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PRACTICAL OBSERVATIONS  
ON THE  
IMPROVEMENT OF  
**BRITISH FINE WOOL,**  
AND THE  
NATIONAL ADVANTAGES  
OF THE ARABLE SYSTEM OF  
**SHEEP HUSBANDRY.**

BY  
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M.DCCC.XXVIII.

**ADDRESS.**

THE three first chapters, (for so I must now call them,) which form part of the following pages, have already appeared in some of the public prints.

At the time I began writing on the subject, I little thought of pursuing it to the length I have done; but I was led on, step by step, and had prepared part of the subsequent observations for publication in the same way.

I found, however, that much inconvenience arose from this manner of publishing so protracted an argument; and complaints were made that individuals had seen some parts and not others. I therefore determined to submit the whole in a pamphlet, giving the first obser-

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vations in the form in which they had already appeared, and to continue the remainder in the same manner they had, in part, been prepared in.

After coming to this resolution, I was induced to enlarge still more upon them, being anxious to give utterance to the whole of those reflections which had long weighed upon my mind on the subject.

This last manner of publication, however, now that the parts are collected into one focus, exhibits much redundancy of sentiment and expression, since, in the disjointed way which some had been given in, I had found it necessary, after the first, to begin each address with a summary of the prior one, least the reader should not have seen the former. For this I hope I need offer no excuse, but the statement I am giving.

In executing my design, throughout these observations, I have endeavoured to point out to the practical man the minute particulars to be attended to, in case any deem the course I have recommended worth pursuing.

In discussing the matter, I have laboured to meet the question fully, fairly, and temperately, and as far as in me lay to give offence to no one; but I should have considered myself truly unworthy to be an advocate in so important a cause, if I had not attempted to search every corner, to show all the depths and shoals of it. I have shaped my course to suit the opinion of no class of men, or any individual; and where, in any point, I have differed even from a friend, I have openly and frankly stated my own sentiment; and I have striven, as far as my abilities could compass the question, so to bring the subject within one view, that the Statesman might, as far as may be, see the beginning and end of the matter.

Whether I have faithfully and truly executed my design, it must rest for others to determine; but I trust that the liberal minded man will view these as my honest labours to effect some real good.

I cannot conclude this address without offering some apology for the imperfect manner in which the following pages are executed.

I can truly say that I have often sat down to the task, amidst the toils of business, weary in body and mind, and that very many of the hours which have been devoted to the consideration of the subject have been those in which I have deprived myself of natural rest.

This, I know, can furnish no plea for the want of soundness in the matter itself, for that should be duly weighed and digested, or not intruded on public notice, and it must therefore stand or fall on its own merits; but I hope it may afford some excuse for the deficiency in better arrangement and expression of my sentiments.

*Strand on the Green,  
Kew-bridge, Middlesex,  
October 3, 1828.*

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PRACTICAL OBSERVATIONS,

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It is impossible that any person can have even glanced over the mass of evidence given before the Committee of the House of Lords, without being forcibly struck with the awful fact, that this country, which once boasted of its native wool as the staple commodity—clothing with it not only its own population, but supplying also other nations largely with cloth manufactured from it—has now become nearly wholly dependent on a supply of foreign wool for its clothing manufacture. In this volume of evidence, it is stated, on one hand, by the manufacturers, that British fine wool has greatly degenerated, whilst, on the other, this is denied by the growers of it; but as both agree in one point, that from the introduction of softer German wools, the habits and taste of consumers of cloth at home and abroad are changed, it is

obviously expedient for this country diligently to improve its fine wools. In offering the following observations on the subject—as I speak not from theory but long experience, and shall state nothing which I cannot have fully proved—I trust I may claim patient attention; and I feel assured I shall be able to shew that this country is as capable as any other of producing fine wool.

The first improvement in the German wools arose from the introduction of Merino sheep from Spain; and the spread of it was more rapid, since there was neither prejudice nor interest to counteract it. The sheep in that country had not been advanced to any state of improvement in other respects: the mutton was of minor import, and the breeders therefore had nothing to bias them. As their wool improved in quality, it found a ready market in this country; whilst our growth of fine wools, from opposite causes, remained stationary. Saxony, in particular, took the lead in improvement, and produced wool of the most tender and delicate quality; but suited rather to the refinement of luxury than to the profitable use of consumers of cloth at large. It is, however, material to shew by what course of practice the Saxons effected this great change in the wool; and it is well known, that, in addition to making the

fineness of wool the main object in breeding, they confined the sheep, in winter, in houses, feeding them on corn and hay, and thus doubly heated them. The result has been, that whilst the wool has become thus delicate, the sheep have degenerated into a puny weak race, producing only half the weight of wool or mutton which the parent Merino stock, from which they sprung, yielded. Although I have no doubt that, from such a course, wool equally fine and delicate could be produced in this country, yet it cannot be advantageously pursued, since the three valuable properties in sheep—mutton, wool, and the use of the fold for the short woolled breed—are essentially necessary with us; and clothing wool sufficiently fine for general use can be produced without sacrificing those other properties in the sheep. Nearly twenty years ago, we also imported a number of Merino sheep from Spain, derived from flocks of various qualities, but those of the most pure blood were some selected by the Cortes, from the best flocks, as a present to the late King.

From the high state of improvement which, in many respects, sheep breeding had reached in this country, the greatest expectations were formed of our success in improving this breed; but, strange as the assertion may seem, this very cause mainly tended to defeat the object.

Leading breeders of sheep had a great stake in the flocks which they already possessed; they had given and were obtaining high prices for them, and they were also accustomed to look to particular points in them as those nearest to perfection. The Merino sheep, on their introduction, differed materially from such popular points; and it is not to be wondered at, under such circumstances, that they were decried. It was said that they were neither suited to the climate nor the fold, unkindly in their disposition, that the mutton was worthless, and that the wool would and did degenerate. Practical breeders of eminence, who made any trials of them, being thus warped by prejudice and interest, those trials consequently were not pursued with zeal; and the sheep were not adapted to the taste of the shepherds, who were accustomed to view a different kind of animal. They were therefore without a fair chance of success. Unfortunately, too, many of them fell into the hands of other than practical men, and from mismanagement a colour was given to the clamour raised against them. Wool from inferior and mixed flocks of all kinds was attempted to be passed as the best and most pure; manufacturers could only judge from the quality which they found it to possess, and they therefore considered the wool did degenerate. Rams,

also, from the like flocks, were passed as those of the first blood, and breeders who used them found disappointment in their produce. From my own experience, however, of many years, I can fully attest that these prejudices were groundless; and I will therefore state the result of that experience.

Soon after the King's flocks were imported, I purchased a considerable number of sheep from them, and selected from those of the Negrette blood, as being the largest sheep, and carrying the most and softest wool. These I have continued to keep strictly pure, having no other sheep whatever, and I drew rams from the Royal flock, so long as that was kept up; since which I have depended wholly on my own. By due attention in breeding, the wool, far from degenerating, has annually improved in softness and fineness, and these properties have become much more uniformly even throughout the fleece; so that I now obtain for the whole a price beyond what any foreign wool brings in bulk in an unsorted state, whilst the fleeces of my flock are full double the weight of those of the Saxon sheep. It is right, however, to state, that the staple of my flock having arrived at a length beyond that of other Merino sheep, thus rendering it fit for combing, is a cause of enhancing the value. The form of the sheep

is also highly improved, whilst the disposition to fatten equals that of the Southdown. The mutton is of the first quality, and I can readily have for the fat wethers the highest price which any mutton brings in the London market.

The disadvantages under which these improvements have arisen are such as to speak highly in favour of these sheep. I have no pasture land whatever. The sheep do all the work of a Southdown flock, feeding off such cultivated spots as the season yields.

For winter they have no hay, except a little of secondary quality to the ewes after lambing, whilst the store sheep live on turnips and straw, which latter they eat readily, and keep up their condition with such food; and it is admitted by those accustomed to attend them, that they will eat food which most sheep would reject.

It may be said that all these are broad assertions, but where are the proofs? I answer, first, as to the wool, by referring to men highly independent and intelligent, connected with the wool trade, and to manufacturers of the like class who have again and again used the wool, and applied it to the most delicate purposes for which wool has ever been used, and who speak of it in unqualified terms. For the quality of the mutton I can refer to those who have been

accustomed to purchase the fat wethers, and who have given me a higher price for the carcass alone than they sold the mutton for, throwing it in (from the great satisfaction it gave) as a luxury for the upper tables of their customers at the west end of the town. For evidence as to the food and treatment, I must refer to those who have had the care of them; but I have no hesitation in offering to put some wethers on a fair trial with Southdown sheep, and I am confident they will grow as much and as good mutton, and one-third more wool (independent of its quality) on an acre of land than the Southdown sheep. I say not this as inimical to that breed of sheep, which I highly esteem in most respects, but to meet the prejudice of the owners of those sheep, and but, for the existence of which, and their consequent rejection to cross with Merinos of high blood, I am persuaded that the wool of their flocks would at this time be in a much higher state of improvement, and that, too, without diminution of the other valuable properties of their sheep.

I regret the necessity of thus publicly advocating this cause; but seeing, amidst the evidence in question, some opinions stated of a contrary cast, I deem it essential that they should not remain recorded without being refuted in the most public way now left to effect



it. I also lament that the limits of a communication of this kind will not permit me to go more into detail; but if any one who feels a true interest in the matter will write to me, postage free, I will readily answer his inquiries.

#### SECOND OBSERVATIONS.

THE observations which I recently published on this subject, having met with a very favourable reception, and led to a desire from some persons that I should enlarge upon them, I am induced to do it, trusting that those which I am about to offer will receive the same candid consideration.

In my late Address I stated it as my full conviction, arising from experience, that fine wool could as well be grown in this as in any country, and I also gave a brief sketch of the means pursued in refining the Saxon wools; contrasting the spread of improvement between the German and British clothing wools; and I likewise pointed out how greatly the temporary interests and strong prejudices of individuals had tended to keep back British wool from its due share in the improvement.

To show how extensively those causes, conjointly, have been operating to our national disadvantage, I must trace back to a period of about twenty years, the state of our clothing wool, both of native growth as well as of foreign supply.

