such persons is as severe and as justly deserving of remedy as the insufficiency of the royal income, or salary of the crown, which can be viewed in no other light than the permanent income of all the subjects. We have particularly noticed this point, because many are ready to acknowledge the depreciation of money when the charges of the state and the arrears of the civil list are in question, but absolutely deny it on every other occasion.

31. It should also be observed that in our opinion it is not the immediate pressure of the taxes which constitute the grievance, because we see that they are equalized by the depreciation or debasement of money. Indeed such taxes could not be raised without continual debasement, which affords the key to all the mysteries of

cising them increasing with that of the people, should increase only as the price of commodities, and are determinable by the first columns of the tables.

modern finance. But, on the contrary, it is the gradual yet rapid unceasing debasement of paper money, which occasions distress to all but the prosperous speculator in trade, allows of no refuge for exhausted industry, no tranquillity for philosophic retreat, and deprives all leisure and retirement of its wonted dignity. It is this which leaves industry no excitement from hope, while it gives to speculation all the spur of want, all the goadings of dire necessity, and deprives society of that class of quiet, calm, contented seceders from the bustle of active life, in whom alone reside all the learning, patriotism and philosophy, and the better part of the virtues of the age; a class without which corruption and luxury must soon become unbounded.

32. Its effect on the labouring class, we have seen, is of all things most cruel; for it gradually tends to drive them to absolute want, unless they can hereafter agree to receive their wages in a composition for corn as landlords will speedily do with respect to rent.

33. *Adam Smith* has truly said "labour is "the real measure of the exchangeable value "of all commodities, never varying in its own "value; it is alone the ultimate and real

" standard by which the value of all commo-
" dities can at all times and at all places be es-
" timated and compared. It is their real price:
" money is their nominal price only." (Book I. Chap. V.) Hence labour should be equally paid, and not deprived of its due support and just reward, and being duly paid, all things else in the state must be well regulated; for the labourers form the mass of the community, and deserve the peculiar guardianship of the profound statesman. Unless they are supported in comfort, slavery or rebellion, want or anarchy will necessarily follow, and how they have suffered during the last century may be seen by considering that about 1688, when paper money commenced, the quartern loaf was at fivepence, and the average wages of husbandry labour about six shillings a week; (see *Eden* on the *Poor*,) consequently the labourer received twenty-four such loaves weekly. In 1792 the same labour was nine shillings per week, the loaf seven pence, and the bread price of labour fifteen loaves per week; in 1812 labour is valued in money at about fifteen shillings, the quartern loaf one shilling and sixpence or more, and the real price of labour ten loaves a week. Landholders who have let long leases are equally injured, and the stockholder, or mortgagee, or curate, who with a pound sterling annuity

in 1688 could purchase eighty loaves, would receive in 1792 only thirty-four at sevenpence each, and now only thirteen at one shilling and sixpence each, and in thirteen years more will at the same rate of depreciation receive not one loaf for his pound sterling, as it is falsely called. It is therefore obvious that this must be redressed, and when we argue upon diminishing the pressure of public burthens by depreciation, we only expose the means by which war and taxation are supported.

34. Mr. *Young* estimates the fair wages of a day's labour at a peck of wheat, and says that in the long period which passed without complaint previous to the price of corn rising to excite clamour, the average price was 4s. per bushel, and the rate of wages 1s. a day: during which period poor rates were low and not granted to persons able to work. This proportion was a peck of wheat a day, and if the same were established at present all complaint would be radically removed. The same thing might be said of all other labourers; who should estimate their wages in corn and not in money, but be paid in money rated by the value of corn.

35. That landlords will do this cannot be doubted, and then it is obvious that whatsoever

may be the money price of commodities, the landholders, the traders, manufacturing workmen and the labourers will see the debts of the country, and the nominal wealth of every individual, in money, increase, without any cause of repining.

CHAP. II.

Of paying the Debt of the State: of Compound Interest, and Accumulation of Money by Sinking Funds.

1. When a debt exceeds the value of the whole disposable property of the debtor, it can only be liquidated by instalments or by a composition. Of these modes the former is the anticipation of hope on contingent gains, and the latter is the result of despair upon the accession of future means, and the consolation of saving a part from the wreck of insolvency. The debts of the state are, however, contracted in war, and the intervals of peace seldom afford time for their payment fairly, by instalments. Accordingly we shall perceive in the course of our inquiry, that they are ultimately discharged by some one or other of the various modes of composition, either under an avowed or concealed insolvency.

2. The whole property that the state can at any time command, or put to sale, cannot in money produce as much as the whole amount

of the money existing in the country; because the whole money in circulation must, at any given moment, measure the value of the whole stock of vendibles brought to market; and, unless the state can at once put every thing up to sale, and tempt all possessors of money to become buyers, to the amount of the whole stock, it can only command a part of the circulating medium. When, therefore, its debts exceed the stock of the circulating medium, it is impossible to liquidate them otherwise than by instalments, or immediate and positive bankruptcy.

3. In the year 1786 the debt of the state in GreatBritain amounted to 237,213,043l. or more than ten times the amount of all the money then existing in the country, and it was absolutely impossible to have paid the debt, had it instantly brought to the hammer and sold all the land, houses and commodities in the three kingdoms; for these could not have produced, for prompt payment, one tenth part of the debt, and consequently the state could by no possibility have paid more than two shillings in the pound.

4. By compound interest it has been said by Dr. *Price* and others, however, that a penny

laid out at interest, will in 1810 years amount to as much money as would be coined from 381,860,000 times the weight or magnitude of the whole terraqueous globe or the earth in solid bullion, if the interest were accumulated yearly; or to 1,121,470,000 such globes if accumulated half yearly, or to1,905,680,000, such globes if accumulated quarterly. But this is a plain absurdity, for interest is the produce of the use of money, which cannot produce any thing except by the means of labour; and when money has measured the whole existing stock of the nation, its increase can only diminish the value of each individual piece. Wherefore, when a penny by interest has accumulated till the lender is intitled to the whole of the current coin, he can accumulate no more wealth in money, and cannot purchase even one whole year's produce of England with his gold. It is further palpably absurd, because of the impossibility of coining the whole of our globe, much more 200 millions of such globes as the earth into money. When coined also the guineas would be mere gold counters, worth no more than 20,000,000 of guineas, which were once supposed to be circulating in England, A. D. 1774; unless upon a supposition that they might be exchanged and pass current from the planet *Mercury* to

the planet *Herschell*, and so on through all the regions of the solar system. For it is demonstrable that every doubling of the circulating medium is the reduction of it to one half of its value, unless population and production are reduced also.

5. Yet upon this basis of absurdity, has been raised the scheme of a sinking fund to pay the national debt of England, which in 1811 carries an interest of 30,500,678l.0s.9d. and which if all were real sterling money would be more than 801,386,735 guineas, or 17,808,816lbs. weight of solid gold, and at 5l. per ounce, or 60l. per pound troy, a price which it will soon reach, would be worth in notes about 1,072,148,890l. To comprehend the amount of this debt more fully we may adopt a somewhat ludicrous calculation for the year 1810, wherein it is stated, that the national debt funded and unfunded on the 5th of January, 1810, was 811,898,081l. which are equal to 773,236,267 guineas, which, at 5 dwts. 8 grs. each guinea, weigh 6312 tons, 11 cwt. 3 qrs. 5 lbs. 1 oz. 6 drs. nearly, averdupois. Now, supposing a waggon and five horses to extend in length 20 yards, and to carry 2½ tons of these guineas, the number of teams necessary to carry the whole, would extend in length 28 miles 23 yards nearly. To count the debt in shillings,

at the rate of 30 shillings in a minute, for ten hours a day, and six days in a week, would take 2469 years, 306 days, 17 hours, 30 minutes nearly. Its height in guineas, supposing 20 guineas in thickness an inch, would be 610 miles, 339 yards, 9 inches; and supposing each guinea an inch in diameter, they would extend in a right line 12,203 miles, 150 yards, 7 inches. Moreover, these guineas would cover 348 acres, 2 roods, 202 yards, nearly. And lastly, in shillings, each an inch in diameter, they would cover 7319 acres, 1 rood, 349 yards!

6. By several acts of parliament passed in the years 1786, 1792, and 1802, first an annual sum of 1,000,000l. next a further sum of 200,000l. and lastly a sum of one pound in every hundred, upon each loan raised by parliament, are directed annually to be applied in the purchase of stock and annuities; "the interest whereof" in the words of the acts of parliament, "shall accumulate and be applied "in like manner; so as that the whole "of the several redeemable public annuities, "charged upon the public funds of Great "Britain, shall be paid off within 45 years "from the respective periods of the creation "of such respective charges and public an-

"nuities." And accordingly it is certain, that, by the process described in these acts of parliament, each successive charge upon the public funds will be liquidated, according to the strict letter of the agreement with the public creditors.

