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R E P O R T

RESPECTING

BREAD, CORN, &c. &c.

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*Ordered to be printed 10th February 1800.*

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R E P O R T.

Lunæ, 10<sup>o</sup> die Februarii 1800.

THE COMMITTEE appointed to consider of Means for rendering more effectual the Provisions of an Act, made in the 13th Year of the Reign of His present MAJESTY, intituled, "An Act for better regulating the Affize and making of BREAD;" and who were instructed to consider of the most effectual Means of remedying any Inconveniencies which may arise from the Deficiency of the last Crop of Grain; and empowered to report their Proceedings, from Time to Time, to the House;

HAVE proceeded, in pursuance of the Orders of the House, to consider of the Provisions of the said Act; and are decidedly of Opinion, that the Act in its present State is completely ineffectual for the Purposes for which it was intended; that the Regulations contained in it are in many Respects defective; and that the Execution of it would be totally incompatible with the present Mode of setting the Affize of Bread by Law, and would answer no Object, unless, at the Time when Bakers are prohibited from making, according to the Demand of their Customers, different Kinds of Bread; Millers should be prohibited from manufacturing different Sorts of Flour.

Your Committee proceeded next to consider, how far it might be proper to recommend to the House to adopt such further Regulations

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regulations and Restrictions; and as they understood a Prejudice existed in some Parts of the Country against any coarser Sort of Bread than that which is at present known by the Name of the "Fine Household Bread," on the Ground that the former was less wholesome and nutritious than the latter, they thought it important to obtain the Opinions of some eminent and respectable Physicians on this Point. The Result of their Evidence appears to be, that although a Change of any Sort of Food, which forms so great a Part of the Sustenance of Man, might, for a Time, affect some Constitutions, that as soon as Persons were habituated to it, the Standard Wheaten Bread, or even Bread of a coarser Sort, would be equally wholesome with the Fine Wheaten Bread which is now generally used in the Metropolis; but that in their Opinion, the Fine Wheaten Bread would go further with Persons who have no other Food, than the same Quantity of a Bread of a coarser Sort.

Your Committee were next desirous of ascertaining, whether a Standard Bread was likely to be acceptable to the People of this Metropolis; they have examined for this Purpose several considerable Bakers, who agree in stating, that scarcely any Bread is consumed in the Metropolis but that which is made from the Fine Wheaten Flour; that Attempts have been formerly made in Times of Scarcity to introduce a coarser Species of Bread into Use, but without Success; and that in their Opinion, the high Price of Bread would be considered, by the lower Classes of People, as a small Evil, when compared with any Measures which would have the Effect of compelling them to consume a Bread to which they have not been accustomed.

Your Committee then proceeded to enquire, whether a Measure, which compelled the Millers to manufacture only One Sort of Flour, would be likely to increase the Quantity of Sustenance for Man. It has been stated to Your Committee, that, according to the Mode of manufacturing Flour for London and its Neighbourhood, a Bushel of Wheat, weighing 60 lbs. produced 47 lbs. of Flour, of all Descriptions, which were applied in various Ways directly to the Sustenance of Man; that about 11b. was the Waste in grinding, and the remaining 12lb. consisted of Bran and Pollards, which were made use of for feeding Poultry, Swine, and Cattle.

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Cattle. It has, however, been suggested, that if only One Sort of Flour was permitted to be made, and a different Mode of dressing it was adopted, so as to leave in it the finer Pollards, 52lb. of Flour might be extracted from a Bushel of Wheat, of the before-mentioned Weight, instead of 47lbs.; that this Proportion of the Wheat would afford a wholesome and nutritious Food, and would add to the Quantity, for the Sustenance of Man, in Places where the Fine Household Bread is now used, 5lbs. on every Bushel, or somewhat more than One Ninth. But as this Saving is computed on a finer Wheat, and of greater Weight per Bushel than the Average of the last Crop may produce, and can only apply to those Places which have been stated, and as a coarser Bread is actually in Use in many Parts of the Country, the Saving on the whole Consumption would, according to this Calculation, be very considerably reduced.

Your Committee have considered how far other Circumstances might operate, or the Saving likely to be made of Flour by adopting this Proposition: They beg Leave in the first Place to observe, that if the Physicians are well founded in their Opinion, that Bread of a coarser Quality will not go equally far with the fine Wheaten Bread, an increased Consumption of Bread would be the Consequence of the Measure, and this increased Consumption might in a considerable Degree make up for any Saving which might result from the Use of the finer Pollards: In the second Place, if the Millers were permitted to make only One Sort of Flour, it is to be apprehended, that Sieves would be introduced into many private Families for the Purpose of sifting the Flour to different Degrees of Fineness: such a Practice might, in Times of Scarcity, increase the Evils which it would be the Intention of Parliament to remedy: The Quantity of Flour extracted from a Bushel of Wheat, depends very much on the Skill of the Miller, and the Perfection of his Machinery. The Extent of his Concern, and his Interest in his Trade, is a Security that he will endeavour to draw from the Grain whatever it will produce; but the comparative Want of Skill, and Want of Attention to the nicer Parts of the Operation, in private Families, might lead upon the Whole to a very great and unnecessary Expenditure and Waste of Flour.

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Your Committee are of Opinion, that to change by Law the Food of a large Part of the Community, is a Measure of the greatest Delicacy, and on the Face of it highly objectionable. If a considerable Benefit could be proved to arise from it to the Community at large, Your Committee might be induced to recommend it, notwithstanding any Inconveniencies which might for a Time result from it; but from all the Consideration Your Committee have been able to give to this Subject, and from the Evidence which has appeared before them, they are not satisfied that any Saving would arise proportionate to the Disadvantages that would, in the first Instance, necessarily attend upon it.

Your Committee have hitherto confined their Observations to the Idea of compelling the People, by Law, to consume a particular Sort of Bread. They are sorry, however, to be under the Necessity of stating, that, in consequence of the last wet and unfavourable Season, the Crops have been unusually deficient; and although a considerable Importation of Wheat from Foreign Countries has already taken place, and more may be expected, yet they feel, that they should not discharge their Duty, unless they strongly recommended to all Individuals to use every Means in their Power to reduce the Consumption of Wheaten Flour in their Families, and encourage in the District in which they live, by their Example, Influence, and Authority, every possible Oeconomy of this Article.

Impressed with the Idea of the Importance of such Oeconomy at the present Moment, your Committee earnestly recommend the Adoption of a Measure, which, from the unanimous Opinion of those who have appeared in Evidence before them, would lead to a very considerable Saving of Wheat Flour. The Evidence of the Bakers who have been examined before your Committee, cannot fail to convince the House, that in Families where Bread which has been baked for some Hours is used, the Consumption is far less considerable, than in those where it is the Custom to eat it new. They differ in the Proportion of this Saving, some have stated it as amounting to One Third, some as amounting to One-Fifth, and others only to One Eighth; but when it is considered, that One Half of the Bread in London is consumed the Day on which it is baked, there can be no Doubt that a great Saving would

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would ensue (perhaps One Tenth or Twelfth Part of the whole Consumption in London) if the Bakers were prohibited from selling it, until Twenty-four Hours after it was baked. Your Committee are strongly induced to recommend this Measure, from the Consideration that a very respectable Physician has given it as his decided Opinion, that new Bread is far less wholesome than that which has been baked a certain Number of Hours; and they think it important to add, that in the Opinion of the Bakers in the Metropolis, no material Inconvenience or Detriment to their Trade would arise from adopting this Regulation.

Your Committee have heard, with very great Concern, that from the mistaken Application of the Charity of Individuals, in some Parts of the Country, Flour and Bread have been delivered to the Poor at a reduced Price; a Practice which may contribute very considerably to increase the Inconveniencies arising from the Deficiency of the last Crop: And they recommend that all Charity and Parochial Relief should be given, as far as is practicable, in any other Articles except Bread, Flour, and Money, and that the Part of it which is necessary for the Sustenance of the Poor, should be distributed in Soups, Rice, Potatoes, or other Substitutes. Your Committee are of Opinion, that if this Regulation was generally adopted, it would not only, in a very great Degree, contribute to economize at this Time the Consumption of Flour, but that it might have the Effect of gradually introducing into Use, a more wholesome and nutritious Species of Food than that to which the Poor are at present accustomed.

Your Committee think it important to state, before they conclude, that Government, in Conformity to the Declaration of the Chancellor of the Exchequer in the last Session of Parliament, have abstained from all Interference in the Purchases of Corn in the Foreign Markets; and, as they conceive the Speculations of Individuals are more likely to produce an adequate Supply of Foreign Wheat at the present Crisis, than any other Measures that could be adopted, the Policy of Government in this Respect meets with the decided Approbation of Your Committee.

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A P P E N D I X.

Appendix, N<sup>o</sup> 1.

Examination of Dr. WILLIAM MACKINEN FRASER.

ARE you of Opinion that Bread made of the Whole of the Flour, is equally nutritious and wholesome with that made of the finest Wheaten Flour?  
 I am not of Opinion it is equally nutritious, because I do not conceive it to be equally, in all its Parts, digestible in the Stomach, as the Finest. I conceive some of its Parts not at all digestible. The Mixture of the coarser Parts also gives a laxative Quality to the Bread.

What Part and Proportion of the coarser Parts should you think it necessary to sift from the Flour, so as to leave the Remainder of it for Bread of a wholesome and nutritious Quality?

I should think the broad Bran and the coarse Pollard should be sifted from the Flour; the broad Bran I conceive to be from 3lbs. to 4lbs. at 6lbs. the Bushel of Wheat. I am not so accurate respecting the Pollard; I conceive it might vary, but I should think about 4lbs. All the rest would be wholesome and nutritious Food.

Appendix, N<sup>o</sup> 2.

Examination of Dr. GILBERT BLANE.