Up to the time I am referring to, the supply of foreign wool for our manufacturers was very limited, and that chiefly from Spain.

Some little, however, had begun to be introduced from Germany, but the growth of British clothing wools was so large as fully to supply the remaining requisite quantity for our manufacture of cloth. The export of cloth, as it has been shown, was then nearly equal to that of the present day, and the home consumption, it must be supposed, could not very materially differ from that now existing, since that for the use of the increased population during the current years can only fairly be estimated as one half the difference, for the wear of woollen cloth is principally confined to men; and as a set off against that, a considerable substitution of cottons for woollens in their use, is known to have taken place.

These British clothing wools were of various qualities; the best was from the Ryeland sheep, which were considered then of such national importance as to have the wool under special

regulations. The sheep themselves were treated, in part, in the manner which I have before spoken of, as having been adopted in Saxony, and carried on there to such excess, that of confining the sheep in close houses, provincially "cots," but the practice for the Ryelands was limited to that of "cotting" them by night, and feeding them on hay and peas halm; but that of the Saxons extended to keeping them wholly confined in winter, and feeding with corn as well as hay.

It has been asserted that the Merino sheep sprang from the Ryelands; but from this opinion I materially differ, since they vary in some particular points, and especially that of the velvet faces which no other breed, except Merinos, at any rate of European sheep, possess.

The next class to the Ryeland of British clothing wool consisted in that from the South-down and Norfolk sheep. The former of these, however, from possessing some superior qualities, have since supplanted the latter.

Besides these, there were several varieties of upland short-woolled sheep, the fleeces of which were more or less applied for cloth.

About the period I have referred to, a considerable convulsion took place throughout Europe, which was not without its effects in this matter.

One of the first acts of Napoleon, after getting possession of the peninsula of Spain, was to drive into France very large flocks of the Merino sheep. The Germans had already become possessed of some of them, by the use of which they had begun, and have since gone on rapidly, to improve their native flocks.

At this time it was apprehended that we should be cut off from the supply of Spanish wool for our finest cloth, but which hitherto had only amounted to about three million pounds, and the quantity grown of British Ryeland wool being very limited, in the wildness of speculation, Spanish wool was driven up from eighteen shillings to a guinea per pound. This naturally caused a great degree of excitement to improve our native wools; and a favourable opportunity was offered by the introduction of some of the best Merino sheep from Spain. Extravagant expectations were formed of immediate and exorbitant profits.

These expectations being disappointed, the spirit of improving the wool flagged; and I have already shown, in my former observations, how much the self-interest and prejudices of some, and the mismanagement of others, tended in the outset to depress this spirit of improvement. Other causes were also operating to prevent it.

The coarser clothing wools were in great demand, and bought up at high prices for the use of the army; the great demand also for meat, occasioned by the consumption and waste of war, took off much of the pork and beef, and threw the home consumption more on mutton; consequently large carcasses in sheep, and heavier fleeces, even though they were coarser, were not deemed objectionable, and in an evil hour crossing those flocks of the description of Southdown, first took place, I believe on the Western Downs, by the use of the Berkshire sheep, a much larger and coarser sheep both in carcase and wool, unkindly in disposition to fatten, and coarse in the grain of mutton, but possessing mottled faces somewhat like the Southdown sheep.

The old breed of Berkshire sheep is now happily nearly extinct, but it has thus left a mark behind it. Some other breeds of British sheep had also a share in the crossing, as was evident by the change of frame and countenance, as well as the openness of the fleece; but it is unnecessary in this place to enter on the particulars.

When, however, an alteration of the kind takes place, if it suits the purpose of the moment, it spreads far and wide, and is not easily reclaimed, and I fear it will be found that the real breed of Southdown sheep is now within a very limited compass. I make this observation,

not as arising out of the evidence I have recently read, for I had often expressed the same opinion before that evidence was known; but I offer it as the result of long attention.

From habit, arising from the interest I have felt in the cause, I have for years scarcely ever passed a flock of short-woolled sheep in any part of the country, or a drove from Smithfield, without my eye ranging over them to see their general character, and especially as to wool; and I flatter myself that I can from custom at once distinguish between the original and the mixed Southdown breed. Let those who are acquainted with the subject, and differ from me in opinion, look, in a season of the year when the wool is in a state to lead to a correct judgment in the matter, at the numerous sheep which are collected by twenty thousands in a day in that great mart Smithfield, and where good and bad, but mostly the good, congregate from all quarters, and then let them fairly determine what portion of the true Southdown sheep, neat and small in size, close in body and fleece, and comparatively good in wool, bear to those of the mixed breed.

I have dwelt thus much on this head with the humble hope, if possible, to reconcile those different opinions which exist on the subject, and to elicit the real state of the country as to its

growth of fine wools. Not, however, that I am of opinion, if all the flocks under the denomination of Southdowns, possessed the full character in wool of the best of those sheep, that such wool could at present hold its former station as clothing wool, since, whilst this country, during the last twenty years, has neglected to improve its wool, others have profited by the apathy, and gained, I hope, only a temporary ascendancy.

What fostering hand, or legislative measure, it may now be needful to adopt, I leave to others to determine; but, unless the wool itself becomes improved, I freely assert that the country will cease to grow clothing wool. The first step towards recovery of the past errors, must be by the breeders themselves; and I would remind them of the excellent fable of the Countryman and Hercules, and say, that, whilst asking for aid, they must put their shoulders to the wheel. The manufacturers have said that Southdown wool may be advantageously mixed with softer foreign wool; but though a finer face than the body of the cloth may thus be produced, the manufacture must resemble plated ware; but if the fleece itself is softened, the whole will be like a manufacture of intrinsic metal. The improvement, I repeat, must commence with the breeders themselves. The mere graziers, who purchase

and sell from year to year, are governed in the choice by that only which will yield the most profit; and if a variety of sheep, in consequence of defect in its wool, can be purchased at so reduced a rate as still to yield them a profit, their temporary interests may be served whilst the breeders from that reduction in price must suffer. The true interest of the latter is to look beyond the immediate moment, and possess a flock inheriting such a combination of good properties as may render it in the end of sterling value.

The different soils and various breeds of sheep in this country, with proper attention and improvement, are happily suited to the wants of man in food and clothing. The rich grazing grounds to feed the large long-woolled breeds of sheep for a supply of the coarser and heavier mutton and wool, whilst the middle and upland soils, which constitute by far the greatest portion of the lands, are adapted to the growth of short wools and fine-grained mutton; and the best state of agriculture can only be sustained on such lands by the use of the sheep fold. A great quantity of short wool must thus necessarily be grown, and, as it is in vain to strive against the stream, and unprofitably to produce that for which there is no demand, it is important that this wool should be of a quality to meet the

purpose for which there is the greatest consumption. If the breeders in general of Southdown sheep were to endeavour to restore the degenerate flocks merely by the use of rams of the best of that kind, the progress would not only be extremely slow, but they would, perhaps, scarcely ever arrive at the point from which they had descended. The quickest and only means of accomplishing improvement, even very much beyond that given point, is by the use of such rams as inherit a very superior and the highest quality of wool, if that wool be produced without artificial means, and I have before shown that the greatest advantages which have taken place in fine wool have originated in the Merino sheep, and that those, in an improved state, are well adapted for the growth of mutton and use in the fold. I can now neither expect space to be allotted to so protracted an article as it would make, nor would I encumber this address with all the calculations relative to the advantages incident to the use of them in British flocks; but, if needful, as I probably shall find it, I will make it the subject of a future article. I will, however, here answer one prejudice existing among Southdown breeders against the use of Merinos, which is the dread that the former will thus lose the character of black faces and legs. This, in itself, would be a great advan-

tage, since I never yet conversed with an intelligent manufacturer who did not say that the body of the fleece, in some degree, partook of those black hairs, which lessened the value of the wool for the manufacture of articles of light colour, as such black hairs will not take the dye in the same manner as white wool does. The question, in my opinion, now is within very narrow compass. Whatever aid the Legislature may or may not deem it right to afford in the matter, that must remain for determination to another year; but the breeding season is now at hand, and it is for the flock-masters promptly to determine whether they will, or will not, without loss of another year, begin improvement in the wool. That those who do first and vigorously set about it will be the greatest gainers, I feel the most confident assurance; and if none do, the growing of clothing wool in this country, as I have already said, will become extinct. I have heard and read much of speculative advantages likely to arise from deriving it elsewhere; but I have never yet met with any thing in the least convincing to me, that, in every point of view, it is not most profitable, and of the greatest national advantage, that the British isles should, as heretofore, grow as much as possible of clothing wool, rather than depend on a foreign supply of it from any country whatever.

If, without the charge of egotism, I may be allowed once more to refer to the successful improvement which has taken place in my own flock, I will state two circumstances which have occurred since I last offered some observations on the subject, and I trust that I may so refer to it with confidence, since on reading the reported evidence, I find how very great a difference of price the wool of it has supported above that of any other British Merino wool. One of the incidents which I allude to is, that the fleeces of a select flock of Saxon sheep have recently been sold by public auction, and under circumstances which excited considerable interest, and after every abatement necessary for some difference in the deficiency of cleanness, those fleeces, which only weighed half the weight of mine, they sold at a rate considerably below the whole from my flock.

The other circumstance is, that the Van Diemen's Land Company, not from any suggestion of mine (for I was ignorant of any such intention till the matter was concluded), but after the most full inquiry and consideration, and at the recommendation and ample investigation of competent persons, who were well acquainted with the Saxon flocks and mine also, have determined on the use of some of my rams for their Merino sheep, in preference to the Saxon rams.

In now looking back to my past labours in this cause, I feel, if I may be allowed to express it, a satisfaction and glow of patriotism, that, through good times and through evil times, by persevering to preserve and improve this flock, a nucleus is formed and a scion is preserved in this country at once capable of greatly extending improvement. It is not for me as an humble individual to endeavour to overcome prejudices further than by reasoning and a very limited example, or to stem the torrent of interest opposed in this cause; but if any large landed proprietor, possessed of influence and spirit, will meet me in a liberal manner respecting the use of this flock, I will place it on equitable terms, so that whilst a suitable remuneration may arise to each, such immediate and extensive improvement may be diffused by the means of it, as the state of the country in this case, and at this moment, so imperatively calls for.