7. It is also equally certain, that by the effect of credit notes not convertible into coin, notes might be created nominally to represent the coin contained in 300 millions of solid globes of gold, each equal to the terraqueous globe of the earth which we inhabit, or the whole solar system. The actual worth of these notes, in exchange might not, however, be one thousand pounds; and if it were possible to coin the whole weight of the solar system into guineas, and pay them in one day on the Royal Exchange, they could scarcely value in exchange, on any true principles of the science of money, one half of the real and personal property in the city of London. For it is not probable that so great a portion of that property could be brought to market in one day, and the greater the quantity of money in circulation, the less is the value of each individual piece; a fact which after what we have already said, it is not necessary now to explain.

8. It is equally certain, therefore, that to the framers of this plan the science of money was unknown, or the nature of money and circulation price and value kept wholly out of view. They attended only to the science of figures, and overlooked the probable effects upon all property resulting from a circulation increased so enormously, as, upon the supposition of the payment of the debt by such means, the circulation of English currency must necessarily become.

9. If by the operation of a sinking fund money could be withdrawn from circulation for a time, advanced at interest in foreign countries, and then returned in large portions, for the payment of the debt, the most ruinous consequences must ensue, by the certain and violent depreciation of money; and the greater the resemblance of the actual operation of the sinking fund to this process, the more mischievous is its tendency. So that, if any sum were so applied till the whole debt were paid in one day, all monied men who should not receive a due proportion of it, would be ruined.

10. Hence it will appear to every attentive reader of this work, that, although by the gradual accumulation of money at compound interest, and laying out the annual pro-

ceeds in land, and the future rents also, the private avarice of any individual might be gratified to an extent bounded only by the limits of purchase and of terrestrial acquisition; yet the accumulation of actual money, or its representatives, is an unreal vision of positive delusion and unexampled absurdity. That the state might accumulate, as a private individual would accumulate, is plain, but equally absurd; because the gradual purchase of the land, its produce, and all other commodities by the state, is the purchase by all the individuals cumulatively taken of all their own property, and would be giving to the state nothing more than it possessed previously, namely, the command of all its own property and possessions.

CHAP. III.

Of the true Operation of a Sinking Fund.

1. MONEY raised by taxation is taken in some instances from the surplus income of the people, but, through the inequality of taxes bearing on the necessaries of life, it is more frequently withdrawn from the necessaries of the multitude; and, in all cases where it bears upon persons of fixed income, it must necessarily diminish their efficient expenditure. They have naturally no money either to spare, or to lend, and by the continual progress of taxation, however cautious in their expenditure, will ultimately be deprived of all surplus, and must sink in society.

2. Persons in trade, on the contrary, alway indemnify themselves for and often receive a profi upon, taxes on consumable commodities. Thei capital is however diminished. But this in a state of credit, where mere credit notes supply the place of money, is easily replaced by the

discounting of bills either for accommodation or upon real transactions.

3. All money raised by taxation is forcibly withdrawn from expenditure, and if accumulated for any time, to be applied at interest, is diverted from its ordinary channel to a new one of a very different kind. And by taxation for the purpose of the sinking fund, money is taken from persons who have none to spare, and for a time accumulated.

4. The sinking fund, being established in peace, a sum of one million was annually diverted from expenditure, and thrown into the stock market, where its first operation was to increase the capital of the stock jobbers, and the price of stocks. By increasing the stock market also it created a greater capital disposable on loans or in speculations. The interest of money accordingly fell; country banks were formed, speculations in cotton and other articles took place; credit and the circulation of bills increased, many failures ensued, and canal and other speculations were set on foot, although the produce at that time, A. D. 1794, was not more than 1,630,615l.

5. At the commencement of the war against the French nation, or the anti-revolution war, this new capital was diverted into the channel of stock exchange and loan dealings, and finally distributed itself by means of the state expenditure, through the general circulation. Thus, although the fund was continually increased, the channel for its employment was increased also; and now by progressive additions and accumulations the sinking fund produces, A. D. 1812, 14,337,834l. and in 1826, will by the calculation of Lord *Castlereagh* amount to 27,115,881l. This calculation being made in 1806 gives no allowance, however, for the increase of the fund, in consequence of additions to it by subsequent loans, and in the first or second year of peace, should it take place between 1812 and 1826, a sum between 14 and 30 millions and upwards, probably 20,000,000l. or 25,000,000l. will be diverted from the ordinary channels of expence to new ones, and this will be repeated annually, and will be annually increasing.

6. The ordinary expence at present, is the expenditure of the state in war: and the new application will be chiefly on loans to private persons, or by novel employments of capital, in trade, or in canal and dock speculation. Competition will then be afforded by the raising of new country banks, or by the agency of

brokers, through whose means discounts will be effected, sometimes in preference to the bank of England and at lower interest.

7. The expenditure of government ceasing, and capital requiring new channels for employment, prices will then rapidly increase; because, in seeking a new channel of expenditure, money must always force itself by out-bidding the present market price. The government expenditure being withdrawn, it might be supposed that the loss of so extensive a dealer in the market would have a great effect in depressing the value of commodities; but as its expences consist in articles used in war, and not in peace, the withdrawing of such a competition will most materially affect only the shipping interest, and such articles as are used in war, which are, however, somewhat numerous. It will, therefore, be obvious, that notwithstanding the reduction which may happen upon some commodities, prices in general will necessarily be raised in the capital, and by consequence also must shortly afterwards rise in the country.

8. By the operation of the sinking fund, in

peace, a competition for discounts will be instituted against the bank of England, with a large increase of capital, and either the bank discounts will be reduced greatly, or those, as well as private discounts, extended. In the former case, the profits of the company and value of bank stock will be greatly reduced; and in the latter, by increasing such discounts, through competition, money will be greatly increased, and prices raised very rapidly. Hence it will appear, that the necessary effect of an accumulated or sinking fund, operating in peace is to depreciate money, and diminish the value of all government annuities, rents, pensions, salaries, stipends, and wages enormously. Whereas the real effect of a sinking fund in war appears rather to consist in the raising of money involuntarily, from one part of the community, to be applied in the aid of stock-jobbing speculations; whereby it raises the price of funded securities.

9. To endeavour to explain this so far as is consistent with our limited knowledge of the secrets of the stock market, we must observe that the commissioners of the sinking fund lay out weekly 250,000l. in the buying of stock, which is purchased of jobbers at 2s. 6d. advance on the market price per cent, and affords them a

profit of about 5 shillings per cent., as they always purchase of the real stockholders at 2s. 6d. below the market price.

10. By means of loans and omnium, the instalments of which are frequently paid by the bank and omnium held over, a stock of the last year's loan is generally kept back; and with the money so received, and the profits so made, the jobbers redeem their omnium and have more new stock to sell at an advance of 2s. 6d. on the market price. We have not been able to institute such inquiries as we should deem necessary to explain thoroughly the arcana of this traffic, and should wish to be furnished hereafter with a knowledge of the nature of these dealings from some practical man, and particularly of the amount of a day's sale, and the number of persons commonly concerned, as well in the sales of the loan dealers as in the sales to the commissioners; but it appears probable that the amount of the capital employed does not by any means equal the week's expenditure by the commissioners of the sinking fund.

11. The effect of a sinking fund in war, therefore, appears to be simply that of a sort of forced loan to government, by the aid of which,

the debt of the state is greatly increased beyond the possibility of payment. And in peace the effect of it is, in some degree, that of a forced loan to commercial and agricultural speculators and others. That is to say, it forces money into the channel of the circulation amongst bankers, brokers, and jobbers; through whose hands it must, in peace be generally dispersed. Both in peace and war, however, some correctives are found to these effects, by withdrawing somewhat from the national fund of circulation for that money which would ordinarily be employed in loans to private persons, if the taxes had not withdrawn it from the hands of private individuals. But on the whole this effect is increased, and more money diverted to these purposes than would naturally be employed.

12. The precise effects of a sinking fund of 27,000,000l. and upwards, in 1826, annually increasing cannot be ascertained by any arguments from experience: but some approximation may be afforded by considering the effects of 1,000,000l. in 1793, compared with the supposed value of the whole currency, and thus ascertaining its proportion to currency. If, therefore, the currency were at that time 27

millions, the proportion of the sinking fund to the total of the currency was one-twenty-seventh, and the proportion of the sinking fund in 1826 to the circulating currency, should be estimated at not less than one-twentieth, which will make the whole currency in 1826 amount to 540,000,000l. increasing annually. Should it only bear a proportion of one-twentieth, the currency will be 270,000,000l. or if one-fifth, it will be 135,000,000l.