ARE you of Opinion that Bread made of the Whole of the Flour is equally nutritious and wholesome with that made of the finest Wheaten Flour?

Wheat differs from all other Grain in this Respect, that it contains a large Proportion of a glutinous Matter peculiar to itself. This Matter being of an Animal Nature, is probably more nutritious than the other Principles of which Grain consists.

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This glutinous Matter is found in much larger Proportion in the external Part of the Grain than in the central Part. The Difference of the Standard and Household Bread from the White Bread, consists in the former having a larger Proportion of the external Part of the Grain, upon which the Brown Colour depends; and I have found, by an Experiment which I have made myself, that the Standard Flour contains double the Quantity of the glutinous Matter that there is in the White Flour.

But as this highly nutritious glutinous Matter is more difficult of Digestion, as appears by the Brown Bread sometimes disagreeing with the Stomach and Bowels of those who are accustomed to eat the White, it may not in all Cases be equally nutritious and wholesome as the latter.

What Part or Proportion of the coarser Parts should you think it necessary to sift from the Flour, so as to leave the greatest Quantity of wholesome Food for Man?

I am of Opinion that, independently of Habit, the Brown is in all Respects preferable to the White, and that the Whole of the Grain is nutritious, except the Husk or coarse Bran, which I believe does not enter into any Class of Bread.

I wish to suggest to the Committee, that it would be of great Advantage if Bakers were prohibited from selling their Bread for Forty-eight Hours after its being baked; a considerable Saving would thereby arise, and the Bread would be more wholesome.

The Bakers compute that One Half of the Bread is consumed in London the Day on which it is baked. I understand the Saving by the general Use of stale Bread would be from 8 to 12 Loaves in 136.

Appendix, N° 3.

Examination of Dr. Sir WALTER FARQUHAR.

ARE you of Opinion that Bread made of the Whole of the Flour is equally nutritious and wholesome with that made of the finest Wheaten Flour?

I am of Opinion that the Whole of the Wheat, with the Husks only taken out, would be equally nutritious with the fine Wheaten Flour, and I am convinced as wholesome, after People had become accustomed to it; at first I have known it disagree with the Stomach, and bring on some uncomfortable Feelings in the Bowels, but after a little Time I have known that give way.

Appendix,

Appendix, N° 4.

Examination of Dr. JOHN COAKLEY LETTSOM.

ARE you of Opinion that Bread made of the Whole of the Flour, is equally nutritious and wholesome with that made of the finest Wheaten Flour?

First, respecting their being equally nutritious, I am of Opinion the Coarser is not so nutritious as the Fine Wheaten Bread which is at present used; with respect to Wholesomeness, I believe the coarser Bread, if People were used to it, would be equally wholesome; they would require more of it, because there is less Nutriment in it. I conceive the Whole of the Flour to be wholesome except the Hull or Husk. As to what is called the Common Brown or Household Bread, I do not conceive in general any Inconvenience to the Health of the People would result from the Change from Fine Wheaten Bread to that. I wish to suggest, that in many Cases an Addition of the coarser Parts, to the very fine Parts may contribute to make the Food more digestible.

Appendix, N° 5.

Examination of Mr. THOMAS LOVELAND, Baker, Aldergate Street.

SUPPOSING 52 lbs. of Flour to be got out of a Bushel of Wheat, weighing 60 lbs. what Effect do you think that would have upon the Market? I am not competent to answer that Question.

Do you conceive, that if the Legislature were to order only a particular Sort of Flour to be ground, and the Bread to be made out of that Flour was to be of a coarser Sort than that which is at present used in the Metropolis, that it would be acceptable to your Customers? To the Majority it would not.

Would it be so to the lower Orders of your Customers? It would not.

If the making only a coarser Sort of Bread than what is at present used would be equally agreeable to your Customers, would it be any Detriment to your Trade?

As I am certain that a Sack of coarse Flour would not make as much Bread as a Sack of fine Flour, unless an additional Allowance was made to the Bakers, it would not be equally profitable.

Is not the Affize set in such a Manner, at present, as to make it unfavourable to Bakers to bake Standard Wheaten Bread rather than Fine?

Certainly it is; but the Affize is equally favourable to making the present Household Bread, and making the Fine Wheaten Bread.

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What Proportion of Household Bread do you make for your Customers at present?

I make none; my Customers would not use it. At the last Scarcity I made it for some Time, but I found they would not eat it.

Do you know whether Flour made of the Whole of the Wheat, without taking out any but the Coarse Pollards and Bran, would make as much Bread to the Sack of Flour as the Fine Flour at present used?

I think it would not. When Governor Pownall's Act was passed, I made some of that Bread, and from it I found it would not make the Quantity that a Sack of Fine Household would. The Difference was trifling, perhaps a Quartern Loaf out of a Sack.

How many Quartern Loaves do you make out of a Sack of Flour?

Upon an Average Eighty.—A Sack of Flour weighs 280lbs. and produces Twenty Peck Loaves, of 17lbs. 6oz. each; it yields a Weight of 347lbs. 8oz. which makes an additional Weight of 67lbs. 8oz. in Water, Yeast, and Salt.

Do you not think, that the Adoption of the Regulations in Pownall's Act, are impracticable with the present Mode of setting the Assize?

I think they are.

Is there any Mode that you think might be adopted, in order to economize the Expenditure of Wheat, Wheat Flour, or Bread?

The only Mode that has occurred to me, is to prohibit the Sale of new Bread, that the Baker should not sell it before Twenty-four Hours after baking.

What would be the Amount of the Saving if this Mode was adopted?

I think the Saving in London would be One Sixth.

Would there be any Objection to prohibit the Baker from selling it before Forty-eight Hours?

I think not.

Would the Saving be greater in that Case than at Twenty-four Hours?

I think it would, but cannot say how much. I think also this Bread would be more wholesome than new Bread.

Are you of Opinion, that the same Quantity of Bread, baked for Twenty-four or Forty-eight Hours, would be equally nutritive, and go as far by Way of Food as new Bread, notwithstanding its Loss in Weight?

I think it would be equally nutritive, and would go further; my Reason is this, we have Customers who eat new Bread (poor Families) and we observe that their Consumption, although the same Number in Family, and although of the same Class of Life, is more than that Family who eat stale Bread, in the Proportion of about One Sixth.

Do you think that the great Difference of Price between the fine Wheaten Bread, and that made of the Whole of the Wheat, except the Pollards and Coarse Bran, would not induce the common People to purchase it on Account of that great Difference?

I think it would not; my Reason is, when I made the Bread of the Whole Produce

Produce of the Wheat, except the Pollards and Bran, I found the People would not eat it; I beg to observe, that notwithstanding the great Price of Bread, the poorer Part of my Customers pay for it with Cheerfulness.

Mr. Loveland being again examined, stated, That he had weighed Two Quartern Loaves fresh drawn on the Tuesday Morning at Ten o'Clock, and again on the following Morning at Ten o'Clock, and found they had lost each in Weight about an Ounce and Three Quarters: On the next Morning at Ten o'Clock he re-weighed the same Loaves, and found they had lost rather better than Two Ounces in the Whole.

Mr. Loveland also confirmed what he had stated on his former Examination, respecting the Saving that would arise from prohibiting the Use of new Bread; and added, that Three Fourths of the Bread he sold was new, and he believed the greatest Part was consumed while in that State: And,

A Sample of Meal, which was first produced to the Committee by Mr. Alderman Watton, being shewn the Witness, he was asked, Whether that Meal would make such a Sort of Bread as his Customers would like? he said, It would not.

Appendix, No 6.

Examination of Mr. ALEXANDER URQUHART, Baker, at Wapping.

DO you conceive, that if the Legislature were to order only a particular Sort of Flour to be ground, and the Bread to be made out of that Flour was to be of a coarser Sort than that which is at present used in the Metropolis, that it would be acceptable to your Customers?

I have baked the Household Bread near Thirty Years; I make it of a very good Quality, and I can never find Sale for it from the Poor, but from better Sort of Housekeepers, who make it their Choice. I live in a very populous but poor Neighbourhood.

If the making only a coarser Sort of Bread than what is at present used would be equally agreeable to your Customers, would it be any Detriment to your Trade?

I conceive that it would, because the coarser Sort of Flour would not keep any Time in Hand, neither produce the like Quantity of Bread.

How many Peck Loaves do you make from a Sack of fine Flour?

Twenty.

Is not the present Mode of setting the Assize more favourable to the Baker in the making of the Fine Wheaten Bread, than in the making of coarser Bread?

I conceive that it is, because there is a particular Regularity in making fine Flour at present, the Millers vying with each other to produce good Articles.



Is there any Mode that you think might be adopted in order to economize the Expenditure of Wheat, Wheat Flour, or Bread?

At present, the Poor and working People eat their Bread new; and I conceive, by Experience, that stale Bread is much more serviceable than new; that is, it is wholesomer, and goes much farther. I conceive that Seven Quarterns of stale Bread will go as far as Eight new, supposing the Bread kept Twenty-four Hours.

From the Period of drawing the Bread from the Oven to the Expiration of Twenty-four Hours, what would it lose?

An Ounce, or an Ounce and a Half. In Forty-eight Hours Two Ounces.

Do you think there would be any Objection in obliging Bakers to keep it Forty-eight Hours?

I think it would be rather too long. The Bakers of small Capital would find an Inconvenience. Twenty-four Hours would be no material Inconvenience to any Part of the Trade.

Do you think that the greatest Difference of Price between the fine Wheaten Bread and that made of the Whole of the Wheat, except the Pollards and Coarse Bran, would not induce the common People to purchase it on Account of that great Difference?

I can answer, I think positively, they would object to it. We who keep Retail Shops, and who retail to the Poor, have much to do to please them.