I can truly say, that, in offering the foregoing observations, I have adduced no reasoning but what I firmly believe to be just, nor asserted any things as facts, but what, as I said in a former address, I am ready to come to the proof of.

I deeply lament to see the degree of irritation which unhappily exists on the subject, and

above all, the obloquy and ridicule put forth in the present day against the interests of agriculture. I know and feel of what vital importance this branch of it is to some of the best interests of the nation; and I do not hesitate to say, that whoever suffers his evidence to be biassed by self-interest, his calm and better judgment to be warped by prejudice, or his decision in any way influenced contrary to the conviction of his own mind, is no friend to his country.

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### THIRD OBSERVATIONS.

IN my last observations on the improvement of fine wool in this country, I held out an expectation that I probably should submit some particulars more minutely descriptive of the advantages incident to the use of Merino sheep in the British flocks.

Being anxious that the subject should come before the public in the most ample manner, I proceed to fulfil my promise. In a matter which it is so truly important to the interests of individuals and the nation at large, that a calm and right judgment should be arrived at, I trust I shall not weary others by these continued obser-

vations; and for myself, I can truly say, I shall never feel weary of the task whilst I entertain the humble hope of serving my country by a perseverance in it, or until such unanswerable statements are put forth in refutation of what I have advanced, as shall convince the independent, calm, and well-judging part of mankind, that my labours in this cause have been and are vain and worthless.

The tendency of my former observations on this subject was to point out what great improvements in fine wool have of late years taken place in Europe, by the use and diffusion of the Merino sheep; that in those countries where prejudice and former interests did not operate to counteract it, the spread of improvement has been the most rapid; that in such countries also as wool was deemed the most profitable article, the refinement of it has been carried to an excess so as to degenerate the animal in its other valuable properties; that unhappily the British breeders, from causes which I shall not dwell upon, have run into the opposite extreme, and let other nations gain, as I before said, (I hope only a temporary) ascendancy, but the effect of which is for this country to have become deluged with the importation of an article which will obtain preference for consumption until met by improvement in British fine wools.

I further endeavoured to show, and referred to facts arising from my own experience, not only that there are no physical causes why such improvements cannot be effected in this country, but also that it might have been carried on in the wool, without losing the other valuable properties in the sheep, as to the mutton and use in the fold, which properties are of such importance to us, not only as supplying that quantity of animal food which our population, compared with the extent of land and national habits, requires to be thus produced, but inasmuch as the animal which yields us this kind of meat, also in its growth mainly contributes to the further increase of human food in grain, by the aid thus afforded to our best system of agriculture on the generality of arable lands.

If I am right in the foregoing positions, it follows, of course, that every breed of sheep in the kingdom, which has heretofore been deemed suited to the growth of clothing wool, is open to improvement by means of the Merino sheep; and I have said, in a former address, that in my estimation it can be profitably done, since I feel confident that as much and as good mutton can be raised to the acre, and more wool (independent of its improved quality) by aid of Merino sheep, than on a given and highly popular, and I admit, in many respects, very valuable, breed

of sheep, in common use for upland and middle soiled arable districts.

The breed of sheep referred to is the South-down variety, and upon which, as it forms the best standard of the whole, shall my calculations be founded, although there are other varieties of British sheep well suited to effect the improvement in fine wool, and one breed in particular still more readily susceptible of it—I mean the Ryeland sheep.

Before I enter on these calculations of advantage thus likely to arise, I must endeavour to clear the way by analyzing some opposite opinions which have been publicly given by other practical men previous to mine on the subject; in doing so, however, I disclaim the least personal disrespect or hostility against any particular individuals or interests differing from mine; and if I have been, and am, able truly to execute my intention, I hope and trust that every observation which I have already made, or may in future put forth on the subject, will be found free in the sight of all candid and impartial persons from being liable to any such censure.

I must first notice the statements, recorded from what may be considered high authority, (as coming from eminent breeders) comparative of these different kinds of sheep, that three Southdowns could be kept on the same quan-



tity of land as one Merino, and that it had been found that the latter would not fatten at all.

I would ask how this trial had been made?

Was it by taking a given number of each, fairly selected according to their relative circumstances with their fellows, and of equality as to condition with each other, and then putting them respectively for a certain time on a given quantity of land, taking the live weight of both lots in the first instance, and again trying at the end of the time the comparative weight of each? For example: were fifteen Southdown and five Merino sheep, thus fairly selected and weighed, put on four acres of land of equal quality, and equally divided, the five Merinos being put on two acres, and the fifteen Southdowns on two acres, and the proportionate increased weight of each lot, and the state of the remaining herbage, fully examined at the close of the experiment? If so, and the herbage remained equal in each portion of land, and there had just the same increase of mutton arisen on each animal during the time, then the experiment was fairly tried; and if any such fact can be shown to have taken place, whether as to the unimproved or improved Merinos, I will readily admit, that, as far as that trial went, it warranted the conclusion which has been drawn. Another way might perhaps have been resorted to for this

trial. An equal number of Merinos and Southdowns, each fairly selected in the manner before spoken of, might have been put on given quantities of land, equal in amount and goodness, the respective lots weighed in and out, and the state of the herbage afterwards examined; and if the event proved that the latter was in an equal state on each quantity of land, and that the increase on the Southdown mutton was in amount three times that of the Merino, then the same conclusion might fairly be drawn.\*

If, however, the test was merely made by turning ten or twelve Merinos, inferior in condition and size, and consequently doubly so in strength, amongst a flock of four or five hundred stouter and stronger Southdowns, which latter in such case, (be the extent of pasture what it might) would have the mastery and the best of the feed, and thus the event proved that the Merinos had not thriven in proportion to the Southdowns; then, though there might be some

\* If such an experiment was made by winter food, the fodder and roots being weighed, and it was found the five Merinos consumed as much as fifteen Southdowns, and that each animal increased in the same weight of mutton—or if a given quantity of food was weighed to equal numbers of Merino and Southdown sheep, and it was found that the latter increased in mutton three-fold in proportion to the Merinos—the like inference would also fairly be made.

colour for such conclusions as that three Southdowns could be kept on the same land as one Merino, and that the latter would not fatten at all, yet I leave it to the candour of those who stated it to say whether such have not been slight surmises, rather than just conclusions derived by proofs from real and fair experiments.

If such latter only has been the case, I must further leave it to the candour of those persons to state it as early and as openly as possible, lest perhaps the interests not only of individuals but a whole nation may be led astray by too hasty opinions coming from practical men, whose names as leaders in their occupations give weight in such matters.

I should not deem it necessary to dwell thus much on this head, but that I well remember the evil effects produced in the early state of the Merino cause in this country by a fashionable London butcher having declared, at a public meeting, that he considered Merino mutton was no better than carrion; and the spread of this opinion, coloured in some degree by the mismanagement of many persons into whose hands the first Merino sheep fell, produced such unfounded prejudice, that all the zeal and labour of others in the cause have as yet scarcely been able to remove.

I have now to speak of what I before asserted, that as much and as good mutton, and a third more wool (independent of the quality of the latter), can be grown on a given quantity of land by the Merinos than by the Southdowns.

If the Merino sheep, on the average, weigh two-thirds, whether fat or lean, of what the average of the Southdowns weigh, then it follows that three Merinos for two Southdowns must be kept on the same quantity of land, to produce the same amount of mutton.

In this case, if three Merinos, moderately fattened, reached only seven stone weight each, and two Southdowns, in like manner, ten stone and a half each, then the amount of mutton would be equal. I have fattened a few Merino wethers to twelve stone weight each, but that was an extraordinary case, and after long feeding; but eight stone weight for a Merino wether (which is about the average weight of mine) may be set against the larger Southdowns of twelve stone weight each, and three of one kind and two of the other will thus give twenty-four stone weight of mutton each.

Now on this head I will be perfectly candid.

As I have kept none but a pure Merino flock, I therefore have had no opportunity of making those separate experiments which I have before

stated as the fairest tests; nor have I been able to put a given number of sheep on a given number of acres of pasture land; for, as I stated in my first address, my land is wholly arable, and the sheep have subsisted entirely on cultivated crops. From every observation, however, which I have been able to make (and I have made them with great attention), whether as to the number of sheep my farm carries as compared with other farms of the like extent, quality, and circumstances; or whether with reference as to the amount of turnips and other cultivated food which I know a given flock of Southdowns require, as compared with a like amount of sheep in my own flock, and as my practice and inferences have not been confined to a few sheep, but a large flock (of which I shall hereafter speak more), I trust I am fully warranted in coming to the conclusion, that three Merinos can be kept on the same land as two Southdowns, taking each at the respective weights I have set forth.

I feel, too, the more fortified in coming to this conclusion, since it is consistent with common sense; for, unless it can be clearly shewn that the Merinos are unkindly to feed, and will not fatten (and I can truly say, that my own do so most readily), then the natural inference must be, that the same quantity of land will produce

twenty-four stone weight of meat as readily on three as on two animals; for no one conversant in grazing can but admit, that though a dwarf and stunted animal will not fatten well on any land, yet, on the average of soils, a middle-sized healthy animal will thrive better, and yield more profit than a very large one.

Thus far as relative to my assertion, that *as much* mutton can be grown on a given quantity of land by Merinos as by Southdowns. Next as to the *quality* of the mutton being as good; and I regret that this head is not capable of being shown in so definite a manner on paper as the last head. The first proof, however, which I will advance (and I state it fearless of contradiction) is, that the butchers, who at one time would not look at the Merino sheep in the market, are now eager (at least many of them) to purchase those which are of a good quality; some of them, indeed, as most buyers will do, attempt to invalidate those sheep with the hope of obtaining a good bargain. I well remember an observation which a horse dealer once made to me when I began by looking carefully round his horse, and found many faults with it—"Ah, Sir!" said he, "I see I shall have you for a customer before we part; but had you began by praising my horse, I should have had no hope of you." I felt the force of this remark, for

“————— his language, in my mind,  
Bespoke at least a man that knew mankind.”

The butchers (at any rate those who speak without prejudice) admit, as they must do, that no sheep die brighter than the Merinos—that no mutton is finer in the grain, or more juicy at a proper age, than that of well fed Merinos—and that if they do not throw out such lumps of fat on some particular points, yet those excrescences of fat are often unprofitable to the consumer.