13. This view of the subject is, we believe, entirely novel; but we are afraid it is not the less accurate for being hitherto undeveloped. When the Earl of *Lauderdale* published his View of National Wealth, and announced to the world the inconveniences that must arise from throwing into circulation large masses of money annually accumulated, it was answered by many, as it was deemed satisfactorily, that his lordship had overlooked the material fact that the money was already in circulation; that it was not newly created but actually existed, and thus there could be no inconvenience arise.

14. Now this answer appears fallacious; for, owing to the circumstance of the war having commenced in the infancy of the

operation of the sinking fund, its effects have not been perceptible; because it has not had its full and fair play, the money which it discharges upon the public being immediately absorbed by new loans. But, during a peace, this must be felt; and though we should admit that the money must actually exist in circulation before it can be applied by the commissioners who manage the sinking fund, yet, if we pay attention to the nature of circulation, we must see that it is only a portion of the whole circulating medium that can be so applied: and that, whatever be the amount of the annual savings of the sinking fund, it can only amount to a portion of the currency. Before, therefore, the sinking fund can be made to produce a given sum, the total currency must be relatively increased.

15. It is not indeed possible, that the circulating medium could have increased, with a proportionate rapidity, while the currency consisted of gold; but any assignable sum may be created in bank notes; and it is probable that without this aid it must have stopped long ago. But if, as is almost certain, the currency must increase as the sinking fund increases, there recurs upon us all the disadvantage of increased but depreciated currency.

For it is absolutely certain that if the process of compound interest could by repeated accumulations augment the currency, as it should appear to do in books of arithmetic, by a series of geometrical progressions, doubling every fourteen years or less; then, in the same manner, would the natural operation and effect of money and prices reduce it in value in a subduplicate proportion during the same period. Thus at the end of a million of years, although the number of pieces would be increased almost beyond calculation, their value would be decreased in an equal ratio, and real wealth compared with price and value remain just as at the beginning. To exemplify this, by the present case, supposing the currency in *England* is 50,000,000l. and by the operation of the sinking fund it is increased to 150,000,000l., as we see is more than probable in 1826, prices must then have risen two-thirds, or be in the proportion nearly of three to one, and the value of a 3l. per cent annuity will be only equal to one pound in the currency of 1811. But in the progress to this state, as at the period when assignats were current in France, the greatest inconveniences must be felt.

16. To ascertain the progress of currency,

and the effect of taxes during its increase, it is necessary to possess several elements of calculation which are yet unknown; amongst which one of the most necessary is the total amount of currency in each year from 1786; for which we are left to conjecture, from not knowing the amount of country bank notes. These elements might be obtained, in future, by imposing an increased stamp duty of 1d. or 2d. in the pound on every promissory note payable on demand, and requiring them to be renewed annually, without increased expence for three years. The stamp office would then ascertain the amount of paper currency in England; and financial operations be greatly facilitated. To further this plan, a bank of deposit should be opened as at Hamburgh, by which the amount of real money would be ascertained.

17. By the income tax, population returns, excise and customs, and reports of the bank directors, and by corn returns and agricultural surveys, indeed, many elements are discovered for calculations in political economy, which were unknown to Dr. *Adam Smith*, and other philosophers of the eighteenth century. And we are in this respect placed on an eminence from which we may carry our views probably to a

greater extent, though we may want the mental sagacityand natural acuteness of political vision which he possessed. Thus the income tax affords a true *cadastre* or valuation of all the land in England equal to that proposed in France; but, at the same time, the value of commercial property and income is by the same means very imperfectly ascertained.

18. It is foreign to our immediate views to enter into these investigations at present, but the opportunities which are afforded to the parliament of making enquiries through the tax office returns, and reports of committees which might be established for the ascertaining of financial facts, would be gratifying to an inquisitive speculator, and would shortly place the science of political economy on the basis of absolute certainty. Private philosophy can only meditate in this science upon possibility, but public power can institute experiments to develope facts and bring to light invaluable truths. Every discussion of a financial question in parliament is useful, not merely for the speculations of the leading characters whose judgment is mainly perverted by party spirit,but for the remarkable facts and last ing truths, not to say damning exposures which

it elicits and throws into strong light. Ere many years have elapsed, the science of political economy will in this manner be perfected, and the art of government rendered manifest to all capacities.

CHAP. IV.

On the Restoration of Coin, during the Continuance of a large Debt and Sinking Fund.

1. We have seen already the difficulty of restoring coin when once it is entirely banished from the circulation; and this difficulty becomes greater by the introduction of two prices. which it is almost impossible, during that time, to prevent.

2. When, in fact, two prices are once introduced, the paper becomes more and more depreciated; and its value can only be supported by diminishing its quantity, and a strict attention to foreign exchanges. The introduction of coin is, therefore, necessarily attended with a diminution of currency, and increase of its exchangeable value; so that annuities on government security can no longer be paid in the same coin, without greatly changing the pressure of the taxation. But every alteration in the settled mode of taxation, and its existing equipoise and relative pressure, is burthensome and dangerous to the state.

3. When the revenue and expenditure of the state has attained a fixed point, the quantity of currency existing is necessary to that expenditure. For, as currency equals demand, and state expenditure, or the levying of taxes, is a principal part of the demand, it cannot safely be diminished. Nor is it possible to diminish a currency and introduce coin, without diminishing state expenditure. Because, state expenditure increases the demand beyond that of other countries, which has expelled the coin by raising foreign exchanges and home prices. Until the expenditure decreases, therefore, it is impossible to restrain the outgoing of coin, or to procure its return when expelled. Wherefore, in order to restore coin after a high state of national debt and expenditure, these must be destroyed or reduced.

4. The evil of a national debt is its tendency to depreciate money, and the impossibility of justly satisfying the creditor of the state, arising out of the continual increase of money. But, if the money be reduced, and

the demand also reduced relatively, no material change is effected; and this would happen if the debt were reduced relatively to the coin, currency, and taxation. But if the debt were destroyed entirely without compensation, a great injustice must be committed by the state, and where the debt is large in proportion to the exchangeable value of land and commodities, a great part of the people would be absolutely ruined.

5. Now the sudden ruin of a great part of the people of property, and the reducing them to absolute poverty, occasions a thorough convulsion of the state. And if this ruin extended to one-fourth only of the people of property, the state of society would be broken up, to be reformed from its elements, the most dreadful anarchy be produced, and till the new settlement of property, and a fixed government, civil wars the most sanguinary and violent would most probably arise.

6. For all violent changes in the state or the relative condition of the people are essentially revolutions. And the change of the relative condition of the owners of 20 millions

of property out of 110,000,000l. which is the proportion of the funded annuities to the whole income, on which the property tax is raised, would, by reducing one-fifth of the people of property to ruin, occasion in Great Britain a revolution of the most horrible kind. At the same time the inability of a government to perform its obligations, and pay its creditors brings it into contempt, and leads to revolution, which sooner or later, ensues from the increasing debility of the state.

7. The actual distribution of wealth in any state is the distribution of the land in unequal shares, and the unequal possession of goods and money, the latter of which in part, is raised in taxes and distributed by the state in payment of its creditors and its servants, or the governors and their agents, with the military. But it has frequently occurred in ancient states, and in new conquests, that a new division of property is made to suit existing circumstances. Thus among the Jews, every fiftieth year during the year of jubilee, it is said, that all lands which had been alienated during the interval returned to their former possessors.

8. Now supposing that by increasing burthens, taxes raised for payment of a debt became intolerable, and the necessity of introducing coin is added to the evil, and coin cannot be introduced without destroying the taxes raised for payment of interest, it is plain, that without a new distribution of property, the state annuitants must be wholly ruined, and revolutionary convulsions ensue. To remedy this evil, therefore, a new division of property becomes necessary: when taxes being destroyed, land, commodities, and all produce will become more valuable relatively.

9. But the creditors of the state have a claim to part of the taxes, and taxes being imposed upon commodities, land and its produce, they have a claim to be indemnified from all these, when the taxes are no longer paid. And as the reduction of taxes by removing the claim of the annuitants, increases the value of land, its produce, and all other commodities in exchange, in a given proportion, the annuitants have an equitable and just claim to be indemnified by the distribution of the land and commodities, according to this exact proportion.