Do you mean that they would object to any Change from the fine Wheaten Bread to any coarser Bread, which, of course, would be considerably cheaper, although it should contain the Whole of the fine Flour?

I am now in Possession of many of their Opinions which pass in my Shop, and I conceive they would object.

Suppose the Legislature were to direct that only one Sort of Flour should be made, would it not obviate the Objections on the Part of your Customers?

With Part of them, which we call our regular Customers, and Housekeepers, by those it would be thought fair and equitable; but the labouring Part would still object.

Appendix, N<sup>o</sup> 7.

Examination of Mr. JAMES JOHNSTON, Baker, Strand.

Do you conceive, that if the Legislature were to order only a particular Sort of Flour to be ground, and the Bread to be made out of that Flour was to be of a coarser Sort than that which is at present used in the Metropolis, that it would be acceptable to your Customers?

I think it would not, for this Reason: Some short Time ago, I sent to Market

Market to order Five Sacks of the Standard Meal, but got only One; on the Sunday following, my Man, out of Mistake, mixed it with the other Flour in the Trough; there were Twelve Bushels in all, Five of which were of this Sort. On the Monday Morning, when our Customers arrived, we told them of the Mistake, and that we in consequence would abate a Penny on the Quartern Loaf; but they in general were quite dissatisfied with it, and desired to have no more of it, saying that it would not go so far.

Is not the Assize set in such a Manner at present, as to make it unfavourable to Bakers to bake Standard Wheaten Bread, rather than Fine? Certainly it is.

Is there any Mode that you think might be adopted in order to economize the Expenditure of Wheat, Wheat Flour, or Bread?

Stale Bread:—I should recommend by all Means, that the Legislature should enact, that Bakers should not sell Bread that had not been baked Twenty-four Hours; which Bread would go further, and be a great deal wholesomer. Nine Loaves, in that Case, would go as far as Twelve new Ones. I think I speak within Bounds.

When you mention that Nine stale Loaves would go as far as Twelve new Ones, do you speak upon Experience, and what is that Experience?

That is, when a Family let themselves run out of stale Bread, and have nothing but new, they will always eat Three Loaves extra; we know it by the Bills of our Customers; and we know that One Half of the Bread which is baked To-day, will be eat by the poorer Sort of People in the Course of the Day.

What Loss of Weight will there be in the Quartern Loaf in Twenty-four Hours?

Two Ounces, according to the Experience I have had.

Then Mr. Johnston delivered in to the Committee a Paper, by which it appeared, that in the Metropolis alone 160 Sacks of Flour, consisting of Five Bushels each, would be saved per Day by the Adoption of stale Bread, which would amount in the Year to 58,240 Sacks.

Was that Estimate made by yourself alone, or in Conjunction with others in the Trade?

In Conjunction with others of the Trade.

Do you, from your Knowledge of the Trade, believe, that what is consumed in the making of Gingerbread might be applied towards making Biscuits?

I do; and I wish to suggest, that there might be a considerable Saving to prohibit the making of Fancy Biscuits.

Appendix, N° 8.

Examination of Mr. JAMES CRIGHTON, Baker, Goodman's Fields.

IN your Neighbourhood do you think that Bread made of the Standard Wheaten Flour would be agreeable to your Customers?

No; because I have tried the Household Bread, and even that is not approved of: One Family tried the Household Bread, and found that it did not go so far as the same Weight of the finer Bread.

Have you any Mode by which you can ascertain the Difference in Consumption in the same Family, by using new Bread and stale?

Yes: In Two Sugar Houfes which I serve, and One of them being out of Bread One Week, they were obliged to use new Bread, and they consumed 44 Loaves instead of 30. The general Rule in the Sugar Houfe was, to eat Bread at the Third Day, and not sooner.

What Proportion of Bread is eaten new in the Metropolis?

More than Half of what I bake; and I have a considerable Trade; I consume 25 Sacks per Week.

Appendix, N° 9.

Examination of Mr. WILLIAM KINGSFORD, Miller, near Canterbury.

SUPPOSING a Bushel of Wheat to weigh 60lbs. what is the Quantity of Flour of all Descriptions, and of Pollards and Bran, produced from that Bushel?

My Calculations are made by the Quarter of 8 Bushels Winchester Measure: Lofs in Grinding 12lbs. The Average Produce of Fine Flour, which is now used in the City of London for making the best Bread, 5½ Bushels, at 56lbs. per Bushel, taking the Middlings together (for we bring every Thing into Use that we can get from the Wheat) One Bushel; the Remainder is Bran and Pollard.

It appearing that about 14½ lbs. go to Pollards, Bran, and Waste, is any Part of these Pollards and Bran applied to the Sustainance of Man?

Not when made for the London Market; and we manufacture our Flour for the Bakers in the Country in the same Manner as for London. The Country People, who are not accustomed to eat Fine Bread, like to have a cheaper Food, and have provided for them a Mixture as follows: We take Two Sacks of Wheat made into entire Meal, from which nothing has been taken, and then to that we add One Sack of Middlings; the Lofs upon the Two Sacks made into entire Meal

Meal is only 8 lbs; but then we could not make Use of this entire Meal, without having the Middlings mixed with it.

In your Trade, what is the Proportion consumed of this Mixture, compared with the Consumption of the Fine Flour?

The Whole of the Middlings we make, goes into this Mixture of Meal for Bread.

Supposing (taking upon the general Average of your Trade) 125 Quarters of Wheat manufactured, what Proportion of those 125 Quarters are manufactured and used as entire Meal?

The Fifth Part of that Quantity I manufacture and use as entire Meal.

Do you conceive, that a greater Proportion of Sustainance for Man could be obtained by manufacturing your Wheat in any other Manner?

It is possible to eat the whole Wheat of good Quality, without taking from it any Bran.

Have you large Concerns in the Country?

My Concerns in the County of Kent are as large, if not larger, than any other Miller in the County.

What Kind of Bread do the People whom you supply with Flour in the Country generally consume?

In Towns and large Villages the finer Bread is generally consumed; but in the smaller Villages, and amongst the labouring Part of the Community, the coarser Bread is generally used; there is considerably more coarse Bread made in the Villages.

Would it be most advantageous to the Public, that Bread should be made, containing more of the Bran and Pollard, or that the present System of dividing the Flour should be continued?

I am of Opinion, that if the People are permitted to eat what Kind of Bread they chuse, and the Millers are left to make such Kind of Mixtures as are in Demand, that more of the Produce of the Wheat will be consumed for the Sustainance of Man than if any Restrictions were imposed. One of my Reasons is, that a great Quantity of Wheat is frequently so bad, that unless we are allowed to take out the Bran it would not be fit for Consumption; therefore any Enactment that obliged us to dress the Meal with a certain Quantity of Bran in it, must have the Effect of throwing that Quantity out of Consumption. Another Reason is, that those Persons who did not chuse to eat coarse Bread, and wanted finer Flour for other Purposes, would sift it themselves, and by doing it less skilfully than the Millers, would occasion a very great Waste.

Do you conceive there would be any material Inconvenience in prohibiting the Manufacture of that finer Sort of Flour called Hertfordshire Whites, of which, Rolls and Fancy Bread are made?

Certainly not; but I don't think any Benefit would arise from it.

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20 APPENDIX, Nos. 9 & 10. [BREAD, CORN, &c.]

Have you supplied Flour for the Purpose of making Biscuits for the Navy?  
I have sold that Sort of Flour to the Biscuit Bakers.

What Sort of Flour did you sell for that Purpose?  
Middlings.

Is it your Opinion, that the greater Proportion of Bran there is in the Flour, the less liable it is to keep?

Certainly: If Meal is shipped for London in the Spring, any Delay by contrary Winds, &c. will make it heat, and on its Arrival unfit for Use.

Will that Kind of Flour from which 8lbs. of Pollard and Bran are taken from 60lbs. of dry Wheat, keep a necessary Time, without being heated so as to be essentially hurt?

I think in the Summer Months it would be dangerous to ship that Kind of Flour for the London Market.

Appendix, N<sup>o</sup> 10.

Examination of Mr. JOSEPH WEBB PILCHER, Miller, near Dover.

SUPPOSING a Bushel of Wheat to weigh 60lbs. what is the Quantity of Flour of all Descriptions, and of Pollards and Bran, produced from that Bushel?

I take it, upon the Quarter, 12lbs. Waste in grinding; 66lbs. Seconds, Thirds, and Middlings; and 94lbs. of Pollards and Bran; of fine Flour 308lbs. In this Manner I dress it for the London Market.

For what Purpose is the Pollard used?  
It is not applied as Bread.

Do you dress the Flour in any other Manner for the Country?

I make an inferior Sort of Flour out of the Wheats which have been badly harvested, which I mix with some of the Best and some of the Middlings.

If you were prohibited from dressing any Flour but of One Sort, and were not allowed to divide it according to the present System of milling, could you make use of the ill-conditioned Wheats for the Purpose of making Flour?

No, we could not. The Reason is, these Wheats, while thrashing, get stale and fenny; and if that was to go into the Bread, it could not be eat.

In an indifferent Harvest what is the Proportion of Wheats of this Description?

Such a Harvest as this, we have many Parishes in our Neighbourhood where there is very little Wheat but of that Description.

Does Wheat varying in Quality require different Degrees of dressing to be made into Flour?

Pollards and Bran in the inferior Wheat will weigh more than in the best.  
Would

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Would it be most advantageous to the Public, on the whole, that Bread should be made containing more of the Bran and Pollard, or the present System of dividing the Flour should be continued?

I conceive if we depart from the present System of dividing the Flour, it will be an Injury to the Metropolis, because we cannot work the Wheats that will make an Average for the Goods to keep till they are consumed, sending them here for a Market; and we are to expect, when Wheats are imported in the Spring, many of them will come in bad Condition, such as heated, stale, &c. the best of which we can manufacture so as it can be consumed, but the Pollard will have so much of that Staleness or Mustiness, that it may remain in the Market and spoil.