That, on the other hand, good Merinos, when dead, weigh fully equal to their appearance, prove well within; and be the amount of external fat what it may on a particular animal, that fat is spread more evenly over the carcass than on many favourite breeds of sheep. Their defects are, that the shoulder and breast still want a little more opening and thickening, (though this point has been carried to excess in some breeds of English sheep), and the thigh, particularly the lower part of it, requires a little more filling up in meat; but these points are already greatly improved in my own flock; and, from the advanced state of improvement in it, I have no doubt, that, in a very short time, compared with that during which the first improvement has thus far been accomplished, all that is

desirable in these respects would be soon effected.

In further confirmation of what I have been stating, I can say, that I am in the constant habit of having these sheep killed for the use of my own family, in which the mutton is preferred to any other, found to be good flavoured, and to possess the properties I have spoken of. I have likewise frequently given it to friends, from whom I have received the highest praise of it. One not long since wrote to me thus. He was an extensive manufacturer, who previously had kindly been making some experiments with the wool:—“ I thank you for your Merino mutton, which I have had dressed, and can only say of it, as I did of the wool, that it is too good for common use.”

One word more before I dismiss the subject of meat, and that relative to size, and which is, that the butchers admit they can more readily and satisfactorily sell a sheep of from 7 to 8, than from 10 to 12 stone weight of carcass; that their better customers prefer such kind of mutton, and small families can oftener have fresh joints at the same cost.

I shall now proceed to the comparative growth and value of wool, between Merino and Southdown sheep, on a given quantity of land.

Assuming (as I think I may fairly do after

the foregoing observations) that the same amount of land will feed three Merino wethers of 8 stone as will feed two Southdowns of 12 stone weight each, (but on which subject I may possibly, under another head, hereafter add a few more words), I have then to bring the weight and price of wool of each into comparison. A fat wether of 8 stone weight from my flock, if the fleece at the time be fully grown, will, when it is clean brook-washed, produce five pounds weight of the improved wool. But I do not mean to bring this forward as the comparative weight, although I know of no such weight of fleece in true Southdown sheep even on fat wethers; yet I wish as much as possible to try the matter by the evidence given and on record before the Committee of the House of Lords. I find there that some of the flock-masters of the most celebrated Southdown flocks state the average weight of the fleeces at three pounds each; and that they cannot now obtain 10*d.* per pound for the wool.

Now I presume, that, as these were breeding flocks, they contained few fat wethers, but consisted, for the most part, of store ewes and tags.

My own flock being of the like description, will come fairly in comparison; their fleeces, when brook-washed, average three pounds and a half each; and the price at which the entire

of the fleeces of the whole flock have sold for, during each of the four last years, has been three shillings and sixpence per pound.

As I do not wish to cut the matter very close, and some of the breeders of Southdown sheep have stated their average weight of fleeces rather higher than three pounds, I will add a quarter of a pound to theirs, and bring the weight equal, by sinking a quarter of a pound from the average of mine.

The weight of mutton on three Merino fat wethers, of eight stone each, and two Southdowns, of twelve stone each, as already stated, being alike, and the price it will bring the same, (although the mutton of the former, from being smaller, will be of more ready sale), that part may be dismissed as a balanced account, and the difference will be on the wool, which will stand thus:—

	£.	s.	d.
Three fleeces of brook-washed Merino wool, weighing $3\frac{1}{2}$ lbs. each, in all $9\frac{1}{2}$ lbs. at 3 <i>s.</i> 6 <i>d.</i>	1	14	$1\frac{1}{2}$
Two fleeces of Southdown brook-washed wool, at $3\frac{1}{2}$ lbs. each, in all $6\frac{1}{2}$ lbs., at 10 <i>d.</i> .....	0	5	5
Difference.....	1	8	$8\frac{1}{2}$

or a produce in weight of one third more, and in value more than as six to one.\*

\* It may also be remarked, that, if the difference thus produced in the total value was calculated on the twenty-four stone weight of mutton, it would be equal to a deduction of more than one shilling and twopence per stone from the Southdowns when fat, and of nearly ten shillings per

Here then I think I might rest the cause, and leave it to those who have given evidence that they cannot now sell their wool at eightpence per pound, as well as those who possess the best flocks of Southdown sheep, and state that they cannot obtain tenpence per pound for such wool, to determine themselves as to the advantage which each might obtain by crossing with pure Merinos of high blood.

I wish, however, to add some further particulars, and to show more at large than I yet have done, that this country, so far from being less equal to, possesses, under proper management, considerable advantages for the growth of fine wool, and I shall take a very early opportunity of offering some additional observations on this part of the subject.

head from their value in a lean state, estimating that at only two-thirds of their weight when fat.

Respecting the quality of wool which can be grown in this country, and the dependance of the manufactures upon the raw article, it is to be observed that worsted yarn from the wool of my flock, is spun to a fineness of thirty skeins to the pound, and has been sold at a higher rate than the best Piedmont silk twist.

Messrs. J. and W. Freyer's, of the Crescent, New Bridge Street, Blackfriars, and Huddersfield, whose shawls, the most beautiful in the kingdom, rival those of India, manufacture this yarn into Thibet and Lama dresses, and shawl cloth; a yard and three quarters square of which cloth will readily pass through a common finger ring. The tender wools of the Continent are too short and brittle to answer the purpose.

#### FOURTH OBSERVATIONS.

I proceed to execute that promise which I recently gave in my observations on the comparative growth and value of mutton and wool, on a given quantity of land, as arising from the Merino and Southdown sheep; and to show more at large, than I yet have done, that this country, so far from being less equal to, possesses, under proper management, considerable advantage for the growth of fine wool. A very prevalent opinion having existed that our climate is not suited to produce the finest qualities of wool, I will first endeavour to clear up the point by showing, both from reasoning and facts, the error of that supposition. In the very commencement of my engaging in this cause, now nearly twenty years ago, I reasoned the matter in the following manner; and stated such sentiments, in a letter to a late Baronet, who at that time took an active interest respecting the Merino sheep which had been imported into the country; and it has been the confidence I felt in these sentiments, confirmed by what I have found arise in other European

nations, which led me to persevere as I have done in the cause: viz.

That a hot climate cannot be essentially necessary for the production of fine wools, since animals which yield the most delicate furs in their native state, are inhabitants of the colder regions. The sable and ermine are not found within the torrid zone, but arctic circle. The wool, too, (if such it may be called) of the Cape of Good Hope sheep, so far from being fine, resembles coarse hair. The Thibet, or Cashmere goat, produces, it is true, an under-coat of extraordinary fineness; but this coat, which he casts at particular seasons, is guarded by a permanent covering of coarse hair, which alike shelters the animal itself, and under-covering of down, from the effects of the sun. In confirmation of this reasoning, wool of the finest class is known to be grown by the Merino sheep, even in Sweden, and other of the coldest countries in Europe; and the Saxons so far found the rays of the sun prejudicial to the production of the most delicate quality of wool, that they have in some degree sheltered from the effects of it, those sheep which produced such wool. The close fleece of the sheep is destined to secure the animal from the severity of winter's cold; and when from change to summer's heat that coat becomes burden-

some to him, Providence has ordained that the wants of man shall lead him to strip from the animal that load of wool which has then arrived at a state of maturity, and thus the exigencies of both are satisfied.\*

\* The opinion prevalent amongst persons connected with New South Wales, of the wonder working effects of that climate on wool, in its growing state, and that even in one year it is very materially changed in fineness on the same animal, may seem to militate against these sentiments and facts. I have, however, always thought, and till I see better reason than I yet have, to alter that opinion, must continue to think that considerable error exists on this subject; and I give it, not as my own sentiment, but one to which I fully subscribe, that the length of voyage, and consequent time the wool is on ship board, may, if it be not attended with some circumstances to injure it, have a beneficial effect, in softening the wool. I do not state this with any view to prejudice the cause in that colony, to which I wish every prosperity, but rather to serve it, since nothing can prove more prejudicial to a cause than to form extravagant expectations on any point, which cannot be realized. Trusting to this, many a poor settler has, I fear, expended his last guinea in purchasing, because he obtained them at a low rate, cross-bred sheep, with the full expectation that on their arrival, or in a year or two afterwards, the climate would, as if by a magic spell, make the coarse haired wool of his sheep fine, but after paying the same freight and costs as for better stock, he has, I am convinced, found his disappointment in those he took out, as well as in their progeny.

It has often been said to me, by settlers going out to that colony, who have been in treaty with me for sheep,



The next head on which I wish to clear up some prevalent opinions, relates to the food of the sheep; and on no point has greater error existed, for it has been supposed that none but particularly fine close pastures can produce fine wool. My own experience is wholly at variance with this supposition, for whilst my flock is admitted to have produced softer and finer wool than has been grown on any such pastures, the sheep have subsisted on every other kind of food, the produce of arable crops, which would support them without any preference to either sort, further than as it conduced most to the health and condition of the animal, such as rape and rye in early spring, followed by rye grass, clover, trefoil, and tares, for summer, rape, turnips, and mangel worsel, straw,

—your price will not suit me, as I care not much what the quality of the wool be, since, in a very short time, that climate will render a coarse fleece fine.

Specimens of fleeces, the growth of different years from the same animal, it is true, have been shown in this country, whereby it seemed that improvement had taken place; but without fully knowing all the circumstances of the case, and the state of the animal at the time in each instance, I should be sorry to found a theory from the example: for, on the other hand, I have also seen some from a British sheep, and the individual from which it came could be fully identified, but there was not in that case the slightest improvement perceptible.

and (if it could be afforded) hay of any kind for autumn and winter; and when pinched for keep in the spring, even oil-cake and linseed.

By no change of food could I ever make the hair of an individual coarse wooled sheep fine, or a fine one coarse; and I am convinced it is upon the high blood and ancestry of the sheep alone, that dependence for fine wool in the progeny can be looked for.

“Heir’s not the racer all his lineal speed.”

“Burn’s not the war-horse with paternal fire?”