10. The details of a new division of property in any state, cannot be given in a theoretical treatise upon science; they must be discovered in the existing circumstances of the state, and must be regulated with great discretion, and above all with equity, moderation and justice; which will best be attained by allowing assessments to be made, impartially by juries, and by various compositions between parties having specific claims.

11. Supposing the taxable income of the people, estimated in the existing currency at 110,000,000l. and the claim of the annuitants at 20,000,000l. the claim of the annuitants is as one-fifth nearly, or 20 per cent. and may be so estimated in any given value, in coin of any denomination. The division of one-fifth of the land is then easily made, and the portion required may be conveyed to the same uses as the stock, either in the hands of trustees in every parish, or specifically by proper assessments by means of commissioners, as in the division of common lands newly enclosed.

12. The raising of commodities, in specie, might be more difficult, but great facilities are afforded by the system of the excise and customs. Coffee, cotton, corn, coals, beer, flour, flax, hemp, iron, wine, spirits, and other commodities in

the gross, would be easily distributable and might be bonded in government warehouses, and the real produce only applied, in discharge of such claims, providing by the purchase of lands for all annuities in settlement.

13. Upon a new distribution of property, as settled above, it would be easy to call in all bills or credit notes, and to make an issue of a new coin, exactly adapted to the emergency; which, by a due admixture of a proportion of paper might be rendered nearly equivalent to the currency of other neighbouring states; and, being issued on discounts, might easily be reduced gradually, to adapt itself to the state of foreign exchanges. But assessments of damage on all previous special contracts would be necessary, and every special contract must thereby be reduced to a sort of meritorious claim of uncertain damage, which in our law is called *quantum meruit*, when the claim is for labour, and *quantum valebant*, when it is for goods, at an uncertain price or meritorious value. The difficulty of thus arranging the private debts of the people is very great, but without a proper arrangement the greatest injustice must ensue.

14. Sudden changes of property leading to revolution, it may be said that an Agrarian

and proprietary law is a revolution; but, though it is a change which would produce revolution, in a state declining or debilitated, yet when made by the authority of the state, possessing its full vigour, it is plain the authority of the state must remain in all its force; and will be increased rather than diminished. For the relative state of property is by that means not disturbed, but the state is relieved from a cumbrous burthen.* Thus the incumbrance of debt being removed, and a real currency restored without confusion, the real wealth and power of the state remain unimpaired, and new and better modes of levying imposts may be adopted.

* Figurative language being the bane of all science, it may be referred to a note to illustrate these principles, by observing that a revolution is like the fall of a venerable pile, by dilapidation and decay, when the whole becomes a heap of ruin and confusion; but by taking down the parts carefully, the building may be rectified without injury. It is in this way that revolutions can alone be prevented; they always happen of necessity, arising out of long neglect, or unavoidable changes in the state of society.

CHAP. V.

Of the Burthen of Taxes, and of a Tax on Capital.

1. Taxes are the means by which all the funds for the expenditure of the state are raised, and these are applied either in the ordinary support of the persons employed in its service, or in some extraordinary expenditure on occasions of war and otherwise. The real effect of taxation is to appropriate a certain portion of all the labour of the nation, which alone is ultimately productive of wealth, to the support of those persons who are combined for the purpose of the government of the state.

2. Taxes ultimately resting in this appropriation of labour, can in reality bear only upon the annual production and revenue of the people, and cannot, without the most destructive and unjust violations of private property, be made to bear on capital. We have considered labour as the only source of wealth, nationally considered, though an individual may possess wealth invested in houses, goods,

money, or lands, which have all been acquired by labour originally, and by lending or employing these may be said to use his capital advantageously for the purpose of the new production of wealth. Labour and skill are alone the real sources of wealth; but it has been made a question what part of the national wealth ultimately bears the burthen of taxation. *Locke* is of opinion, that all taxes are paid by the land, and there is reason to think that, in a great measure, the proprietors of the land suffer the most by the heavy burthens of taxation, because indeed they are most capable of supporting the burthen.

3. The taxing of land raises the price of all its productions, as the taxing of commodities raises their price. Hence every man's income in money remaining the same, every tax must diminish the general consumption of the article taxed, and reduce the effective wealth of each individual. But by the increase of currency and prices, and the improvements of skill in the productive effect of labour, this is in a great measure counteracted, and while the taxes are moderate a general equalization of the burthen is produced, and the people suffer little by taxes; except indeed the

poorest individuals whose present income is barely sufficient for support of life, and who by the smallest deprivations must be driven from existence.

4. By taxing the annual rent of land, the produce of land is increased in price annually, and the burthen distributed equally, not amongst the land owners merely, but amongst all the consumers of the produce of land. And by taxing commodities generally, the burthen is also distributed amongst the consumers of those commodities; so that in the ordinary process of taxation it bears entirely upon the annual production and consumption of commodities. Taxes are therefore ordinarily considered as raised upon the revenue or yearly income of the people.

5. In some particular emergencies, when the amount of the taxes upon revenue are deemed insufficient for the support of the state, it has been proposed to augment them by a tax on capital. This, wherever it occurs, is the wildest vision of political ignorance that despotism and folly can invent; and we shall shortly demonstrate that it means nothing more than to raise the amount of the taxes beyond the endurance of a patient and degraded

people, and that when it is attempted to be carried into effect by a tax levied in money, it ends only in the ruin of all landed proprietors, and the disappointment of the financial visionary by whom it is attempted.

6. When a tax is laid upon any commodity, it bears upon the whole existing stock; and is paid amongst the consumers, whatever be the monied amount of the tax: and as commodities which are consumable are never existing in the country beyond the natural consumption of the year, that is, beyond the quantity which will be sold to consumers within the year; a tax on commodities is necessarily a tax on the mere revenue of consumers; and can never be made a tax on capital.

7. Such a tax can only be levied by raising an assessment upon the supposed money capital of the people, and the landed proprietors. Now when this comes to be paid, if all persons were obliged to pay one-tenth of their capital in land, or money, or in land estimated in money, the most mischievous and ruinous effects must ensue; for the whole stock of money in circulation is just as much as is necessary to carry into effect the sales of the ordinary saleable stock of lands and commodities in the usual

transactions of one or two of the days in which the sales are the most frequent. Any increase of these sales must render a greater stock of money requisite, or must reduce the prices. In the one case the effective quality of the money is not increased; in the other the owner of the commodity is greatly injured in the reduction of its price.

8. Now the capital of every individual in a nation is vested in a small stock of cash, but principally in machinery, commodities, lands, and houses, or debts; amongst which may be numbered the national debt in particular. To pay a tax upon capital, therefore, as no one would have enough in ready money, a corresponding quantity of the actual capital must be brought to market throughout the nation, and as this would create an extraordinary demand for money, the existing currency would not be enabled to meet it, so as to keep the stock at the ordinary prices. The price of every thing must fall, or currency be increased instantly. Either, therefore, the people must sell a much greater portion of their real capital, to raise the assessment on their estimated money capital, or the nation must abate of its demand, and the tax become unproductive.

9. Suppose, for instance, the capital of the nation be estimated at 20 years' value of the income on which a tax is now paid, and which is probably not one half of the income of the whole population; it will then amount to 2,200,000,000l.: a tax of 10l. per cent. on this will be 220,000,000l. which if raised and paid by a quarterly assessment, would require a sum of 50,000,000l. to be paid into the exchequer quarterly.* This would exhaust all the cur-

* It is not, however, necessary, upon every increase of taxes or expenditure, that an equal addition should be made to the currency, to support it. In general a small sum will suffice, by the contrivances of circulation, to liquidate a very large one. But in whatever respect by increase of taxes or prices, the demand for money is increased, there must be an increase of the currency; which, however small it may be in fact, has an equal effect upon the demand or scarcity of money, as if the currency were actually increased, by the whole amount of the tax, or augment of prices. In like manner the addition of one million to the stock of currency would operate very sensibly in increasing the effect of the circulation. For supposing the previous currency to be 50 millions, it would allow all prices to be augmented by one-fiftieth part, or more; that is, it would raise all commodities 2l. per cent. in nominal value. Whatever be the amount of the payments in the year throughout the nation, the currency multiplied by the circulation must equal it; and thus the great effect of a small augment or decrease of currency must be readily perceptible. Hence the effect of an increase of one or two millions annually in the amount of bank notes,

rency existing in the nation, and either that currency must be rapidly increased and depreciated, or the tax could not be raised. It is easy to be perceived that such a tax would not be paid. The land owner would sell every tenth acre at a very low price in money, and tender the amount in payment of the tax; or suffer it to be seized by the collectors. The government would be disappointed, but the money brokers, bankers, and jobbers, would amass wealth rapidly, as in the French revolution.