Do you mean to say, that the less Pollard there is taken from the Flour, the less capable the Meal is of being kept?

Yes; and I am so convinced of it, that I discontinued working my Mill for the London Market for Two Reasons; first, because I thought that the Flour so prepared would not keep, and secondly, I did not chuse to run any Risk before I knew whether the Magistracy of London would issue an Order of Sessions for making the Standard Wheaten only.

How do you judge that the Standard Wheaten Flour is more liable to Damage than the other?

I judge from my own Experience, having made it frequently for Camps.

Do you think that the Suspense now existing, whether the Provisions of the Act 13 Geo. III. C. 62. being in force, has any evil Effect upon the Supply of the London Market?

So far as it concerns myself I think it has that Effect.

Do you think that Wheat could be made to produce more Sustenance for Man than it does at present?

No, I do not think it can.

Do you think that the prohibiting what is called the Hertfordshire Whites would be of any Use?

No, I do not; all the Rest of the Flour is consumed for the Use of Man, as well as it would have been if the Whites had not been taken out.

Appendix, N<sup>o</sup> 11.

Examination of Mr. JOHN DUNKIN, Miller and Flour Factor.

ARE you of Opinion, that if a Law was enacted to prohibit the Use of any but One Species of Flour, that more would be obtained for the Sustenance of Man than is obtained at present?

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I am of Opinion, that more would be got for the Sufenance of Man by dressing it in the usual Way, by dividing the Flour as at present, than by making only One Sort of Meal.

Do you think that the ill-conditioned Wheat could be used for the Sufenance of Man, unless there were some fine Flour to be mixed with it?

I am convinced it could not.

Is the Proportion of the ill-conditioned Wheat at present considerable?

I expect there will be a great Proportion; but we have not had much of that Description which has as yet come to Market; much of the Foreign Wheat that may come to Market in the Spring will probably be in such a State, that if it was ground into Standard Meal, the Pollard that would be in it would be so musty that it would not be fit to eat.

Will Meal keep better or worse, in proportion as it contains a greater Quantity of Bran and Pollard?

The larger the Proportion of Bran and Pollard the worse it will keep.

Do you think that the Sufense of Millers and Mealmen, whether the Magistrates of London will enforce the Act of 13th Geo. III. has had a Tendency to lessen the Supplies of Flour to the London Market?

I am satisfied it has, from the Uncertainty of the Sale of what Wheat the Millers sent to Market.

What Sort of Meal is generally used in making Biscuits for the King's Service?

The Meal we sell for that Purpose is of the best Quality.

What Weight does that Meal bear, in proportion to the Wheat from which it is made?

In proportion of about 50 or 52 lbs. to 60lbs. by the Bushel.

Would prohibiting the Use of the Hertfordshire Whites encrease the Quantity of Sufenance for Man?

None whatever; very few Whites are now used.

Appendix, N<sup>o</sup> 12.

Examination of Mr. JOHN KILLICK, Miller, Hackney Mills.

DO you remember the Sale of some Flour, sold on Account of Government, at the Langbourn Ward Coffee-house, about a Month ago?

Yes.

Of what Quality was that Flour?

Extremely inferior the greater Part was.

Was

Was it calculated for Bakers' Use in the Metropolis?  
No.

Who were the Buyers?

People from Portsmouth, Liverpool, Southampton, and the Out Ports.

What Proportion to the Average Price of the Day did they sell for?

From 40s. to 20s. per Sack under the Average Price of Baker's Flour.

Are you sure that no considerable Part of that Flour was bought by Mealmen, or Bakers, for the Purpose of making Bread to feed the Inhabitants of the Metropolis?

I am certain none by Bakers, and I am almost certain none by Mealmen—The Biscuit Bakers would not even buy it.

Are you of Opinion, that if a Law was enacted to prohibit the Use of any but one Species of Flour, that more could be obtained for the Sufenance of Man than is obtained at present?

I think none.

Is there not about One Sixth, or from 390lbs. to 400lbs. of Pollards and Bran in the grinding and dressing of a Load of Wheat, which is not used in any Way as the Food of Man?

That is generally the Proportion, excepting when the Red Stuff is re-ground, which is sometimes the Case.

Will Wheat of different Qualities produce different Proportions of Bran and Pollard when it is reduced into Flour?

The finer the Quality of the Wheat, the less will be the Produce of the Bran and Pollard.

Is this Difference considerable?

There is a great deal of Pains in the Manufactory, or it would be very considerable.

Could badly harvested Wheat be converted into Flour fit for the Food of Man, unless it was mixed with good Wheat, or unless it was so dressed that a large Proportion of Bran and Pollard was taken from it?

The colder the Sample, the greater Proportion of fine Wheat will be required to make Flour such as to please the Bakers—and ground by itself it would not answer the Purpose without being impregnated with Wheat of superior Quality—Bad Wheats may be used, but more Labour is required in the Manufactory.

Have you been in the Custom of grinding entire Wheat for the Purpose of making Bread in that State?

Not for London.

What

What Sort of Bread may be made from Meal from which 8 or 10lbs. of Pollard and Bran out of 60lbs. of Wheat has been taken?

A very decent and sweet Loaf—not bright to the Eye, and not so large in Size.

Do you think that Meal will keep more or less in good Condition according to the Quantity of Bran and Pollard contained in it?

It will set it on fire; taking the Bran and Pollard out is the Means of keeping the Flour.

What Quantity of Bran and Pollard do you think it necessary to take out of the Flour so as to make it keep?

It will keep, if dressed through a 12s. Cloth, as well as in any State, excepting the fine Flour.

Suppose Flour made in March, and found stale and bad in October, what Condition do you suppose it would have been in, in the same Period, if it had remained in whole raw Meal?

It would be musty, and quite unfit for Use—On the other Hand, stale Flour would be very valuable after the next Harvest to mix with the new.

Appendix, N<sup>o</sup>. 13.

Examination of Mr. CHARLES PRATT, Tottenham Mills, Middlesex.

SUPPOSING a Bushel of Wheat to weigh 60 lbs. what is the Produce of it, according to the present Mode of dividing it?

In Waite 1 1/4 lb.—fine Flour 30 lbs.—of Seconds and fine Middlings about 10 lbs.—and of coarse Middlings about 5 lbs.—Pollards and Bran, 13 1/2 lbs.

Are you of Opinion, that if a Law was enacted to prohibit the Use of any but One Species of Flour; that more could be obtained for the Sustenance of Man than is obtained at present?

Certainly not; I consider that in the present Mode of Manufacture, if any Thing is left, it is put over a Mill and re-dressed, so as to extract from it every Particle of Flour. It frequently happens that the Proportion of Bran and Pollard is not as much as 13 1/2 lbs. out of a Bushel weighing 60 lbs. In indifferent Wheat the Bran and Pollard is considerably more than in the finer.

Is there any Wheat so damaged and indifferent in Quality, that the Bran and Pollard, or Offal produced from it, will be as much as the Flour of all Descriptions?

There are Cases in which the Quantity of Bran and Pollard is as much as the Quantity of Flour, if the Wheat is manufactured in that State.

If you was prohibited from taking more than 7 lbs. of Pollard and Bran out of a Bushel of Wheat, what Use would you make of the damaged Wheat?

I certainly should not mix that with better Wheat, and it would not, in my Opinion, come into the Consumption of the London Trade.

Is Flour more or less capable of being kept, in proportion as it has more or less of the Bran and Pollard in it?

I have no Doubt that the finer Flour will keep better than the coarser.

Do you ever supply Flour for the West Indies?

I have.

Of what Quality?

Seconds.

Do you occasionally supply Flour, with which Biscuits is made for the King's Navy?

Yes; frequently to the King's Bake Houses at Deptford.

Of what Quality?

Dressed through a 13 Shilling Cloth, which yields a Meal of about Three Fourths of the Weight of the Wheat.

Did you see the Samples of the Flour which were brought to this Market after the Departure of the Troops from Holland, and which was afterwards sold by Auction at the Langbourne Ward Coffee House?

I saw several Samples in Mr. Scott's Hands, none of which were calculated for the Use of the Bakers in the Metropolis. I don't know by whom they were bought, or at what Prices they were sold, but I understand they were bought for distant Markets; and the Prices were very low compared with our best Flour, but high in proportion to the Quality of the Flour.

Do you conceive that a Continuance of the Suspension, whether the Magistrates of London will enforce the Act of 13 Geo. III. or not, has a Tendency to check the Supplies of the London Market?

I conceive very much for the Mills at a Distance, but the neighbouring Mills can vary in the Mode of dressing whenever the Order might be given.

Does any Mode occur to you by which a Saving can be made in the Expenditure of Wheat, Wheaten Flour, or Bread?

I don't know of any.

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Appendix, N<sup>o</sup> 14.

Examination of Mr. JOHN FELL, Flour Factor, Southwark.

ARE you of Opinion, that if a Law was enacted to prohibit the Use of any but One Species of Flour, that more could be obtained for the Sustenance of Man than is obtained at present?

My Opinion is, that a small Saving might be made of the finest Pollard, but the Saving would be inconsiderable, perhaps from 1 to 2 lbs. in a Bushel, and I am not confident it would be beneficial; it would make the Bread considerably coarser, not only from the Use of this small Quantity, but there would be superadded to that all the Middlings, which the Biscuit Bakers now use.

Do you think that the ill-conditioned Wheat could be used for the Sustenance of Man, unless there were some fine Flour to be mixed with it?  
I think it could not.

Is the Standard Wheaten Flour equally capable of being kept as the finer dressed Flour?