Even this last observation is strongly verified in the Merino sheep; for although they are an extremely quiet kind of sheep, and never break pasture except driven out by dogs, and the slightest fence is sufficient to keep them even though the next field may afford them better food; yet they are very timid, and startle at a noise, but without flying from it, unless the noise proves to be that of a dog. This I can in no way account for, but from the constant fears their predecessors were under, from the attack of the wolves in Spain; but that it should have continued for so many generations, is, I think, one among the many proofs of what is inherent from ancestry.

The first advantage which I have to state this country possesses, is, that the British sheep, in



general, are in other respects, wool excepted, more highly improved; and even as to wool, that they rank above the native unimproved sheep of some neighbouring nations. Another advantage I consider, arises from the application in this country, of short woolled sheep, to the best purposes of husbandry in arable districts, thus enabling us more profitably to keep extensive flocks, in the hands of individuals, and on the whole, a far greater proportion of sheep, as well as wool, than in any other country.

The most ready way of showing this, will be by drawing a contrast between the produce of this, and some other country; and I shall fix on France, from its proximity, extent, and rivalry.

This matter will lead me into considerable detail; but I must crave the patience of my readers, in a matter so truly important; and I trust that I may fairly claim such indulgence, without the charge of prolixity, since, under the existing circumstances between the two countries, it cannot be uninteresting even to the British agriculturist to know how he stands with respect to his nearest neighbour; and to the statesman it must be highly important to learn such particulars. To attempt to satisfy either with merely glancing at the subject, would be futile.

In the autumn of last year, I for the first

time visited France, and took a view of the greatest arable district, over an extent of nearly 300 miles; I at the same time looked into the flocks, as to the character of the sheep themselves, as well as to the economy of management, and I then formed general ideas on the subject.

I have now again visited that country, though more hastily, but looked attentively to those objects which had before made an impression on my mind, and have taken an opportunity of inspecting the royal parent flock of Merino sheep, of Rambouillet, esteemed the best in France, and originally founded by Lewis the XVIth. for the propagation and diffusion of that breed of sheep, and since carried on with great interest under succeeding governments. Finding by that review my former opinions established, at least in my own mind, I proceed to offer them to the public in illustration of this subject. I will first speak as respects the sheep themselves. Few, or none of the flocks in that country, but partake, more or less, of the Merino cross; and it is little to be wondered at, either from the long time the royal flock has existed, and studiously been propagated, or from the spread of those numerous flocks which Buonaparte had driven into France from Spain. I speak only from memory, but if that does

not fail me, I think they were said at the time to amount to two hundred thousand sheep. Let the former means used however, and the latter number have been what they may, still enough traces of the original stock of the country remain for an attentive observer to discover what the native sheep were.

The ordinary flocks of the country are the most uneven of any I ever met with, and in very many of them may be found animals varying in wool, from a good Merino fleece, to one resembling goat's hair; and the latter very evidently of such a character, as a very great portion of the native sheep of that country originally were. They vary in size and form from that of a British South Wales sheep, to a small Berkshire sheep of the old variety; and a great portion seem to have the character of those latter,—long on the leg and body, with faces mottled, and a prominent curved countenance. In general they are hornless.

Different degrees of improvement may be traced in the wool, and indicated by the various shades of countenance, according as it partakes of the Merino.

I have now spoken of the lower class of sheep. The fleece increases in goodness as the flocks ascend in Merino blood, but in most a great unevenness of quality abounds, arising

from neglect in forming the flocks, and which occasions abundant employment for the wool-sorter. It is shorn in the grease, then soaked and brook-washed before scouring, throwing the foul water away, without knowing the high value of it. I endeavoured, in one instance, to convince those who were thus throwing it into a river, that it would be valuable for the land, gardens, or vines. They smiled at me; but, to bring it to practice, I took two buckets full, pouring it on the adjacent grass; and, placing a large stone in the centre, requested they would notice the spot at the end of one or two months. Whether they may attend to it, I know not; but if they do, the country may gain something by it. In Spain they know so well the value of this water, that they call it "old gold." I have long regretted that so much valuable manure is lost to this country in brook-washing; and have often planned to have the sheep previously soaked, and the water carted over the land, and diffused in the manner of watering roads, especially as the Merinos carry so much yolk in their fleece.

But to return from this digression. I have now to speak of the higher class of French sheep in the ancient Merino flock of Rambouillet; and, as this was to me a very interesting subject, I hope to be excused for being particular

in detail. I had before made some attempts to see it, but circumstances prevented my doing so; and, being now pressed for time in travelling, I could only accomplish it by quitting the Diligence at one in the morning, to resume another which passed the place at seven. I was conducted straight to the fold, which I entered soon after five.

The fold consisted of a spacious close building, fitted up with compartments for the rams and ewes, and lofts above. The under shepherd was still in his bed, which was affixed in the middle, near the ceiling; not an enviable situation, as he inhaled the effluvia from about a hundred rams and double that number of ewes, with some Cashmere goats intermixed. My guide informed him that a gentleman wished to see the flock. He said the head shepherd was gone afield with the ewes. However, he quickly descended, and shewed me the rams; for the whole were within the fold, and housed, even at this season by night. After examining these, we proceeded to the ewes, and met the head shepherd, an intelligent man, half-way on his return. Congratulating me on my early rising (at which he seemed surprised), he conducted me quickly to the ewes, and I looked them carefully over. I requested him to show me some of those which he deemed the best.

In his selection, he evidently was wholly governed by the fineness of the fleece, without regard to the form of the sheep, some of those shown being very plain. As I afterwards walked through the flock, I requested him to catch one which I pointed to. He shook his head. "Ah, Sir," he exclaimed, "you have fixed on the worst fleece in the whole flock." It proved of a character I had anticipated. He afterwards produced some specimens of the wool from the last clip, and gave me a few samples. We then exchanged civilities; he expressing, in the most gentlemanly manner, the satisfaction he had experienced in seeing me. Such is the history of my long-meditated and at last executed visit to the Rambouillet flock; and let not the recital of these small incidents weary the patience of any one, for they mark the character of the people.

I have now to speak of the flock itself.

The sheep in size are certainly the largest pure Merinos I have ever seen. The wool is of various qualities; many sheep carrying very fine fleeces, others middling, and some rather indifferent; but the whole is considerably improved from the quality of the original Spanish Merinos. In carcass and appearance, I hesitate not to say, they are the most unsightly flock of the kind I ever met with. The Spaniards

entertained an opinion that a looseness of skin under the throat and other parts contributed to the increase of fleece; and they rather encouraged it, so as to produce wrinkles of it in various parts of the body. This idea has always appeared to me as wild as that which some of our theorists have entertained, that by laying the lands in high ridges and low furrows the surface of the earth and its produce was increased. This ridge and furrow system in the sheep the French have so much enlarged on, that in length of years they have produced in this flock individuals with dewlaps almost down to the knees, and folds of skin on the neck, like frills, covering nearly the head. Several of these animals seem to possess pelts of such looseness and size that one skin would nearly hold the carcasses of two such sheep. The pelts themselves are particularly thick, which is unusual with Merino sheep. The rams' fleeces were stated at 14 and the ewes 10lbs. in the grease. By washing they would be reduced half: thus giving seven and five pounds each; but, as I have observed, the sheep were large and in unwashed wool, it is difficult to estimate the real weight, since it differs so much, according to circumstances, as to the state of foulness. The ewes lamb in December.

Such is the Rambouillet flock; of which I

have endeavoured to give a faithful portrait. I have perhaps gone more into detail in consequence of learning, from a conversation I lately had with an experienced French diplomatist, how cheaply they hold our labours, in this cause. "I have read," said he, "all that has been written, and all that has been said in Parliament on the subject, and am satisfied that in England you have tried to propagate the Merino sheep, and have totally failed, and that you can never grow fine wool in your country."

I hope that my countrymen will soon wipe away this reproach; and for myself, having now had opportunity of fully examining into the nature and extent of it, I can only say, that if such be the victory, I am well satisfied with my share in the defeat. I found most of the flocks more or less partaking of the deformity, and some, particularly in the district of Rambouillet, qualified in this respect to rival the parent flock.

Having, it may be thought, been rather unsparing of censure, let me atone by bestowing the mead of praise where it is justly due; and, before I quit this part of the subject, speak of the French shepherd as he truly deserves, and hold him up for a pattern to our own.

Intelligent, faithful, and diligent, he watches his sheep day and night; never absent from

them, he is part and parcel of his flock. By day he patiently tends them, to pick over the scanty stubbles in the open field-state of the country, amidst the numerous small intermixed properties, whilst his light well-trained dogs are employed for useful, not abusive purposes. Of these he has generally three, an old, a middle aged, and a young one in training. The old dog takes his station, lying down with a watchful eye over any trespassers, whilst the middle aged and active dog frequently canters to and fro, at the extreme boundaries between the patches of lucern, or clover, as if kept in motion by clock-work, silent in tongue, and the whelp is either held in a string, or keeps close to his master's heels, to obey him. If he wants to examine the sheep, his steady dogs gather them together, whilst he walks in the midst of them. When he wishes to remove them from place to place, they follow him obediently, whilst he, perhaps, holds an ashen bough in his hand, with which at other times he occasionally feeds them, and the dogs walk silently behind, or even, as I have frequently seen them, close to his heels, at the head of the sheep, without alarming them. His nightly residence is a small cot, drawn upon wheels, under which his dogs lie, to give him alarm in case of the wolfs approach. From this he rises almost at mid-

night, to change the fold ! The reason assigned for it, is, that half the day's fold is sufficient for the land. A far better, I believe, would be, that it is all they can allow it. Midday and midnight are the times spoken of for changing the fold, but two o'clock in the afternoon, and the same hour again in the morning, is, I believe, the usual practice. The sheep are brought out very early, folded in the middle of the day, and again taken to feed till dusk in the evening, which, on those dry arable soils, and even hot climate, is not prejudicial to them, as the folds are set out large.

Such are the arduous labours of the French shepherd and his trusty dogs. In no country, I believe, are the sheep worried by dogs, equal to our own. In Spain, the very large dogs of the flock are used entirely for their defence against the wolves, and in cases of attack the sheep fly to, and gather round them as friends and protectors. If the shepherds wish to remove the flock, they call to them the tame wethers accustomed to feed from their hands, of which they keep a few in every flock, and these, however distant, if within hearing, obey the call, and the rest follow. With us dogs are used too often for worse purposes. I know that in open, unenclosed districts, they are indispensable, but in others,

——— "I wish them, I confess,"  
 "Or better managed, or encouraged less."