10. Such are the limits which nature affixes to the rapacity of state theorists, and such is the ignorance of those who, regardless of the effect of currency and circulation, must ever remain unacquainted with the true science of money and finance.

11. A tax on capital, raised in money upon any

which produce a large increase of country notes, and greatly augments the currency, must have a very considerable and very sensible effect upon the prices of all necessaries. The present low price of many commodities, is owing to the failure of foreign trade, and the ruined state of manufactures, which compel every one to sell his commodities even at a loss. A few years will prove the injuries of our commerce, by the war, to the most careless and ignorant of our statesmen.

given assessment, it is certain, would produce nothing but ruin to the state, and destruction to its proposer. Such ignorance and such folly produced most of the miseries of the French revolution, when loans were raised upon the estimated value of the national domains, which were brought hastily to market, and either fell rapidly in price, or were paid for in depreciated paper.

12. In any other country where a revolution is not already commenced, let but a tax on capital to be paid in money be enforced, and the hour of revolution or of ruin is fixed. If a tax on capital can be raised, it must be levied in commodities and land, to be transferred to the state creditors, in some manner similar to that mentioned in the last chapter.

CHAP. VI.

Of raising the Supplies of the State within the Year.—Conclusion.

1. WHATEVER be the means of raising the supply, as it is called, the actual burthen of the state is provided annually.

2. For, the waste and consumption of war and other expenditure are the true supply afforded to the state. The taxes raised and debt created are merely indirect modes of distributing the burthen; which may be supplied by better and more equitable modes of original taxation.

3. All the intricacies in which our previous inquiry has been involved to detect the operation of paper money, debt and permanent taxation, arise out of the successful endeavours which the active and commercial inhabitants make to transfer the burthen upon others less active. And the real capacity of the state to incur new burthens, is only derived from the general

equipoise of the taxes produced by time and the different exchanges of property.

4. Hence, by a due distribution of the means and power of the state, its natural energy might be kept in constant and equal exertion, either for necessary defence or successful aggression. Instead of which war is now a state of violent exertion, succeeded by the repose of peace, which is seldom permitted to endure long enough to restore the exhaustion of war.

5. How practical the raising of supplies annually is, in reality, may be proved by the usage of ancient states; and, by the facility with which large burthens are now actually levied, which, were it not for the incumbrance of a national debt would supply the annual expenditure.

6. For this purpose it seems necessary to adopt only an equal land* and house tax, a

* A land tax is easily assessed by tything or annual imposition. The most equitable house tax would be imposed, not by the absurd estimate of the light and air admitted; but by a valuation derived from the actual rent, and the number and cubic contents of the rooms compounded together. For a

property tax, and a proportional duty or tonnage on the conveyance of all commodities by land and water, by the mile inland, with allowance of certain drawbacks on exportation. Importation of the produce of land should in that case be prohibited except at a duty of one-fifth or one-tenth of the value; by which means agriculture would be sufficiently protected and encouraged. But these considerations would lead to inquiries which would extend our work almost without limit.

7. Notwithstanding, therefore, that the subject would properly conduct us to many inquiries into the natural and appropriate limits of state expenditure, in which it would be necessary to consider the character of hostile operations and warlike combinations, as far as they are affected by pecuniary circumstances; yet we must here conclude, contenting ourselves with drawing the inference which must now be obvious, that states can never incur debts without affecting very considerably the money system of the country. Let us add, that when they pay their creditors according

perfect view of all the objects of taxation, see the useful and laborious work of Sir *J. Sinclair* on Revenue.

to any of the processes hitherto adopted, whether by alterations in the coin or by paper money and accumulated sinking funds, they, in fact, practice a delusion, and commit a cruel injustice towards a great part of the community. Whereas, if they regard the land and property of the state as their own, which it really must be, and make a fair division, there is always an adequate fund to discharge any debt, however nominally large, without injury to any individual, and without producing comparatively the smallest disorder.

8. In this view, it would be easy to shew, that all the financial operations of the French previous to and during the revolution, from which most of its calamities were derived, as well as the sinking fund of *Great Britain*, were the result of radical error, and a complete ignorance of the science of money; and that with a true knowledge of it there is no difficulty of financial embarrassment, which a wise and bold minister should encounter with dismay, which a strong and prudent government cannot survive, and from which a virtuous nation will not rise with augmented energy and increasing glory.

APPENDIX.

ART. I.

Estimate of the effective Debasement of Money in the Eighteenth Century.

Sir *Geo. Shuckburgh Evelyn* has calculated the depreciation of money from the mean result of the prices of several of the most necessary commodities; and accordingly it appears that in the year 1700, the value of one pound might be expressed by an assumed number 238; that is to say, 238 pounds would then purchase a given quantity of such commodities; but in ten years after, 247 pounds were required to purchase the same commodities.

Therefore, one pound at each of these times, was in the proportion of 238 to 247 inversely; or as 247 is to 238, so is one pound, in 1700, to a fourth proportional; which will be a fraction of the pound in 1700, and equal in the power of purchasing commodities, in that year, to the pound or money unit of 1710. By this means we shall find, taking the value of a pound in 1700 for the standard, what was the comparative value of a pound in any subsequent year, according to the proportions in Sir *George Shuckburgh Evelyn's* table. This may conveniently be stated in the following form, placing the value of

1700 as the numerator, and the depreciating number in each successive ten years, as the denominator of a fraction, which will give the value of a pound for each of these years, in the actual pound of 1700. In other words it will express what we have called the successive debasements of the money unit in England. Then by dividing these fractions and reducing them to decimals, we have the value in decimals of a pound sterling, for each year, as follows:

A.D.				£.	s.	d.
1700	$\frac{238}{238}$	= 1.0000	=	1	0	0
1710	$\frac{238}{247}$	= 0.9635	=	0	19	3¼
1720	$\frac{238}{257}$	= 0.9260	=	0	18	6¼
1730	$\frac{238}{267}$	= 0.8913	=	0	17	9¼
1740	$\frac{238}{272}$	= 0.8750	=	0	17	6
1740	$\frac{238}{287}$	= 0.8311	=	0	16	7¼
1750	$\frac{238}{314}$	= 0.7579	=	0	15	1¼
1760	$\frac{238}{342}$	= 0.6800	=	0	13	7
1770	$\frac{238}{384}$	= 0.6197	=	0	12	4¼
1775	$\frac{238}{414}$	= 0.5748	=	0	11	5¼
1780	$\frac{238}{427}$	= 0.5574	=	0	11	1¼
1790	$\frac{238}{496}$	= 0.4798	=	0	9	7
1800	$\frac{238}{502}$	= 0.4234	=	0	8	5½
1806	$\frac{238}{630}$	= 0.3777	=	0	7	6½

In like manner Mr. *Arthur Young*, in his Enquiry into the Progressive Value of Money in England, as marked by the price of agricultural products; gives twenty-one different items, by which he also estimates the value of money in separate proportions of one in twenty, making corn the principal.

In order to obtain an average from the whole of

these articles we have added each line together, and multiplied it by four, to clear it from the fractions or quarters; which gives the several proportions of the depreciation of money as under, and shews how many pounds at one given time are necessary to purchase a like quantity of these commodities. By a similar proportion as before, we have endeavoured to give the real value of a pound at any specified time during the 18th century, making the value of a pound in the year 1700, the unit or standard, and considering the successive depreciations as equivalent to debasements. The result is as follows:

TABLE of the debasements of a pound in the course of the eighteenth century, as derived from the table of proportions in twenty by Mr. *Arthur Young*.

A.D.				£.	s.	d.
1700	$\frac{388}{388}$	= ——	=	1	0	0
1766	$\frac{388}{438}$	= 0.8858	=	0	17	8½
1789	$\frac{388}{835}$	= 0.4646	=	0	9	3½
1800	$\frac{388}{844}$	= 0.4597	=	0	9	2½
1803	$\frac{388}{1447}$	= 0.03382	=	0	0	8
1810	$\frac{388}{1640}$	= 0.02309	=	0	0	5½

This, as it affords a result in the depreciation since 1800 much greater than Sir *Geo. Shuckburgh Evelyn's* table, is certainly very opposite to the purpose for which it was designed; but as it corresponds so nearly in the depreciation for 1800, it affords a strong confirmation of the accuracy of the former table.