I am perfectly of Opinion, that in proportion as it contains more of Bran and Pollard, it is the more liable to spoil, either in the Hands of the Bakers or the Mealmen.

Do you think that the Suspense now existing, whether the Provisions of the Act 3<sup>th</sup> Geo. III. C. 62. being in force, has any evil Effect upon the Supply of the London Market?

It has already had a very unfavourable Effect, by stopping the Supply of the Market, the Millers not knowing what Articles would be saleable. I believe they will think it a serious Thing to send even fine Flour to London, from the Danger of its heating, at the present high Price, but the Danger would be increased by sending Meal, because, in case of any Injury, it must be kept till next Harvest, at a great Risk of a Reduction in Price, for the Purpose of being worked up with new Flour. I think the best Plan of Economy that can be adopted will be a Prohibition to the Bakers from selling Bread for a given Space of Time after it is drawn from the Oven. I think the Difference by eating new Bread and old is full One Fourth, and the Saving will be to that Amount, in the same proportion to which new Bread is now eaten.

Appendix,

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Appendix, N<sup>o</sup> 15.

Examination of Mr. JAMES PERRY, of Merton Mills, Surrey.

DO you make use of these Mills yourself at present?  
I have done; but I grind at present for hire.

Are you of Opinion, that if a Law was enacted to prohibit the Use of any but One Species of Flour, that more could be obtained for the Sustenance of Man than is obtained at present?

I believe more could be obtained in Weight, but certainly not more for the Nourishment of Man. I think it would be extremely dangerous to change the Mode of Manufacture so far as to make the Metropolis depend only upon the Mills in the Vicinity of London, which must be the Case if the Standard Wheaten Bread only was allowed to be consumed, because the humid Nature of whole Meal renders it unfit to be kept for any Length of Time, particularly in warm Weather.

Do you think that the ill conditioned Wheat could be used for the Sustenance of Man, unless there were some fine Flour to be mixed with it?

I think it is only by correcting the Flour of the ill-conditioned Wheat by a proportionate Mixture of the fine Flour that it can be made into Bread; perhaps it is also equally impossible to correct it, or to add to the Quantity by the Addition or Mixture of any other Kind of Grain.

Appendix,

Appendix, N° 16.

Examination of Mr. SAMUEL WYATT (late belonging to the Albion Mills.)

IN grinding 60lbs. of Wheat, how much do you allow for the Waste, in the present Mode of manufacturing it for the London Market? From Three Quarters to One Pound.

How much Bran and Pollard will the 60lbs. of Wheat yield? 12lbs.; all the Remainder, namely 47lbs., is Flour.

Do you conceive, that out of a Bushel weighing 60lbs. a greater Proportion of it could be applied to the Food of Man than is at present applied, and what is that Proportion?

Certainly may; I know that only 7½lbs. (that is 7lbs. in Bran and Half a Pound in Waste) need be taken from Wheat of that Quality, instead of 13lbs. according to the present Mode of Manufacture.

Do you conceive, that in the present Emergency, and with a View of bringing into Consumption the Proportion of Flour you have stated, that it would be desirable to prohibit the Millers from grinding more than One Sort of Flour? Certainly.

Is the Flour manufactured in the Way you have described (that is 52½lbs. from 60lbs. of Wheat) more or less liable to Heat or Injury than what is made in the present Mode?

Less liable; in the first Place it will be manufactured for One Third less Expence; the Stones will be laid higher, and not so close together, what they call ground high; on that Account the Flour will keep a great deal better by being ground high, because in grinding for fine Flour as they do now, the Generality of the Wheat is squeezed so much in the grinding, by the Stones being laid closer together, that it is more liable to take Heat.

Will it be more advantageous to the Public, that the Biscuit Bakers should have Recourse to One general Sort of Flour, rather than to have a Selection, according to the present Mode of dividing it?

In the first Place, the Brown Bread Flour, made from the Whole of the Wheat, with the Broad Bran only taken out in the Proportion above-mentioned, would make a better Sort of Biscuit than what is now used by the Merchant Ships. If you were to suffer the Sharps to be taken out, it would injure the Bakers Bread, because they are the most substantial Part of the Wheat, and they furnish the lively Part of the Wheat for baking, and that raises the Bread in the Oven; the Result will be, that the Biscuits for the King's Ships will be the same as at present; they are made from Flour with the Broad Bran only taken out.

Appendix,

Appendix, N° 17.

Examination of Mr. Alderman WATSON.

ARE you of Opinion, that if a Law was enacted to prohibit the Use of any but one Species of Flour, that more could be obtained for the Sustainance of Man than is obtained at present?

I am of Opinion, that if the Wheat when ground should have nothing taken from it, but by Means of a 12 s. seamed Cloth, more Sustainance for Man would be drawn from it than is obtained by making finer Flour; upon the Average of marketable English Wheat, I should think at least One Fifth more.

Do you take into your Account, in that Calculation, the Use at present made of what is called Seconds, Thirds, and Middlings, which do not appear at present to be lost for the Sustainance of Man?

I do: The Grounds of my Calculation are, that a considerable Part of what is taken from the Bushel of Wheat, by Means of fine dressing, and may not now be applied for the Sustainance of Man, would then come into that Use by Means of dressing the Meal through a 12 s. seamed Cloth.

Mr. Alderman Watson then delivered in a Paper, on which he said he founded his Calculations; viz.

	Weight per Quarter.	Produce per Quarter.			
		Army Flour.	Coarse Pollard.	Bran.	Waste.
Prime Wheat - -	462 lbs.	374 lbs.	28 lbs.	44 lbs.	16 lbs.
Middle Price D° - -	448 lbs.	360 lbs.	28 lbs.	44 lbs.	16 lbs.
Low Price D° - -	438 lbs.	342 lbs.	28 lbs.	52 lbs.	16 lbs.

	Supposed Price of Wheat per Quarter.	Proportional Value of		
		Army Flour, per Sack.	Coarse Pollard, per Quarter.	Bran, per Quarter.
Prime Wheat - -	50 s.	40 s.	14 to 16 s.	8 to 10 s.
Middle priced D° - -	44 s.			
Low priced D° - -	40 s.			

OBSERVATIONS.

“ The Price of Army Flour is nearly the same, whether produced from prime Wheat or inferior Sorts; in regard to Fine Flour, there is a Difference, as prime Wheat will produce whiter Flour.

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"The Value of Army Flour as above put down, is what the Miller would sell it for (supposing the Price of Wheat to be as assumed) including his Profit and all Charges, and he would for that Sum deliver it at the Baker's House, if at a moderate Distance. But if you purchase your Wheat, and have it manufactured, the Flour will come cheaper. You then pay for grinding and dressing 2 s. 6 d. per Load of 5 Quarters, or 2 s. 6 d. per Quarter; you also pay the Expence to and from the Mill. Lighterage on Wheat bought on Ship Board, in the Port of London, is from 3 d. to 8 d. per Quarter, according to the Distance of the Mill. The Carriage of the Flour from the Mill, varies according to Circumstances.

"Flour weighs 56 lbs. per Bushel, without Distinction.  
 "Coarse Pollard from 14 to 16 lbs. } per Bushel.  
 "Bran - - - from 11 to 13 lbs. }

"The Price of Pollard and Bran does not rise and fall in proportion to the Price of Wheat, but is more governed by the Seasons, and the Price of Oats, Barley, and Beans, for which Grains it is a Substitute in many Cases; it is dearer in Winter and Spring, than in Summer and Autumn.

"The Waste in grinding and dressing White Flour, is greater than in manufacturing Army Flour, and will be from 24 to 32 lbs. per Quarter, instead of 16 lbs. as above stated.

"The Quantity of Bread produced from the best dry Samples of Army Flour, is 37 8 lbs.; whereas the like Flour made from inferior Grain, will not produce more than 36 lbs. Such Wheat would be much improved, and produce more Bread, if a little Kiln dried. A Sack of White Flour will not produce as much Bread as a Sack of Army Flour; the latter taking more Water (called Liquor by the Bakers.)

Mr. Alderman Watfon likewise produced to the Committee a Loaf, made according to the following Contract; viz.

Camp Bread.

"The Bread to be made of good marketable English Wheaten Flour, out of which the Bran has been taken by Means of a Twelve Shilling feamed Cloth, and well prepared, and baked into Loaves of Six Pounds, or Three Pounds each, as may be directed. In the baking of which Leaven shall not be used, except when Yeast cannot possibly be procured."

CALCULATION.

1 Quarter of Wheat, 60lbs. per Bushel	- - -	is	480
Deduct Waste in grinding and dressing	- - -		6
			<hr/>
			474
Deduct Bran, suppose 6 lbs. per Bushel	- - -		48
			<hr/>
			426 lbs.
			<hr/>
The Sack of Meal 280lbs. will produce, at least 61			
Loaves of well baked Bread, weighing 6lbs. each,			
equal to 8 3/4 Quartern Loaves of 4 lbs. 5 1/2 ozs.			

On the 7th June 1799.	Contract for Bread at Windfor Camp; 6lbs.	- - -	a.	9 7/8
	Which for the Quartern Loaf of 4lbs. 5 1/2 ozs.	- - -	is	7 1/8
				<hr/>
				15 3/8
On the 21st Nov. 1799.	Contract for Bread in the Isle of Wight, 6lbs.	- - -		11 1/8
	Which for the Quartern Loaf of 4 lbs. 5 1/2 ozs.	- - -	is	11 1/8

At

At this last Price the Troops in the Isle of Wight are now supplied, and the Contractors do not complain.

Do you think that the ill-conditioned Wheat could be made Use of for the Sustainance of Man, without either mixing it with good Wheat, or without taking from it a greater Proportion of Bran and Pollard than is taken from good Wheat?

I am not competent to answer the first Part of the Question, but I think the more inferior the Wheat, the larger Quantity of Bran and Pollard must be taken from it.