Were it possible to break through custom, I would dispense with dogs, (used as they now are) in an enclosed country. If a sheep commits a fault in the sight of an intemperate shepherd, or accidentally offends him, he is "dogged" into obedience. The signal is given, the faithful dog obeys the mandate, and the timid animal flies round the field from the scourge of its keeper, till it becomes half dead with fright and exhaustion, while the trembling flock crowd together, dreading the same fate, and the churl stands firmly fixed, towering in the consciousness of his own strength and victory over a poor, weak, and defenceless animal. Sheep, like man, I am convinced, can be better led than driven. I must now draw this article to a close, though in the outset I had designed in it to complete this head of the subject. I have, however, dilated so much on what to me is a most interesting part of it, that I have already exceeded the limits of former addresses.

#### FIFTH OBSERVATIONS.

My last address closed with a narrative respecting the French shepherd. I have now to speak of the economy in the application of the sheep to purposes of husbandry, according to the system practised in that country; and the better to illustrate it, I must clear the way by first showing what is the state of agriculture itself, in the arable district which I have examined; viz. through Britany, and again the whole line from Calais to Tours, beyond which I have as yet had no opportunity of informing myself. This district, which, in the two directions, ranges over an extent of about 300 miles in length, will amply suffice for my present purpose; and in describing it, I must beg to be understood, as giving the great outline of character, for in every district of such extent, there will be local varieties differing from the bulk, but in none that I ever examined, were those exceptions so few and circumscribed.

The general feature of this part of France, may be stated as that of a wavy surface, ranging mostly over chalk or lime-stone hills, those shelving into open curved vallies, with scarcely

any large flats; the hills from these vallies again rising in easy ascents. Very few parts, especially the more southern, contain any strong bean land, and there is hardly a thing like a springy patch, or blowing sand to be seen. Altogether a dry, middle-soiled district; much of the land being a hazel loam, and with good depth of staple, resting very generally on calcareous rock, but occasionally on gravel. The chalky land is extremely free from surface flints, the chalk very rarely showing itself. A good upland corn and sheep district. The forests are rather considerable, as these are indispensably necessary for fuel, in a country destitute of coal. Though the vineyards abound in some of the more southern parts of this district, on the whole they occupy but a very moderate proportion of it. I will omit the forests, as not being in point to my present purpose, except in passing I shall merely say, I was much disappointed by the want of size and grandeur of the timber in them, which, I presume, arises from these forests having remained in the same state time immemorial, and in consequence of the frequent cutting of copse wood at stated periods, the land has become exhausted, and unequal to throw out large crops of lofty trees. Of the vineyards I shall say still less; for although I have taken some

pains to make myself acquainted with the economy of management in them; yet, with the exception of the vine-trimmings, which are applied to the feeding of cows, and the herbage growing by the sides, and other grassy patches which is cut and brought away on the backs of women, for the use of cows also, they yield nothing which comes in aid of this system of husbandry. The forests and these form the chief deductions from the arable land, as there are no uncultivated heaths, or even hedge rows, nor any permanent pastures, with the exception of some small flats, and sides of rivers, each of which are very limited in number, and narrow in space. The only substitutes approaching permanent herbage, are the patches of lucern; but these I found of much less magnitude than I could expect in such a country; and I was greatly surprised to see scarcely any sainfoil in districts well suited to it. As lucern, however, will bear cutting three times in the season, and sainfoil only once, with an after pasture, the former doubtless is found to supply the best succession of crops for summer fodder; some of it is made into hay. Clover is also cultivated; yet even that to a less extent than I could have expected; but of no plant does land become so soon weary, and a crop can, at best, only be hoped for once in eight years. Perhaps



it has for a long time been grown in this district, and thus the period I have stated might in such case prove a quicker succession than would be profitable. A larger breadth of tares is sown, but neither these or the clover throw out very strong crops. A great portion of each is cut green in summer, and rather a considerable share saved for seed, and but little of either applied to the folding off with sheep.

The general course of husbandry for this land, is wheat after fallow, and this crop is succeeded by oats; then fallow again, except when clover, or tares intervene, thus taking two corn crops in succession. Destructive as this system is, it is heightened by that of the fallows themselves, since by the frequent ploughings which the land receives, and consequent exposure to the sun in so hot a climate, the soil becomes literally bleached; its vegetative powers are thus exhausted, instead of being restored by the regenerating influence of the atmosphere, acting on the broad leaf of turnips, and other green crops, and the soil has thus no aid from manure, by feeding off such crops on the land.

As it may not prove uninteresting, I will give a brief sketch of the implements, and application of them. In the greater part of the district in question, particularly towards the south,

the ploughs are of the wheel pair-horse kind, simple, but not of the best construction. On the stronger soils three horses are used, two behind and one leading; but like the others they are driven by reins, and in this case with a long whip. In such parts I have found the turn-wrist plough in use; but some which I examined had the share the least adapted to the purpose, of any I ever saw. It was entirely round, drawn off to a beautiful fine point, like a large needle, and well suited to strike a seed seam, but wholly unfit to sever and move the subsoil. Three ploughings with such an implement would have less effect on the under-soil, than one with a well constructed share. The draft was certainly considerably lessened by the construction, but the loss in labour was greater than any gain arising from the facility it gave to the operation. The ploughings given on the fallows are many—crossing direct, and sometimes obliquely, and often fluting the soil, as I have already observed, to give it greater exposure to the sun. The harrows are far worse than the ploughs, universally made with wooden teeth, and those long, to allow of frequent sharpening. The teeth are set very gathering, and in foul lands, (of which, I admit, there are very few indeed) they clog greatly. The roll is very little in use, and when it is, but light, and



of the very simplest form, a mere circular piece of wood, without shafts. The hurdles for the fold, or rather light railing framed together, are very high, six or seven feet, to check the first attack of the wolf; and in many districts two folds are set, so that the shepherd in rising after midnight to shift the fold, has only to move the sheep, and not the fence. The whole operation of tillage is well performed, considering the implements. The horses are clean legged, and of middle size, the best of them excellent plough horses, hardy and enduring extraordinary long hours. Having spoken of the French shepherd in just praise, let me not close this article without doing justice also to the ploughman, for he equally merits it.

Intelligent in mind, and active in body, he toils early and late. With the exception of two hours to bait at noon in long, and one in short days, he seems to live in the field. I have seen him at his post soon after day-break in the morning, and at sun-down in the evening, during the months of August and September, ploughing literally as long as he could see to perform it. He would plough a Kentish ploughman out of his bed in the morning, and into it at night, and be active during the day, beneath the influence of a torrid sun, whilst the other would stretch himself under a hedge, to escape the

rays of it. I lament to see so much of his valuable labour thrown away.\*

It cannot be expected that, in such a course, the corn crops throw out much straw; for they are in themselves greatly below what the quality of the soil would warrant the expectation of, and consequently there is very small return to the land in manure; scarcely any except from the stable; for, from the scarcity of winter fodder, very few cows are kept. What manure is raised is wholly applied on the fallows to the wheat crop, and ploughed under in a very strawy state. The sheep-fold is the only auxiliary; and this so scantily afforded, as I have shown under the head of shepherding, as to admit of only half a day's application of it. Though the country in general abounds in chalk or lime-stone on the surface, yet the use of it on such lands, as it forms the subsoil of, would prove far less beneficial than to any other; and I therefore scarcely met with any instance of its being applied in a raw state for manure. The employment of it as lime is nearly as limited, indeed almost unknown, since the deficiency of fuel is a bar to it; and, except on the

\* I was much struck by finding the same exclamations used in driving, as with us. Gee uope! Ah! Wo hee! Imported, doubtless, with the Normans, and retained to this day. Jolly, a name common to our plough-horses, was probably from the French one, Joli, for a beauty.

skirts of some forests, where a small portion of the brushwood was in a very few instances allotted to it, I have seen no lime used as manure. Peat is hardly to be found in this district. With one exception, and that so limited in produce that it could not be afforded for this purpose, I met with no coal. Happy England! how is this isle, by the bounty of Providence, blessed with that which next to food is most requisite to the wants of man; for his domestic purposes; to defend him from the winter's cold; the corner-stone of his manufactures; and by its aid to produce a valuable manure to assist him in the cultivation of the land. Far may the day be distant—but come, I fear, it will—when succeeding generations shall have to reproach their forefathers with having wantonly wasted thousands and tens of thousand tons of this valuable fossil, by igniting the small coal in heaps to destroy it, or by leaving it in the pits to save the expense of raising it. Alas! we rarely ever know the full value of blessings until we have lost them. But I have largely digressed, and must return to the sheep husbandry, for that is my immediate object. I have indeed rambled over the whole field of French agriculture; but it has in truth been to show the vast importance of this branch of it, and the great loss from a defective system practised in it.

The reader, I think, must have already been led to anticipate that there is a great deficiency of sheep kept on this district, by the course of husbandry in practice; and, before I estimate the consequent loss to the community both in meat and wool, I must endeavour to gather some idea of what the number of sheep kept is, with that which it might be.

The former part of the task is the most difficult; since, on enquiry from the shepherds, though they knew how many their flocks contained, they rarely could tell the amount of land their masters occupied. Besides, the circumstances of different individuals must of course materially vary. Some, for instance, might keep the whole flock the entire year; others only part of the flock during the same period; and some, who have not kept breeding flocks, would at particular seasons have no sheep at all. This, therefore, would have been too complicated a way of arriving at any estimate of the numbers, though I attempted to use it as an auxiliary. My ideas on the subject were therefore formed on the best observations I could make as to the winter provision for the flocks, even making large allowances for their being badly kept during that season, and next as to the appearance of the number and size of the flocks themselves compared with the extent of arable

land. The openness of the country affords great facility for observing this; since, from the uninclosed state of the lands, without trees or hedges to intercept the view, the eye ranges from hill to hill; and those accustomed to agricultural pursuits can form a tolerably correct opinion with attention, and my own was rivetted to the subject.

After this view, and weighing the matter fully in my mind, I could not bring myself to suppose that there was a twentieth part of the sheep kept on this district which might be supported in the best course of husbandry.