Mr. *Arthur Young's* tables give in addition the

depreciation as derived from his statement of the prices of grain calculated in proportions of one in twenty; which also form a part of the last table. These proportions being likewise multiplied by four, to clear them of fractions or quarters give the proportions corresponding to those in the last table as follows:

A.D.				£.	s.	d.
1700	$\frac{37}{37}$	=	——	= 1	0	0
1766	$\frac{37}{31}$	=	nearly	= 1	4	0
1789	$\frac{37}{44}$	=	0.8409	= 0	16	$9\frac{3}{4}$
1800	$\frac{37}{48}$	=	0.7708	= 0	15	5
1803	$\frac{37}{52}$	=	0.7483	= 0	14	$10\frac{1}{4}$
1810	$\frac{37}{80}$	=	0.4625	= 0	9	3

But it should be observed, that in taking 37 for the proportion of the year 1800, we are somewhat misled; for the $9\frac{1}{4}$, or 37, which is given as the proportion, is in fact the average price of 100 years, from 1601 to 1700, and by no means affords a just view of the price at the year 1700. It would be much better to take as the standard the average price from 1701 to 1766, which is 31. As also it will be seen that the whole of this line of proportions is very barren in confirmation of the value in the prices of wheat, and as Mr. *A. Young* must have been well acquainted with the prices of wheat, it is to be wished that he had given the value of money in these prices, for the last century chiefly. We shall, therefore, assume the second figure in the table, which is the average from the year 1701 to 1766, as the true standard, although we regret that Mr. *A. Young* has not afforded the means

of a clear comparison by giving the average of ten years instead of sixty-six years. On this ground the depreciation will be as follows:

A.D.				£.	s.	d.
1700	$\frac{31}{31}$	=	1.0000	= 1	0	0
1766	$\frac{31}{44}$	=	0.7045	= 0	14	1
1789	$\frac{31}{48}$	=	0.6451	= 0	12	$10\frac{3}{4}$
1800	$\frac{31}{52}$	=	0.5961	= 0	11	11
1803	$\frac{31}{80}$	=	0.3875	= 0	7	9

Sir *Geo. S. Evelyn's* table gives the actual proportion of the value of money, at stated times, by the actual price of corn; but Mr. *A. Young* denies the accuracy of his prices. He states the proportion in 1675 as 246, and for that of 1740 as 197, and for 1760 as 203, and for 1795 as 426. Making, therefore, 197 the standard from the year 1700 to 1740, we shall in like manner as before, have the following debasements, viz.

A.D.				£.	s.	d.
1700	$\frac{197}{197}$	=	——	= 1	0	0
1740	$\frac{197}{197}$	=	——	= 1	0	0
1760	$\frac{197}{203}$	=	0.9704	= 0	19	$4\frac{3}{4}$
1795	$\frac{197}{426}$	=	0.4624	= 0	9	$2\frac{3}{4}$

To compare these results it will be necessary to throw them together in a table, which gives the comparative value of a pound note, as follows:

Epochs.	Sir Geo. S. from general results. £.	s.	d.	Sir Geo. S. from the price of corn.			Mr. A. Young from the aggregate price of 21 articles.			Ditto from the price of corn. No. 1.			Ditto from the price of corn. No. 2.		
1700	1	0	0	1	0	0	1	0	0	1	0	0			
10	0	19	3¼												
20	0	18	6¼												
30	0	17	9¼												
35	0	17	6												
40	0	16	7¼	1	0	0									
50	0	15	1¼												
60	0	13	7	0	19	4	0	17	8½	0	14	1			
70	0	12	4¼												
75	0	11	5¾												
80	0	11	1¾												
89 } 90 }	0	9	7	0	9	2¾	0	9	3½	0	16	9	0	12	10
1800	0	8	5½				0	9	2½	0	15	5	0	11	11¼
1803										0	14	10¼	0	9	3
1806	0	7	6½				0	0	8						
1810							0	0	5½	0	9	3½			

In this table it is very remarkable that the values of money deduced from Sir *Geo. Shuckburgh's* proportions, as given by the price of wheat, correspond very nearly with those afforded by Mr. *A. Young*, from the average of twenty-one articles. And on the whole it appears that Sir *G. Shuckburgh's* table from general results, is so far confirmed that it may be relied on with much more safety than either of the others; while the disagreement of all the tables would induce one generally to rely upon the value of wheat and of land, as the best criterion of the comparative value

of money, and the effect of any given income, according to the opinion both of *Puffendorff* and *Adam Smith*, whose united authority must deserve the greatest confidence.

Taking, however, Sir *Geo. Shuckburgh's* table for the basis of our calculation, it will be easy to compare the advantage which might have been made by purchasing a farm of 100l. a year in 1700, and selling it in 1806; instead of laying out the same sum on mortgage and recalling it in the same year. For this purpose we may suppose the farm not to have been improved in value by superior cultivation, but to have produced nearly the same quantity of corn, allowing only for such an improvement as would counterbalance the increase of taxes and poor's rates, which we may suppose the landlord would endeavour to lay upon the tenant at every increase of rent. Then, if the landlord granted new leases every ten years, advancing the rent as the value of money fell, he would every year receive as much money as would be equivalent to his original rent of 100l. and in order to make the comparison, we may take his receipts as always equivalent to 100l. a year, in the currency of 1700; while that of the mortgagee will be only as the depreciated values of the money unit at the same successive periods. The result would be the same if we compared a pension, a salary, or a curacy of 100l. a year with the purchase and sale of land.

The farm would in 1700 have cost 2000l. at twenty years purchase, would have produced 10,000l. in rent, equal to the money of 1700, and would have

sold for thirty years purchase on the actual rent, which would have borne a proportion inversely to the 100l. of original rent, as 0.4234 or 8s. 5½d. would have borne to 20s.: that is, the rent would at the resale have been 236.8, and the price of it at twenty-eight years purchase would have amounted to 6619l. 4s. or thereabouts.

The value of the annuity will require a nicer calculation, which will be most easily performed by the decimal values given in the former table. Thus, to ascertain the amount of the receipts, we must multiply the value of one pound by one hundred for every year, and that by ten for each ten years, or to save trouble by 1000, and adding the results we shall have the total receipts in pounds and decimal fractions as follows:

		£	s.	d.
From 1700 to 1710		1000	0	0
1710 to 1720	0.9635	963	10	0
1720 to 1730	0.9260	926	6	0
1730 to 1740	0.8913	891	6	0
1740 to 1750	0.8311	831	2	0
1750 to 1760	0.7579	757	18	0
1760 to 1770	0.6800	680	0	0
1770 to 1780	0.6197	619	14	0
1780 to 1790	0.5574	557	8	0
1790 to 1800	0.4798	479	16	0
		£7606	0	0
Price 2000l. received in debased money of 1800, valued at 4234. or 8s. 5½d. in the pound.		847	12	0
		£8453	12	0

Supposing therefore, the land not to be improved in produce, but the present rent in depreciated or debased currency to be equal to 100l. in the year 1700, and the selling price to be at thirty years purchase, the landed proprietor would have received in the mean time 13,000l. in the currency of 1700; and the difference between the two would have been 4546l. 8s. But it is probable that the estate would have been greatly improved, and the gain of the proprietor amounted to considerably more than this estimate. This sum of 4546l. however, being the money of 1700, will bear to the money of 1800 the proportion of 1 to 0.4234, the reiprocal of which is 0.23645, and the value of 1l. in 1700 is equal to 2.3646 in 1800; therefore, the real profit in money of 1800 will be 10,749l. 8s.

If, on the other hand, we calculate the annuity to be paid, during the whole century from 1700 to 1800, in the nominal currency of the successive years, then we shall have for the total receipts of the annuity 10,000l. in nominal currency, and the value of it at twenty years purchase will be 2000l. making a total of 12,000l. But, as the rent of the farm would have risen as the value of money decreased, the successive amounts of the annual rents may be estimated accurately enough for the present purpose, by calculating the debasement of money according to the foregoing decimals, and the increase of rent by the reciprocals of the three first figures thereof. The account will then stand as follows:

Years.	Money units.	Reciprocals.	Amount of rent.
From 1700 to 1710	1.0000	0.00000	1000 0 0
1710 to 1720	0.9635	0.10384	1038 8 0
1720 to 1730	0.9260	0.10799	1079 18 0
1730 to 1740	0.8913	0.11223	1122 6 0
1740 to 1750	0.8311	0.12034	1203 8 0
1750 to 1760	0.7579	0.13210	1321 0 0
1760 to 1770	0.6800	0.14706	1470 12 0
1770 to 1780	0.6197	0.16155	1515 10 0
1780 to 1790	0.5574	0.17953	1795 6 0
1790 to 1800	0.4798	0.20877	2087 14 0
1800	0.4234	0.23646	
			£13,634 2 0

To this add the value at thirty years purchase on the rent in 1800, which estimated by the above reciprocal 0.23646, will give the value of one pound 2.3646, which gives 7093.80 or 7093l. 16s. making a total of 20,727l. 18s. From this sum we may subtract the total receipts and value of the annuity, being 12,000l. and we shall have a profit in favour of the purchase of land of 8727l. 18s. more than the profit gained by the laying out of the money in the purchase of an annuity, or on mortgage, secured on land, at an interest of 5l. per cent. These calculations, however, are given rather to elucidate a principle or exhibit a theory than to form a perfect and precise estimate. It would have been easy to have done this by a reference to some actual cases of the rise of rents; but upon consideration it was deemed preferable to gave a theoretical view of what should be the natural increase of rents, during the century, by the depreciation of money, and to leave the reader to

make a trial within his own experience of the actual rise in the value of land, in confirmation of the theory.