Will Flour or Meal keep better or worse in proportion to the Quantity of Bran and Flour being left in it?

To this Question I cannot hesitate to say, that I know from Experience the coarser the Meal the better it will keep, and bear transporting, and I wish now to give Instances of this Fact. The Meal which I constantly used for supplying the Army on the Continent was very coarse; it never spoiled upon my Hands, though much of it was kept for many Months. I do not recollect having One Sack of Meal condemned during the whole Service; but still further, that when in July last, I was directed to make Provision for an Army on the Continent, I wrote to a respectable House at Bremen, who had before served me, and to another at Hamburg, immediately to provide very large Quantities of Meal made from Wheat, and I sent them a Sample of Meal dressed through a Twelve Shilling feamed Cloth, to the end I might have it equally good.

[Sample produced.]

They were not capable of making the Whole so fine, and had my Permission to provide me a Quantity totally unsifted.

[Samples of which were produced.]

This Meal not being wanted for the Service but in a very slight Proportion, it was ordered to be brought to England, where Part has arrived, and Part, from the Severity of the Frost, is detained on Ship-board waiting for a Thaw. It is from that Part which has arrived which I produce the Samples of sifted and unsifted Meal. It was not made from Kiln-dried Wheat: it had remained in Magazines at Hamburg and Bremen in Sacks for some Months. Some of it on Ship-board from Eight to Ten Weeks, and yet arrived here in such perfect Condition, that Mr. Scott, who has had the Charge of it from its Arrival, has not reported to me of any Part of what remains in Danger of being spoiled. A Part has been sold to the Mealmen or Bakers by public Auction, and none of them have complained of its Quality, and it sold for a good Price. The Part which remains on Ship-board, and where I was apprehensive it might heat, I am informed by Letters as late as the 7th of the present Month, that it was still perfectly cool, and in good Order, and in no Danger of spoiling; from such Meal as the unsifted, the British Troops on the Continent in 1794-5 had their Bread made by me, and I never had a Complaint of its being bad in Quality, or of its lacking Strength to support them. If I could have had it in sufficient Quantities sifted through a Twelve Shilling Cloth, it certainly would have been done. Some Time in May or June 1798, I was directed to provide a very considerable Quantity of fine Flour, and to lay it into Magazines between London and Windfor; it was provided under the immediate Direction of Mr. Claude Scott; fresh Flour, and I was under the Necessity of



of having it constantly sifted to prevent it from spoiling, at a considerable Expence and Waste, and in the Autumn of that Year, it was sold by Mr. Scott, at public Sales as stale Flour; from these Instances it is I have ventured to give it as my firm Opinion, that the coarser the Meal the better it will keep.

Do you think if there was only one Species of Bread, of an inferior Quality to the present, consumed by all Classes, that the lower Orders of the People in this Metropolis would not be satisfied with it?

I think I should libel the People if I said they would not, provided they should be convinced of the Necessity of such Arrangements; and I much fear that Necessity exists.

Do you think that any other Means so effectual can be taken to induce the People to use Bread made from Meal so sifted through a 12 s. seamed Cloth, as that of prohibiting the Millers from making any other Meal for Sale?

I am of Opinion that no other Means can prove so effectual, and that Bread made therefrom, would be less liable to Adulteration than if made from Fine Flour.

Have you any Reason to believe that the Foreign Meal you have before described, underwent any Operation to make it keep?

I have Reason to believe it underwent no Operation whatever.

Mr. Alderman Watson being again examined, said, That when he stated in his former Examination, that Coarse Flour would keep better than Fine, he meant if they were both kept equally dry; in case of any Wet coming to them, the Fine Flour would undoubtedly resist it the most.

Are you of Opinion, that the Act 13 Geo. III. Cap. 62. can in any Degree be rendered effectual, even locally, at the Discretion of the Magistrates, unless the Restrictions of that Act are extended to Millers?

I am of Opinion, that the Power given to the Magistrates, if exercised, would be the Means of the People wanting Bread, for unless the Millers are compelled to furnish the Meal necessary to the making of the Bread, the Power of the Magistrates and the Efforts of the Bakers would prove ineffectual.

Can you suggest any other Means of bringing into Use a greater Quantity of the Produce of the Wheat, or effecting a Saving of that Article in the Consumption of Bread?

I know no other Means of increasing the Material necessary to the making of Bread from Wheat, but that of having it dressed through a 12 s. seamed Cloth, but I think the Consumption of Bread would be materially lessened by prohibiting the Bakers from selling any Bread but what should be drawn from the Oven at least Twenty-four Hours before disposed of, and I know by Experience that this would lessen the Consumption materially.

Appendix, N° 18.

Examination of Mr. CLAUDE SCOTT, Corn Merchant.

WHAT is your Opinion, from the best Information you have been able to obtain, of the Produce of the last Harvest, as to Wheat?

In general, I understand, the Produce turns out to be unusually defective; on the whole I question whether the Produce will turn out more than Half a good Crop; for in the most productive Counties, such as Essex, Kent, and Suffolk, I understand the medium Produce is not more than Two Quarters per Acre; the Quality however is good. In other Counties, particularly the Northern Counties, the Harvest has been less productive, and the Quality unusually bad.

What Prospect do you conceive there is of a Supply of Wheat from Foreign Countries?

I think generally the Supply will be moderate; the Crops in general abroad have not been very productive, and in some Parts, where we usually look for Supplies, the Exportation has lately been prohibited; I mean the Prussian Provinces bordering on the Elbe. Our principal source of Supply may be looked for this Year from the Baltic, and chiefly from Poland; for the Produce of the Harvest in the Prussian Provinces bordering on the Baltic has been unusually bad, and the Quality very light and inferior. A considerable Quantity may be looked for from Poland, if there is no Obstruction to its Passage to the Shipping Ports. I have no Means of judging the precise Quantity from that Part, but I hope it will be considerable, for the high Prices of Great Britain will be the Means of bringing all they can spare. The King of Prussia has already prohibited the Export of all other Grain but Wheat; and it is apprehended that Prohibition may be extended to Wheat, particularly in the Event of a further Advance in the Prices in Great Britain, which might create an Alarm in those Countries. Some Quantity of Wheat may also be expected from Russia, but I have no Means of ascertaining how much. The Exportation of Corn is strictly prohibited from Holland, Flanders, and France. By very recent Informations from Havre de Grace, I am informed that the Crop of Wheat in France is One Third less than the preceding Year; the Prices One Third higher, but compared to the Price in other Countries they are very low. With respect to America, by the last Advices, which came yesterday; dated Philadelphia, 25th December last, and by previous Advices, the Produce of the Crop in America last Year exceeds that of any Year for the last Seven Years, but far short of what has been the Produce preceding that Period; the Reason is, the Devastation committed by the Hessian Fly, which has discouraged the Growth of Wheat. Some Quantity of Flour in particular may be expected from thence, although the Prices there are very high. The Prices of Flour, including all Charges of Freight, &c. would stand in about 90 s. per Sack, and of Wheat about 100 s. per Quarter. I understand likewise that a Quantity may be expected from Canada, but I have no Information what Quantity, or at what Prices.

Do you conceive that there are any Means, and what are they, of economizing the Quantity of Wheat now in the Country?

From the Opinions I have collected from all Persons concerned in the Corn Trade, and which coincide with my own, I do not know any better Means of economizing

œconomizing the Consumption of Wheat, than by recommending to the Public not to eat any Bread until it has been baked a certain Number of Hours.

Do you conceive that prohibiting the Millers from making more than one Sort of Flour, would or would not lead to any Economy of that Article?

I do think it would not, because I believe that nearly the whole Produce of the Wheat is consumed directly for human Food, and indirectly so in the Support of Swine and Poultry; a small Part is likewise used for Horses.

Do you conceive that any Part of the Wheat, which is now applied to the Support of Swine, Poultry, and Cattle, could be applied to Advantage in increasing the Quantity of Bread for Man?

I believe not, because the very high Price of Flour, I conceive, is a strong Inducement to the Millers to introduce as much of the Meal into Flour of the different Divisions, as can be made use of to Advantage for the Sustenance of Man.

From your own Experience, do you know whether Coarse Flour or Fine Flour will keep longest without Damage, and will bear best the Water Carriage?

Most undoubtedly Fine Flour will keep longest in any Situation; and that, I think, is proved by the American Flour, which is the finest in the World, keeping in good Condition much longer than any other Flour of the best Sort in Europe. The greater the Mixture of Bran in any Flour, the greater Tendency there is to Fermentation.

Do you not suppose a greater Proportion of Flour might, on Emergency, be acquired for the Food of Man by a different Method of dressing the Flour than is now practised in London and its Neighbourhood?

I have already stated, that nearly the whole Produce of the Grain, in my Opinion, goes to the Sustenance of Man; but I conceive a Manufacturer of Wheat is better qualified to answer this Question in detail.

Does not American Flour keep longer than the Flour taken from European Wheat, in consequence of the American Corn being in its Nature much drier?

Doubtless the drier the Wheat is the longer will the Flour keep: But I have observed, that the Meal which I have been directed to provide for the Purposes of Government, has been more subject to Heat than Flour; by Meal, I mean the whole Produce of the Wheat, except the Bran. The finer the Meal is dressed, the longer, in my Opinion, will the Flour keep.

If 8 lbs. of Pollards and Bran are taken from 60 lbs. of Wheat, will the Flour be too coarse to keep a sufficient Time for the London Markets?

If it came from a distant County in warm Weather, it would be very liable to heat, particularly under Circumstances of the last Harvest.

Has the Market of the Metropolis suffered any Check in the Supply of Flour, from the Doubts entertained by the Millers, particularly the distant ones, whether the Act 13 Geo. III. will be enforced by the Magistrates of the City of London?