The more I see of the practice, and contemplate its effects, the more my wonder is excited how they struggle through the winter. If you ask the shepherd how he supports his flock during that season, he tells you with hay. But, making the most ample allowance I can for the use of it, yet, seeing how limited a quantity is saved from the lucern and clover, and making deduction for the horses which are well kept on it, some trifle for the cows, but little then can be left for the sheep. Roots there are none. Straw then must be their chief food at that season; except that, in some districts, dry leaves are brought down from the forests to aid in sustaining them when pinched in winter. I have

indeed seen, in early autumn, a flock passing by eagerly catch up the withered leaves fallen from the walnut tree, a species of food I think truly unpalatable, and such as few sheep would eat. The whole, I believe, may be briefly thus summed up, that in summer they are far from being well fed, and in winter half starved.

I have already observed how large a portion of Merino blood these flocks possess; and I may now, I think, fairly say that their enduring this treatment is a strong proof of the stoutness of such sheep to sustain hard usage. What breed, I would ask, of the British sheep, except those of the mountains and moorlands, would struggle through it? I have long considered that, in an upland light middle soil district, if the land was not springy, sheep could be kept far more safely at all seasons on cultivated food than on any pastures; and not only my own practice, but what I have seen in the district under notice, most fully verifies it. In the whole tract of country I have been speaking of, only two unsound flocks came under my notice, and those were in the district of Rambouillet. The arable land they were on was not of a nature to lead to any such expectation, but the cause to my mind was obvious. I found, as well as I could gather from one of

the shepherds respecting the number of sheep kept in proportion to the quantity of acres his master occupied, that the farm had a much larger flock, in comparison to its size, than I had elsewhere seen. But I observed some streams close by, and the sheep had doubtless been nearly starved in winter and taken to the brook-sides in early spring, a most effectual way of bringing on the rot; and almost every sheep seemed deeply tainted with it. These two were the worst shepherded flocks I met with; and, short as the wool then was, they stood greatly in need of "dagging."

I will now endeavour to sum up the evil effects of such a course of husbandry as I have been referring to, and point out the advantages arising from a better system. Some years ago, when writing on this subject, in a work relating to the state of agriculture and the condition of the lower class of people in the Southern part of Ireland, I sought earnestly to call the public attention towards bringing about an improved state of husbandry in that country, as one of the best means of promoting the interests of the nation at large, and of improving the comforts, condition, and happiness of the people in that island; and I endeavoured, amongst other things, to form a slight estimate of the number

of sheep which might be kept on a given extent of land.\*

That estimate I took very low; viz. only as at the rate of forty sheep to an hundred acres on arable farms, after making deductions for the uncultivated land. I will not now take it very high, and only add ten to the former number, though on good managed farms double the amount is often kept. This, as it will be shown in some subsequent observations, falls very far indeed short of my own practice. Again—to keep my estimate well down, that I may not be accused of overcharging it to support my positions, I will only state the deficiency of the French flocks as of nine-tenths, instead of, as I have supposed, nineteen-twentieths of what they might be if the lands were brought into a very good course of practice.

Let us estimate, then, that a million acres of arable land, with the proportion of fifty sheep on the average to an hundred acres—or, in other words, a sheep to every two acres—will, independent of corn and other crops, well support five hundred thousand sheep; and that, according to an imperfect state of husbandry, like the

\* These observations were published in the years 1810, 1812, and 1822, by Messrs. Rivingtons and Messrs. Hatchards, London.

French, only one-tenth of the number are kept, or fifty thousand instead of half-a-million.

The amount of mutton I will estimate as from those of the size of Merino sheep only; and, having before stated, the wethers moderately fattened, at 8 stone weight each, I must make a deduction of weight, considering half of those fattened off yearly to be ewes, and therefore put the average weight at 7 stone each. For the same reason I will put the price of mutton low, and estimate it at three shillings and four pence per stone, or five pence per pound. I will further suppose them to be fattened off by the time they were three years old, or one-third of the number kept to be brought to market annually.

The account for mutton will stand thus, on the *Better System*: *Defective System*:

<p>500,000 Sheep kept on a million acres, whereof one-third, viz. 166,000 (abating the fraction) or in round numbers, say, 150,000 fattened annually, producing at 7 stone each, 1,050,000 stone weight or</p>	<p>1-9th only of 500,000, viz. 55,555 Sheep kept annually on a million acres, whereof, (abating the fraction) one-third, or 18,500 fattened annually, producing at 7 stone each, 129,500 stone weight, or</p>
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<p>8,400,000 lbs. of mutton, at 5d. per lb. £175,000 in money.</p>	<p>1,036,000 lbs. of mutton, at 5d. per lb. £21,588 (and a fraction) in money.</p>
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Consequently there will be a difference between the two, or loss on the latter, amounting to £143,412 in money, and 7,364,000 lbs. of mutton as human food.

Next, as to the difference in produce of wool, and it is immaterial whether it be estimated wholly on a dry, or in part a breeding flock, supposing a given number to be made off to allow room for the lambs. I shall state the weight of fleece at 3½ lbs. as that, given for an average in the former part of these observations, and I will put the wool at only 1s. per pound, the account will stand thus:—

<p><i>Better System.</i> 500,000 Sheep kept on a million acres of land, therefore say 500,000 fleeces annually, at 3½ lbs. each, or 1,625,000 lbs. of wool, at 1s. per lb. gives £81,250 in money.</p>	<p><i>Defective System.</i> 1-9th only, of 500,000, is 55,555 Sheep kept, (abating the fractions) or 55,555 fleeces annually, or at 3½ lbs. each, or 180,553 lbs. of wool, at 1s. per lb. gives £9,025, and a fraction, in money;</p>
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thus making a deficiency or loss on the latter, of £72,223 in money, and 1,444,447 lbs. of

wool on the defective system, for every million acres of arable land, between a bad and good system, supported by sheep husbandry. The advantages also consequent on the increased produce of human food in corn, brought about by such a different system, would be very great indeed.

I must add one more remark. I have stated, in the course of these observations, how few cows or other cattle are kept in France for want of winter food, which the sheep system is the means of producing. Hence also the deficiency of hides for leather, which occasions the poor peasant to trudge, and the ploughman in many cases to follow the ploughtail the live long day, galled by wooden shoes, which those who had never seen applied, would suppose to be vessels to hold water, rather than to contain the human foot.

Having been often called upon to state my own practice, and as it is now to the purpose, and the best way of showing the number of Merino sheep my farm carries, in proportion to the extent of it, I will enter into the particulars.

It is what may be called a London farm, being only ten miles distant, and consists of not quite 300 acres, which, with the exception of a meadow of two acres, are wholly under the plough.

The land is thus employed:—half, or 150 acres, are annually in corn, nearly 100 of them wheat, and about 50 acres of spring corn.

I have been accustomed to grow a large breadth of potatoes, which, with the clovers, occupied about 70 acres, leaving from 70 to 80 more to be cultivated in green crops for the sheep and horses. The first crop of clover is made into hay, unless from scarcity of tares for the horses, any be wanted to cut green for them. The sheep, except at a great pinch, have none of it; but part, or the whole of the second growth, according to circumstances, is fed off by them. They have only the worst of the hay. Some of the corn land is sown with trefoil, which comes in for sheep feed, and the land thus occupied forms a portion of that appropriated to the sheep. The rest of that number of acres are thus cropped:—

Rye for the first spring feed, folded off on the land, which is again sown with rape, or turnips, to be fed off. Next comes the trefoil land, in succession for sheep feed. Then winter sown tares; and such land, after folding off this crop, is sown with rape, or turnips, which are fed off on the land. This feed is followed by spring sown tares, which are fed off also; but such land is seldom ready for turnips to be fed off in time for wheat to follow, which the

winter tare land is. About 20 acres of this portion of land is applied to Swedish turnips, and Mangel Wurzel; for having two kinds of crops, the chance of success is greater, the latter being of the most certain, as not affected by the fly. These are pulled on the land, topped and tailed, at the cost of about six or seven shillings per acre, (hands being then plenty,) they are then drawn off, and if time will permit, at the season, carted close to the yard, to be there stacked, care being had to grow these crops as near home as possible. The turnips are piled in lengths, between two rows of hurdles, (supported by strong stakes,) set at two hurdles breadth apart, and when filled to the top of the hurdles, the turnips are afterwards drawn to a ridge, like the roof of a house, then thatched. The Mangel Wurzel is set in rows on the ground, and drawn up gradually into a ridge, from the bottom till about six or seven feet high, the heads of the roots on the outsides being kept even. A thin covering of straw is first put over, and then banked a foot thick with earth, regard being had to keep the wet from entering. At first a few openings are left for the damp to escape, in the manner of flues to hay stacks. These are afterwards closed, to prevent the wet entering, which in the first instance is kept out by a covering of straw.

When the season sets in very wet, so that the ground becomes at all poachy, the sheep are brought into the yard; those from the strongest parts of the land first, the others in succession, according to circumstances.

This "par yard," is, in size, about 250 feet by 140, enclosed by small open sheds set on posts, and thatched. Three sides of the yard are allotted to the sheep, and one to the other stock. The different kinds of sheep are separated by hurdles, and it will thus winter 700, of which 300 being breeding ewes, are lambed down in February.

About the end of that month, or beginning of March, as soon as the land is tolerably dry, the store sheep go out of the yard, to give more room for the couples. Whilst in the yard, they are fed with the stacked roots (which, in the most severe frost and snow are thus always ready for them) together with the oat and barley straw. What they waste of the straw, which is but little, is spread over the yard, and a thin sprinkling of other straw is thrown over from time to time, to keep the yard clean. The dung is removed at least once in the winter, from under the sheep, as the long continuance of it in a heating, or very foul state, would be prejudicial to them. Some late sown turnips, rape, or rye, are, as much as possible, provided near to the yard, for the ewes and lambs to go out, at first



by day, to feed off; and in seasons when roots have been very scarce, it has been needful to give some linseed, or cake, in early spring, as the young rye is a griping food; but this is by no means a general practice. The ewes, as I have said, have some of the worst hay, with straw, after lambing, unless there be any pea or bean halm. Each of these is a favourite kind of food with sheep, and when a year old they are very safe; but if given, when very new, and in great quantities, they are found at times somewhat griping. The sheep, from strong instinct, go under the sheds in heavy rain.