The value of the royal stipend has been given by Mr. *Wheatley* during the whole of the above period, as follows:

"In the spring of 1804, Sir Geo. *Shuckburgh* favoured me (Mr. W.) with the result of his calculations on the depreciation of money from 1800 to 1803. The depression had advanced in the latter year, according to the proportions which he formed, to* 595. From 1803

* As Sir George *Shuckburgh* died in the summer of 1804, before he had completed an essay, which he was writing, on the subject of the depression of money, it is impossible for me, says Mr. W. to refer to a printed document in testimony of this assertion. It may be said too that the mere assumption of the same depression from 1803 to 1806, as from 1800 to 1803, is too loose for practical application. I certainly should not have made any attempt to give the depression to 1806, had not an addition of 60,000l. a year been made to the civil list in 1804; and as it might have been conceived that this augmentation would bring the revenue to a correspondence with the charges, I thought it right to explain its effect. But the following calculation, which carries the revenue and the depreciation of money no lower than 1800, may perhaps be more satisfactory.

A.D.			£.	£.
1710	— 247 —	562	— 700,000	— 1,592,000

to 1806, I will assume that the same depression occurred as from 1800 to 1803, which will nearly bring the value of our present money to 630. But the value of money in 1700 was 238, and the revenue of King William 700,000l. a year. The same proportion, therefore, which 238 bears to 630, 700,000l. will bear to 1,852,000l., and upon this principle the table is constructed."

A.D.			£.	£.
1700	— 238 —	562 —	700,000 —	1,652,000
1720	— 257 —	562 —	700,000 —	1,530,000
1727	— 267 —	562 —	800,000 —	1,683,000
1730	— 272 —	562 —	800,000 —	1,652,000
1740	— 287 —	562 —	800,000 —	1,566,000
1750	— 314 —	562 —	800,000 —	1,463,000
1760	— 342 —	562 —	800,000 —	1,314,000
1770	— 384 —	562 —	800,009 —	1,170,000
1777	— 414 —	562 —	900,000 —	1,221,000
1780	— 427 —	562 —	900,000 —	1,184,000
1790	— 496 —	562 —	900,000 —	1,019,000
1800	— 562 —	562 —	900,000 —	900,000

The first column of the table gives the value of money at the stated periods.

The second, the value of money in 1800.

The third, the actual amount of the revenue at the stated periods.

The fourth, the value of that revenue in the money of 1800.

A.D.	*	†	‡ £.	§ £.
1700	- 238 -	630 -	700,000 -	1,852,000
1710	- 247 -	630 -	700,000 -	1,785,000
1720	- 257 -	630 -	700,000 -	1,715,000
1727	- 267 -	630 -	800,000 -	1,887,000
1730	- 272 -	630 -	800,000 -	1,852,000
1740	- 287 -	630 -	800,000 -	1,756,000
1750	- 314 -	630 -	800,000 -	1,605,000
1760	- 342 -	630 -	800,000 -	1,473,000
1770	- 384 -	630 -	800,000 -	1,312,000
1777	- 414 -	630 -	900,000 -	1,369,000
1780	- 427 -	630 -	900,000 -	1,327,000
1790	- 496 -	630 -	900,000 -	1,143,000
1800	- 562 -	630 -	900,000 -	1,008,000
1806	- 630 -	630 -	960,000 -	960,000

"The subsequent statement will shew the extent to which the revenue should have been raised at the period to which each calculation refers, in order to have been maintained upon an equality with the 700,000l. a year in 1700."

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* This column shews the value of money at the stated periods.

† The value of money in the year 1806.

‡ The actual amount of the revenue at the stated periods.

§ The value of that revenue in the money of 1806.

A.D.	*	† £.	‡	§ £.
1700	238	700,000	238	700,000
1710	238	700,000	247	726,000
1720	238	700,000	257	755,000
1727	238	700,000	267	784,000
1730	238	700,000	272	800,000
1740	238	700,000	287	843,000
1750	238	700,000	314	923,000
1760	238	700,000	342	1,005,000
1770	238	700,000	384	1,128,000
1777	238	700,000	414	1,217,000
1780	238	700,000	427	1,255,000
1790	238	700,000	496	1,458,000
1800	238	700,000	562	1,652,000
1806	238	700,000	630	1,852,000

"By these calculations, therefore, it is obvious, that the present revenue of 960,000l. a year, though nominally superior, is in reality only one half of the value of the 700,000l. which King William possessed."

The debased value of 100l. in a curacy, rent or

* The first column of the table gives the value of money in the year 1700.

† The second, the amount of the revenue in the 1700.

‡ The third, the value of money at the periods to which each calculation refers.

§ The fourth, the extent to which the revenue should have been augmented at the different periods, to have been equal the 700,000l. a year in 1700.

annuity, may be taken from the foregoing calculations nearly as follows:

	£.	s.		£.	s.
Debased value 1700	100	0	Necessary increase	100	0
10	96	12		103	16
20	92	6		107	18
30	89	2		112	4
40	83	2		120	6
50	75	14		132	2
60	68	0		147	12
70	61	18		161	10
80	55	14		179	10
90	47	18		208	14
1800	42	6		236	4

The first column of this table shews the real value estimated in the currency of the year 1700, which the stockholder, annuitant, mortgagee, pensioner, or curate has received; and the second, the amount in nominal value, which he ought to have received to have kept his income at the same real and effective value.

The daily pay of the officers of the army was fixed in the reign of William the IIId. and continued the same during the last century. The yearly pay of a captain at 9s. 5d. a day, is 171l. 17s. 1d.; but for easier calculation it may be estimated at 172l.

We have taken this as an easy, and a fair average; but the nominal pay fixed by act of parliament, in the reign of king William, was 10s. Of this the officer received regularly, 7s. 6d. a day, or 136l. 17s. 6d. a year for subsistence. The remaining 2s. 6d. a day which would have amounted to 45l. 12s. 6d. a year, was called his arrears, and should have been paid at the end of the year; but this was not regularly done,

and it was always subject to certain deductions which reduced it to 34l. 9s. 7d. and made the total pay 171l. 7s. 6d. In 1797 the two sums were combined, and the pay fixed at 9s. 5d. a day, amounting as above to 171l. 17s. 6d. In 1806, a further sum of 1s. 1d. was added to the pay, which made it 10s. 6d. a day, or 196l. 12s. 6d. a year.

A. D.	Debased value of Pay.	Value of the money unit.
1700	172	1.0000
10	165 12	0.9635
20	159 4	0 9260
30	153 4	0.8913
40	140 18	0.8311
50	130 4	0.7579
60	118 18	0.6800
70	106 10	0.6197
80	95 16	0.5574
90	82 10	0.4798
1800	72 16	0.4234

Pursuing the same mode of calculation as before, it will appear, that to raise the captains in the army to the same rank in respect of income, which they would have held, had not the value of money fallen, their annual pay should be very considerably encreased. For the value of a pound in 1700 is equal to 2.364 in the money of 1800.

In the third book Chap. I. of the preceding work, an intention was expressed of giving a like table of the pay of a captain in the navy, and of a common soldier; but it appears now unnecessary. The elements of the calculation are here fully supplied, and it

may be easily made. The pay of a common soldier is also by no means an estimate of his real source of subsistence, which is, in a great measure, derived from the publicans on whom he is generally quartered. But, unless the whole of the present theory of money is erroneous, and unless provisions cease to rise as they have done for the last twenty years, it is obvious that the claims of the army and navy to an increase of pay will speedily become as loud as they will be just, necessary, and irresistible.

ART. II.

Leather or Paper Money in the East.

PUFFENDORF in his Law of Nature and Nations, Book V. Chap. I. § xiv. gives a remarkable instance of the odium in which leather or unreal money is held in the east.