I do not believe those Doubts have yet had that Tendency, because the Millers have concluded, as far as I have been able to learn, that sufficient Time would

would be allowed them to dispose of their Flour, made in the usual Manner: But it may have operated as some Check in supplying themselves with Wheat; because if those Provisions should be enforced, they might be less dainty as to the Sort of Wheat they need purchase for the Supply of the London Market.

Do you remember the Sale of Meal at the Langbourn-Ward Coffee House, under the Instruction of Mr. Commissary Watson?

There were Two Sales—the last about Three Weeks ago, consisting of Two Descriptions, one called Sifted Meal, the other Unsifted. I do not recollect the particular Prices they sold for, but I believe there was a Difference of about 10s. per Bag between each other of 144 lbs.

To what Purposes was that Meal applied?

Most of it was purchased for the distant Counties.

Was any bought by the Mealmen and Bakers?

Not much; some was purchased by Biscuit Bakers—it was not Kiln-dried.

In what Condition was it?

It came all cool, but some of it had been out of Condition; on the Whole, the Quality was very good.

Was it fit for making Household Bread?

Not in its then present State as Meal.

What do you mean by a good Crop of Wheat?

That which of itself is sufficient to supply the Consumption of the Country.

As half the Supply necessary for the Consumption of the Country is deficient, how do you suppose that Deficiency will be made up?

I consider there was a great Surplus, at the Commencement of this Harvest, of the Produce of the last Year, perhaps Two Months Consumption of the Country, and also a Quantity of Foreign Wheat, that was in different Ports of the Kingdom, nevertheless, I am clearly of Opinion there will be no Possibility of obtaining a Quantity of Wheat sufficient to supply the Quantity usually consumed of Wheaten Bread.

Do you take into your Account, in this last Answer, the probable Amount of the Wheat that will be imported from Foreign Countries?

Certainly.

Do you know what has been the State of the Crops of Barley and Oats?

I believe they are, in point of Quantity, pretty good, but badly harvested, and in Quality exceeding bad.—I speak of the Southern Parts of England.

Can any considerable Supply of these Articles be expected from Foreign Countries?

Some Oats may be expected, but less in Quantity than in any Year I remember. With respect to Barley, I believe the Importation will be much less. We import very little Barley at any Time.

As it seems there is a Deficiency of One Third of the Consumption, and the Prospect of a Supply from Abroad is less than in former Years, have you any Opinion in respect to the Means of remedying this Evil?  
I have nothing more to suggest than what I have already mentioned.

Appendix, N<sup>o</sup> 19.

Examination of Mr. ARTHUR YOUNG.

HAVE you any Information respecting the Produce and Quality of the last Crop of Wheat?

I have had Letters from most Parts of the Country, the Purport of which are, that the Deficiency of the Crop generally amounts to One Third; but from various Persons I had Second and Third Communications correcting their former Statements as they advanced in Threshing, which makes the Deficiency still greater, in some Cases amounting to Half. The Deficiency that has been corrected in the Second and Third Accounts, includes Quality as well as Quantity, from which I conclude, if similar Accounts were received from other Correspondents, the Deficiency would be found to amount to more than One Third.

When you state that the Deficiency of the Crop amounts to One Third or One Half, do you mean One Third or One Half of an Average Crop, or of an abundant Crop?  
I always mean One Third of an Average Produce.

Do you mean by an Average Produce of Wheat, that which of itself will be sufficient for the Supply of Great Britain and its Dependencies, without taking into Account any Import, or any Stock remaining from former Years?

I allude to nothing of Export, Import, or Stock, but merely the Produce of Bushels per Acre; and I conceive that an Average Crop never feeds the Country, it is so far short as the Average Import amounts to, which is always something.

How many Bushels do you allow per Acre in your Computation of an Average Crop?  
Something between Twenty-two and Twenty-four.

Have you any Information with respect to the Stock in Hand at the Period of the last Harvest, and the Quantity of Foreign Wheat in the Country at that Time?

I know nothing of the Quantity of Foreign Wheat, but my Information is, that the Stock on Hand was very small (probably not One Month's Consumption) in the Country. I had no Information what Stock there was in London. I speak of the End of the Harvest, which was very late.

What

What is your Information respecting the last Crop of Barley, Oats, and Rye?  
The Produce of Barley and Oats deficient perhaps One Fourth or One Fifth in Point of Quantity; in some Places the Crops worse, but varying considerably; in other Places the Crop equal to an Average one in Quantity, but in Point of Quality miserably bad, inasmuch that I know of Farms that have sold Barley from 20s. to 60s. per Quarter from the same Farm; and I have had Information which seems to confirm this Account, which is, the Price of Oat Flour in Westmorland, and that is, 4s. 6d. the Stone of 14 lbs. being the same Price as Wheat Flour in Suffolk, with Wheat of 11s. 8d. per Bushel. With regard to Rye, I have no particular Information.

Have you any Opinion respecting the Consumption of Wheat?  
It is about One Quarter per Head on the Population of the Country among those who live upon Wheat; and this seems the settled Result of all Enquiries on the Subject.

Do you not believe, when the Price of Wheat is high, One Third of the Inhabitants recur to Barley or Oaten Bread, including those who make it their habitual Food?

I do not conceive the Proportion to be so great; what it would be without Parochial Assistance, is another thing; but I am informed, throughout a great Part of the Kingdom, the general Assistance given to the Poor is by Money, Bread, or Flour, all Three being almost equally an Encouragement to the Consumption of Wheat. And I beg leave to add a very important Consideration, that vast Sums have for Two Months past been expended throughout the Kingdom, and are at present expending, in a Manner that tends strongly to bring on a great Increase of the present Scarcity: I personally know many Parishes, being Country Villages and not Towns, that expend in this Manner from £.40. to £.70 per Month additional to their common Rates—the common Way is to sell Wheat at reduced Prices.

Can you suggest any Means of economizing the Expenditure of Wheat?

I think the present Scarcity so truly alarming, that no Economy whatever, upon the Mode of consuming Wheat, will answer the Exigency of the Moment. In Suffolk, Attempts have been made, and are now making in some Parishes, to mix Barley and Rye with Wheat, and to make a browner Sort of Wheaten Bread; but the Distress of the Poor is great, notwithstanding every Effort of this Sort. In regard to a Standard Wheaten Bread, I cannot see any considerable Relief that can result from it; it seems to me that the whole Flour of the Wheat, reckoning that Flour at about 45 lbs. in 60 lbs. of Wheat, is eaten at present. A new Regulation may take some Pounds more from the Bran and Pollard; but this will have very little Effect as a general Remedy; and I have had Information from several hard-working People, that while eating brown Bread of their own making, they have not been able to labour with that Force and Heartiness which they have found to result from the finer Sorts; evidently resulting, as found by other Observations, from the Want of other Food with it. In Cities, great Towns, and other Places, where their Earnings enable them to consume a small Quantity of Wheat, this Conclusion would not be just. Something much more effectual than this is absolutely necessary; and I venture to propose, as an Opinion, that nothing short of stopping the Consumption of Oats by Horses, or importing Rice to a very great Amount, or extending the Use of Soup almost generally, will be equal to the Demand occasioned

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by the Scarcity. I conceive, the coarse Bread consumed by those Labourers alluded to, to be pretty much like the Standard Parliamentary Wheaten Bread, as it arose from their own Grift, and not from the Flour brought.

Do you understand that Bread which is commonly called "Brown Bread" throughout England, is made of Flour from whence 15 lbs. of Pollard and Bran are taken from 60 lbs. of Wheat?

Brown Bread in general is made of the coarse Flour only, that is to say, the fine Flour only taken out; but that is not the Bread I alluded to.

I beg to mention a Circumstance respecting the Soup: I made a Copper full of Soup every Day; and in order to try the Effect of the leanest Meat that could be procured, I killed Ten of the very leanest Sheep there were in a Flock of 500; and that Effect was exceeding good. To each Copper, containing 30 Gallons, I put One Sheep of from 25 lbs. to 30 lbs. a Peck of Potatoes, Half a Peck of Onions, a Peck of Carrots, a Peck of Turnips, Half a Peck of Pease, and 6 lbs. of Rice, and it made most excellent Soup, which the Poor relished exceedingly, and the Outfitters of the Parish, who lived Five Miles off, came for it very readily; from which I conclude, that One very great Resource for the Kingdom at present is the Establishment of Soup Shops, or perhaps rather to enforce all Parochial Assistance whatever to the Poor, universally, to exclude the Consumption of Wheat; which, if general, would do more to alleviate the present Scarcity than all Assizes of Bread that can be devised.

Do you not conceive, that if the lower Orders of People could be induced to diminish their Consumption of Bread, and would learn to make Soups to fill up that Deficiency, upon the most economical Plan, that they would feed themselves for much less than they are at present in the Habit of doing, and with much more wholesome Food?

I am clearly of that Opinion; but when I see that Class of the People better instructed than the Poor, are at present supplying them in Country Villages with the Produce of Wheat only; when I see so gross an Absurdity in their Superiors, I doubt it will be found very difficult, without the Aid of Parliament, to enforce any such excellent a Consumption as that of Soup; and I am well convinced, that if proper Measures were taken to prevent Parochial Assistance in Wheat and Money, substituting Rice, Soup, and Oat Flour, and Potatoes, if to be had, would have a very great Effect indeed in remedying all the Evils of the present Situation.

Do you not suppose, that if the Brown Bread, to which you have alluded, had been made of the Whole of the Flour, that is, not taking out the fine Parts, that it would be sufficiently nutritive?

The Brown Bread I alluded to, was so made, being made of their own Wheat, but they had no Meat to eat with it.

Appendix,

Appendix, N<sup>o</sup> 20.

Examination of the Rev. LUKE HESLOP.