This, then, is the outline of practice; and I am convinced, that for any breed of short woolled sheep, kept on arable soils, which are at all adhesive in the depth of winter, as good wheat soils are, the yard part of it is invaluable.

A few years since, in an extremely wet winter, I had a strong proof of the superiority of the practice. On a neighbouring farm there was a flock of West-downs, "brave, strong, boney sheep," as the shepherds call them, feeding off turnips on the land; with good hay allowed them. They were under the care of one of the most experienced and careful shepherds in the country, but, with all his management, they lost condition, puddled the land, and wasted a very large portion of the turnips.

I had at the same time 100 Merino wethers

in the yard, fattening fast on the Swedish turnips, and of which they did not waste an handful.

The West-downs were not fit for market in the spring, and remained unsold. Mine were ready, and most of them sold to a respectable butcher in London, who kills a great deal of Merino mutton, and is very partial to it.\* He was highly pleased with the sheep, and praised them much, except that part were rather too fat, as he preferred those of from 7 to 8 stone weight, rather than from 9 to 10, which some of them reached. He was very desirous of having the whole, but could not take them fast enough, as the turnips were nearly gone.

The rest were killed, and sent to market, where the carcasses brought the highest price of any mutton of the day.

I have now, in completion of this statement, to add the number of sheep which my farm has thus carried, and to show it fully I must state a few particulars. I sell some wheat straw, and at times have occasion to supply its place by purchasing oat, barley, pea, or bean straw.

Respecting the number of sheep kept, I will observe, that in the autumn of the year, between tares and turnips, I have been accustomed to put out some part of the flock to after-grass, but I wish in future to avoid it.

\* Mr. Hurry, of Sun Court, Curzon Street, Mayfair.



In this way I have, in one year, kept a thousand sheep, but I was over stocked. I am confident, however, from experience, according to the practice which I have stated, that I can thus keep on the farm 750, by allowing from 70 to 80 acres wholly to their use. I have now full 700, (including the ewes which are to lamb down) and feel satisfied, that, by purchasing some oat, barley, pea, or bean straw, or rather substituting it for wheat straw, I can fully support them till the rye will be ready in the spring. This, therefore, is at the rate of ten sheep to the acre for the land wholly allotted to them, or two and a half to the acre on the whole farm; and which is five times the amount of what I have formed my calculation of, as to the number to each acre, on the general sheep husbandry.

Now, I will ask those who think meanly of the Merino sheep, or the most sanguine advocate for the Southdown sheep, and those who consider that three of the latter can be kept on the same quantity of land as one of the former, whether they can suppose that thrice the amount of my sheep, viz. two thousand two hundred and fifty, could be thus kept on such a sized farm, with only 75 acres wholly applied to them; or whether five hundred Southdown sheep would not have been a very large flock to be thus kept. If so, then I think I have fairly

made out from practice, that three Merinos' can be kept for two Southdowns'.

I must observe, that this amount, *being one-fourth of the land* thus appropriated wholly to the sheep, is not more than, under the old course of the fallow system, would have laid idle each year, and which is thus annually well dressed. I scarcely need speak of the value of the yard-made dung so produced, and which, by being again applied as a good dressing, for the Swedish turnips, and Mangel Wurzel crops, leaves that land, after drawing off the roots, good enough for a corn crop and seeds.

I now, therefore, in the language of Council, say,—“This is my case!”

I wish, however, to add a few parting words.

#### CONCLUDING OBSERVATIONS.

In taking a retrospective view of the statements which I have now been making, I am led to flatter myself it will be apparent to others, as it long has been to me, that the British Isles, so far from being unsuited to the growth of fine wool, possess advantages which render them well calculated to produce it; and that it wants but attention and energy in improving the present short wools of the country

to accomplish that great object, calculated at once to yield individual and general profit to the nation, and render it in that respect independent.

The work of reformation in the wool, I am aware, is one which will be set about with reluctance, by leading sheep breeders; for in cases where men have been accustomed to obtain from ten to an hundred guineas for a ram, they naturally cling to what has heretofore brought them great profit; hoping, that however adverse the present appearance as to the value of the wool they grow may be, yet that some change will take place to render it more valuable. Thus trusting the event to chance, rather than undergo a temporary change, whilst they effect improvement in the wool; and which they would be eminently calculated to accomplish, if their abilities were as diligently and earnestly employed in the pursuit of, as they have been in improving the form and fatting qualities of the sheep.

Minor sheep breeders are, therefore, the most likely to commence the change; and if rams of the highest classes of fine wooled sheep could be afforded to them at a low rate, I feel persuaded that they would be the most likely to set about it, since they have much to gain, and nothing even in idea to lose.

If neither party strive to attain this object, I think no one who has carefully perused the evidence given before the Committee of the Lords, can but feel convinced that the wool of this country must continue to accumulate in heaps, as it is there stated to do, whilst foreign wools are largely used, unless there be a total prohibition put to the latter; but I have no reluctance to say, that I think some degree of legislative aid will be needful to support the change, seeing the vantage ground which other countries have gained, from our apathy; and the more so, as I think there can be no doubt but that overwhelming influence of importation has been one amongst the causes which have operated to lead sheep breeders to seek for the making up the value of their fleeces by weight in them, and the carcass of the sheep, as long as that system would work to advantage.

I have been induced to state this matter thus strongly, from having heard it said, whilst these pages are writing, there are some men who assert, that if wool became even far more depressed than at present, they would sooner adhere to their flocks in the present state, than effect a change by the means I have pointed out. Be it so, for no man has a right to gainsay, much less to quarrel with those who consider that their individual interests will be best pro-

moted by the course they are following; but inasmuch as the labours of each contribute more or less to the benefit of the whole, it may be deeply to be deplored, if the community suffer thereby.

In fairness, however, I think such men (if any such there be) should withdraw from the list of those who call on the legislature for aid to support them in wool growing. The cause itself is a good one; and well worthy of the labours of that exalted Nobleman, who, with a manly, independent, and persevering spirit, claimed investigation, and to be heard, when investigation and hearing were well nigh stifled.

To him the country is truly indebted for his zeal and strenuous exertions; but let not those who urge him forward, say, We can only consent to follow the course which we have set out in. They cannot themselves, if they calmly view the evidence which they and others have given before the Committee of the Lords; and truly weigh the balance, but feel, I think, convinced, that the growth of clothing wool in this country has arrived at a crisis, and that we must either go forward or backwards in the scale of nations as producing it. This, as far as their own interests are concerned, is for them to consider and act upon as they deem best; but it too often happens,

that men, in the eager pursuit of one object, lose sight of another. It was this which led the great improver of the Leicestershire sheep (Bakewell) to say, he should prefer a breed of sheep without wool, since his great object was fat; which, in his time, was produced six inches thick on the ribs of a sheep.

In a national point of view, we are indeed told that great advantages will arise from deriving a supply of wool from our Colonies, and also from the continent of Europe, through the substitution of other trade for any deficiency in the growth of wool. But, were there no other reasons, I should truly lament to see this country forego the production of that which it is within its own means to accomplish, with the flattering hope of some speculative advantage; and thus throw away the resources within its own bosom in the pursuit of some visionary phantom of greater gain.

To our Colonies I wish all prosperity, and a due share afforded them in the production of this and every other commodity, which they, as well as these isles, can yield; and with the Continental Powers I wish to see every liberal policy pursued, by a mutual exchange of commerce; but not to prostitute or yield our own prosperity, arising from the advantages we possess. For dire would be the day when this country be-

came dependent on other nations, or even on our own colonies.

What British heart would, not sicken, to hear it said, much more to see it acted upon, that the native oak, which, navigated by skill, enterprise, and courage, has carried our commerce safe, and our flag triumphant, to the remotest regions of the globe, will now no longer thrive on its own soil; and, therefore—or with the fallacious expectation of gaining some greater advantage by it—we ceased cultivating this majestic tree, to derive a supply of ship timber from foreign parts.

So is it with wool—for who can look back without strong emotion to the day when our forefathers, in honest pride, placed the Lord High Chancellor of the realm on the wool-sack, in token of our national dependence on that great staple article of commerce, and but feel shame and remorse, if we now hold fast the emblem and let go the substance.

There yet remains one important point to speak of, in summing up this matter.

I have long considered that the British Isles, under great exertions with the best system of agriculture, are capable of supporting many millions more inhabitants than they now sustain, and of which, I lament to say, that a very large portion fall far short in almost every comfort.

In the observations which I have already referred to, as those I published on the state of agriculture, and condition of the poor in Ireland, and particularly those of the year 1812, I endeavoured to show what vast resources that island possesses, if they were brought into action by a better system of agriculture; and how much the comfort and condition of the inhabitants might be thus improved, as well as to what extent the prosperity of the nation at large could be thereby advanced.

I am also most firmly of opinion, that the agricultural resources of this Island likewise, are as yet very far from being brought into that state of productiveness which the best course of husbandry on arable lands, is capable of yielding.

If all this be true, whence the great dread of our population, which of late seems to have caused such alarm, and to have been so much lamented?

Let us, then, rather turn our thoughts to better measures, than forming theories which would almost lead to the practice of transporting and drowning of the people as the best means of promoting the interests of man and doing God service. Far rather let us look to Him as the all-wise Author and Fountain of all good, and lift up our hearts in gratitude and contentment

for that in his bounty he has blessed our isles with fertility, and multiplied inhabitants upon them; <sup>lest</sup> by numbering the people, and murmuring at the amount, ~~lest~~ we provoke him to smite, or, by inordinate and extravagant ambition, cause him to withdraw those blessings which in his mercy he has so largely bestowed upon us.

That thus, with wise measures in our councils, and redoubled energies and industry on our parts, Heaven may smile upon our labours, so that "the folds shall be full of sheep: the vallies also shall stand so thick with corn, that they shall laugh and sing."

"That our garner may be full and plenteous, with all manner of store: that our sheep may bring forth thousands, and ten thousands in our streets."

"That our oxen may be strong to labour; that there be no decay: no leading into captivity, and no complaining in our streets."

"Happy are the people that are in such a case!"