"The great Cham at Cambalu put his royal stamp upon a vast sum of money made of the bark of mulberry-trees, which no man, in his dominions, upon pain of death dared to refuse, or to coin and use other. The foreigners too, who traded into those parts for the gold, silver and jewels which they imported, were forced to take that money which they converted into the commodities of the country, and so exported again. By which means that prince heaped up a prodigious quantity of gold and silver."

"The Persians call the leather money, which an unjust king had imposed upon them, Schehreva (i. e.) money imposed on the subject at the pleasure of the prince. The memory of which has made such an impression upon them, that when they would denote the injustice of any king, they express it by saying, He imposes leather money upon his people."

ART. III.

The Author's Suggestions concerning the Present Crisis, in 1812.

IT may naturally be asked whether any results practically useful can be drawn from the facts and theories contained in the foregoing treatise; and the author feels it necessary to state some which are applicable to the present crisis, for various reasons: first, that he may not be deemed deficient of sensibility to the welfare of his country; and secondly, that he may neither be taken for a gloomy misanthrope nor an enthusiastic speculator. All that he can offer is calm opinion, founded upon the foregoing examination, to restrain eager rashness and check headlong folly.

The advantages and disadvantages of a paper system have been fully examined and clearly illustrated. In as far as it has enabled commercial men to borrow a capital of all the rest of the community, it has extended commerce, and, while it depreciated money rather slowly, it improved manufactures, provided employment for the poor, and rendered cheap many useful and necessary commodities. This was its principal operation from the peace of 1783 to the year 1797; but, since that time, it has chiefly assisted in the support of war and the increase of

taxes; and now that the commerce of Europe and of America is excluded from the British isles, manufactures are rapidly falling into decay and merchants sinking into bankruptcy.

This must continue, till the state of trade and manufactures is reduced to the level of domestic consumption, and the labourers who are without work and without food, have found either new means of subsistence, employment in the armies, or rest in their graves; unless peace shall speedily open new outlets of commerce, and revive, ere they sink for ever, those manufactures which were so lately the pride of Britain and the envy of the world.

In the years 1797 and 1798 the bank of England repeatedly offered to recommence its payments; but the great financier of that day, a man who, since his death, has received the apotheosis of immortality, the late celebrated Mr. *Pitt*, forbade them; and many are those amongst his admirers who now regret tha his voice was obeyed, since the measure of justice which was then deemed easy is now considered almost impossible.

The difficulties of restoring coin have been fully examined in this work, and they are so far insurmountable, that probably few who read it will expect its speedy accomplishment. But the power which laid its seals upon the coffers of the bank, will, in due time, be compelled of necessity to remove them;

for those who direct the councils, who collect the revenue, and who wield the sword of the state, will discover, in the end, that, by excluding coin from circulation, they wage a destructive war against themselves.

It is then that the laboured investigation of the present work will be found useful, in pointing out all the difficulties and many of the distresses which must ensue from the restoration of coin, an event that cannot take place without a sudden and universal change of value in all articles bought and sold for money: attended with the utmost confusion in the liquidation of all debts and credits, and in the payment of all taxes, customs, duties, rents and annuities.

In the mean time, all that sobriety and prudence can advise, is to direct the attention of the legislature and its committees, as well as of all commercial men, and all proprietors of land as well as public stock, to prepare themselves for encountering the evil which they cannot prevent, and to provide such regulations for the emergency as may give to equity and justice some controul in the midst of confusion, and prevent the entire usurpation of wild unbounded anarchy.

Till this preparation is made, the bank restriction ought not to be removed, either in peace or war. When it is made, the restriction may be removed at any time. In the interval let the bank manage its

own concerns without the interference of the state, except so far as may be necessary to ascertain the quantity of bullion in its possession, the circulation of its notes, and the necessary particulars relative to the public funds and the sinking fund; but all restraints upon its issues must, of necessity, be futile or mischievous.

The solvency of the bank is unquestionable, and results from the nature of its constitution; but the power of converting all its paper into gold is, from the same cause, at all times chimerical: for it has been seen, that its debts may be liquidated entirely without money, by simply retiring its bills, though its stock of bullion remain untouched in its coffers. This is a sacred deposit which should on no account be violated. It constitutes at present the real wealth of the bank proprietors, and will in the end be found the sheet anchor of the national currency. It will enable the state to distribute a portion of coin universally and equably through the country, upon the first abandonment of the paper system. How to dispose of this fund most usefully, without violating the property of the holders of bank stock, is amongst the most necessary objects of national attention. How to liquidate the debts and credits of individuals justly, and without universal insolvency; how to rescue tenants, and the grantors of annuities from inevitable ruin and confusion; how to regulate taxes, funds, customs and pensions, with equity upon the sudden

change of currency; how to maintain some equality of proportion between the prices of corn and grain compared with manufactures, during the influx of gold from the continent, are all questions which will demand the utmost skill, prudence and foresight in the minister, whose arduous duty it shall be to preside over the councils of the state, in the great revolution of property, which must follow immediately upon the opening of the payments at the bank.

To decree this opening, it has been seen, is simply to withdraw for a time, the paper currency of the bank of England, and by that means to close the shops of all the seven hundred provincial bankers, whose minor streams are fed from the great metropolitan spring of paper currency.

Its first consequence will be to deprive the people of all circulating medium, and the merchants, manufacturers, and great agriculturists of the principal part of their capital. Those who have witnessed the temporary embarrassments of a provincial town, upon the failure of a country bank in its vicinity, and the want of silver at a country market during the autumn of 1811, may form a faint picture of the national confusion which this first consequence must immediately produce.

Yet this decree is already pronounced by the legislature, and the era of peace is to be the harbinger of all

the confusion which must inevitably ensue within six months after a definitive treaty, by the present provisions of the bank restriction act.

To introduce a new currency, is a subject of entirely different and subsequent provision. New paper will not pass, at least in the beginning; for what paper can be devised upon a better principle than that which is now current, and what promises of payment in coin can be relied on with certainty, when no one can estimate the proportionate influx of bullion, and the progressive change in the money value of all vendibles? The author has formed some schemes for the facilitating of that ancient barter which is the foundation of all exchange; and which, in the natural state, preceded the introduction of money: but, though this seems the true course of exchange, upon the sudden relinquishment of the advantages of a money circulation; yet all such schemes are complex, difficult, and of uncertain efficacy.

In this difficulty, great as it is, the stock of bullion in the coffers of the bank, whatsoever its amount, will be found, as before stated, the sacred fund of national salvation. In the administering of this fund, this miraculous remnant of the food which is to appease the craving necessity of millions, the wisdom, the prudence, the fortitude of the government, and the good disposition of an industrious people, will be put to a severe trial; and the author is somewhat sanguine

in his hopes, that, in that eventful period, the rulers and the people will derive much assistance from the plain principles and undoubted truths contained in this volume: in which he has endeavoured to analyse with scrupulous fidelity all the principles, and detect all the mysteries of every various medium of circulation, hitherto used amongst civilized nations.

It is with this hope, that he commits it to the world, confident of his own honest intentions, presuming only upon the utility of patient labour and industrious sincerity, little anxious whether he is deemed the advocate for paper or for gold; but desirous that, if he shall be esteemed the prophet of evil rather than of good, he shall be allowed to have stated adverse prognostics only to render the patient submissive to the curative process of the state physician; that, if he has probed the deep and sinuous wounds of the state with severity, he has touched to the quick, only to guide the master surgeon the more safely in the painful operations of his skill.

He has kept nature and her law in view through all his labours, and he has endeavoured to pronounce her decrees as the true guide and principle for the rulers of all states. If reason and nature have really dictated his opinions, he has confidence in the wisdom of parliament, and the justice of the nation to believe that his humble voice will not want attention. If he is in error, the test of experience will soon detect his falla-

cies; for his principles, unlike those of many others, are definite, tangible, experimental, and demonstrative. At all events, he has performed a duty, which long reflection had induced him to consider as imperative. He has given the warning to his countrymen: the result is beyond the reach of his philosophy, and for the event he can only wait with patience and resignation. He commits himself, under providence, to the stream of time, and the hope of futurity; deprecating the censure of enmity, and the outcry of prejudice, with an humble prayer, that if he shall have spoken, according to his intentions, the voice of truth, and the dictates of sound policy, he may not be numbered amongst those who have prophesied in vain, and that it may not be recorded hereafter in the history of his countrymen, as in that of Troy,

NUNC ETIAM FATIS APERIT CASSANDRA FUTURIS
ORA DEI JUSSU, NON UNQUAM CREDITA TEUCRIS.

FINIS.

W. Flint, Printer, Old Bailey, London.