WHAT is your Opinion of the Produce of the last Harvest?  
From the Information I gained in different Parts of Buckinghamshire, in the beginning of November last, I apprehend the Crop of Wheat was about  $\frac{3}{4}$ ths of an Average one in that County—I believe also there was then a considerable Residue of the last Year's Crop.

Are there any Means that occur to you, by which the Expenditure of Wheat may be economized?

I apprehend that, by including the Sharps, and one or both Pollards, in the Manufacture of Bread (but I think both might be included) its Quantity would be considerably increased, and at the same Time it would be very wholesome and nutritive.

[Three Specimens of Bread and Flour were produced.]

Will you describe what is the Mode of manufacturing and dividing Flour in that Part of the Country where you reside?

The usual Method of separating it is, into Fine Flour, Seconds, Coarse Sharps, Two Pollards, and Two Brans; but the Bakers frequently do not separate the Fine Flour from the Seconds; and they often separate them in different Proportions, according to the Demand. From 40 Bushels of brown Wheat, weighing 62½ lbs. each, there were made Two Sacks of Fine Flour, Four Sacks One Bushel of Seconds, and One Bushel of Coarse, which included the Sharps; the Remainder were Pollards and Brans. The Total was Seven Sacks, One Bushel, and Ten Pounds, or 2026 lbs. of Flour, which is 50 lbs. and rather more than an Half to the Bushel of Wheat.

Is the Whole of that 50 lbs. and an Half applied towards the Sustainance of Man at present?

I believe it is.

Do you conceive that badly-harvested or ill-conditioned Wheat could be used for the Food of Man, unless a very large Proportion of Bran and Pollards were taken from it—or unless, when reduced into Flour, it was mixed with the finer Description of Flour?

Such Wheat will yield less Flour, and of an inferior Quality; but if kept till the Month of May, or until it is perfectly dry, I apprehend it would then make wholesome and good Bread without the Mixture of Flour of a finer Description. But in using Wheat that has been damaged by the Wetness of the Season, and some Part of it grown, the Bakers, I am informed, frequently dissolve a little Gum Arabic in the Water with which they make the Bread. A little boiled Rice has also been mixed with this Kind of Flour with great Advantage.

What Quantity of Flour may be obtained, fit for the Use of Man, from a Bushel of Wheat weighing 60 lbs.?

About 7 Parts in 8, or 52 Pounds and an Half, according to the Experiments I have made on Wheat of Average Goodness.

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Do you conceive there can be any Advantage in putting Bakers under Restrictions in respect of the Kind of Flour they are to use in making Bread, unless some Restrictions are extended also to the Mealmen and Millers?

I apprehend that any Restrictions laid on Bakers would not be effectual, except the Mealmen and Millers should be obliged to manufacture that kind of Flour which is necessary for the Bread the Bakers are required to make.

From Observations or Information respecting the present Harvest, do you consider the Produce to be of Average or Inferior Quality?

From Observations on Bread made for my own Family, and also from Information, I apprehend it to be of an Inferior Quality, and more particularly that Part which was injured by the Wetness of the Season.

Will or will not Wheat of an inferior Quality throw off a larger Proportion of Bran or Hull in grinding, than Wheat of the best or average Quality?

I apprehend it will; but the Trade are best able to form a Judgment herein.

Is not the Quality of Wheat sufficiently ascertained by the Difference of its Weight?

This I apprehend is the best Mode of judging of its Quality; but Wheat being generally sold by the Sample, and its real Weight not known, the Judgment is then formed from the Fullness of the Grain, and the apparent Thinness of its Skin or Hull.

Can the Magistrates in the Country fix an Affize, as the Table is now formed, without Detriment to the Interest of the Public?

The Bakers, both at the present Time and during the late Dearthness of Bread, as also at all Times both before and after, (as long as I have paid Attention to this Subject) have sold their Bread considerably lower than the Price in the Table of the Act 31 G. II.: but since the passing of the late City Act, they have raised their Prices. Yet these Prices are still lower than in the Affize Table. There are also various other Defects, I conceive, in that Act.

You have given it as your Opinion, that there are several Defects in the Act 31 G. II.; are these Defects removed in the Act 13 G. III. and in the late City Act?

All the principal Defects in the Act 31 G. II. are continued in the Act 13 G. III. In the City Act, One of them is somewhat altered, but not amended; and another is introduced, which was not in the Act 31 G. II.

Can you state, concisely, to the Committee, what are the principal Defects in the Act 31 G. II., which of these Defects remain in the following Acts, and which are altered, and also your Opinion on such Alterations?

The first Defect or Objection to the Act 31 G. II. is the Allowance of 7½ Bushels of Wheat to the Sack of Wheat Flour, which Flour is made from 6 Bushels of Wheat of Average Goodness, in those Years when the Crops also are of Average Goodness; and by this Allowance the Manufacturer of Flour has 1½ Bushel of Wheat (besides Pollards) for manufacturing 6 Bushels, which is ¼ or 25 per Cent. on One Return, and 300 per Cent. on Twelve Returns, which I am informed is the usual Number of Returns in the Year. In Act 13 G. III. this Allowance of 7½ Bushels of Wheat to the Sack of Flour is continued. In the City Act, the Allowance

ance of Wheat to the Sack of Flour varies in every succeeding Line in the Table, from the Beginning to the End, and that Variation necessarily arises from the very Mode of constructing the Affize Table. In Four Instances only the Allowance is 7½ Bushels, in all the rest it is either more or less than that Quantity; and when Wheat is from 8 s. 9 d. a Bushel to 11 s. the Allowance is 7½ Bushels on the Average; but when Wheat exceeds 11 s. a Bushel, the Allowance always exceeds 7½ Bushels, so that Bread is then encreased in Price by this encreased Allowance, as well as by the Dearthness of the Grain. The Second Objection is the allowing 280 lbs. (which is the Sack of Flour) to 20 Peck Loaves, when in Fact it makes 21½ Peck Loaves on the Average; for 260 lbs. of Flour, of Average Goodness, will make 20 Peck Loaves, the extra Allowance is 20 lbs. or 1 lb. to the Peck Loaf; and this is the Allowance in all the Three Statutes. The Third Defect, which I think is a very material One, is, that the Act 31 Geo. II. allows the making of Three Kinds of Bread, White, Wheaten, and Household, and fixes the Price of the 1st to be ¼ more than the 2d, and the Price of the 2d to be ¼ more than the 3d, yet there are no Directions given in the Act for separating the Flour, so that the relative Qualities of these Flours may correspond with the respective Prices of the Bread into which they are to be made. The Act 13 Geo. III. directs a Standard Wheaten Bread to be made, which shall always be sold ½ lower than the Wheaten Bread of the Act 31 Geo. II. And here also no Directions are given for separating the Flour according to the Prices of the Bread; and from Experiments which I have made on Wheats of Average Goodness, it appears, that the Quality of Wheaten Bread sold in the London Market, is to the Quality of the Standard Wheaten as 8 d. is to 7½ d. and not as 8 d. is to 7 d. The Table also in this Act is very incorrectly calculated. The City Act adopts the whole of the Act 31 Geo. II. except where express Alterations are made; but no Alterations are made, or Directions given, concerning the separating of Flour for the making of Wheaten and Household Bread; therefore we must conclude, that the Household Flour in this Act, is to be ¼ inferior to the Wheaten, as it is in the Act 31 Geo. II. and consequently that the Household Bread is always to be sold ¼ cheaper; but it never (throughout the whole Table) bears that Proportion to the Wheaten, except in One Instance, viz. when Wheat is 5 s. 2 d. per Bushel; but as Wheat encreases in Price, this Bread approaches nearer to the Price of the Wheaten. For Instance, when Wheat is 6 s. 6½ d. a Bushel, it is only ¼ cheaper than the Wheaten; when 9 s. 2½ d. ¼ cheaper; when 11 s. 9½ d. ¼ cheaper; and when 13 s. 0½ d. ¼ cheaper, which Price is 10 d. too dear in the Peck Loaf; and this is in Effect a Prohibition of the Use of Household Bread, and more particularly when it would be of the greatest Use. And this extraordinary Increase in the Price of Household Bread naturally arises from making it only 6 d. cheaper in the Peck Loaf than the Wheaten, though the latter should be ever so much encreased in Price.

Do you know of any Means to remedy the Defects you have mentioned. I know of none, except by forming a new Affize Table.

On what Principle do you think an Affize Table should be formed? The following appears to me to be the most expedient; viz. 1st, By ascertaining the Quantity (or rather the Weight) of Wheat of Average Goodness, which will produce a Sack of Flour (Quantity and Quality included) and of that Quality of which the Bread is to be made: 2d, By adding to the Price of this Wheat a per Centage

Centage thereon (suppose 5 per Cent. or other sufficient Sum on each Return) for the Mealmen's Profits: And 3dly, Then by fixing the Price of the Sack of Flour of Average Goodness at the Amount of the Two above Sums. And for the Assize of Bread, add the Bakers' Allowance to the above Price of Flour; and from the Amount of these Sums an Assize Table may instantly be calculated. I must observe, that setting an Assize by Weight seems preferable to the setting it by Measure; for the Bushel of Wheat of inferior Value weighs less than Wheat of Average Goodness, and it is also less productive in Flour; but by setting the Assize from the Weight of Wheat, the first Difficulty is removed; and the latter (its being less productive in Flour) would be compensated by the Wheat being bought at an inferior Price.

In what Manner do you think that Flour should be separated to produce the greatest Quantity of wholesome and nourishing Food for Man—Should it be separated into different Kinds, as at present; or should there be only One Kind?

I think there should be only One Kind at present, and that this Flour should contain the whole Produce of the Wheat, except 8 or 9lb. including the Waste in grinding. But to adjust the proper Proportion of Outcast or Bran, I think Experiments are necessary; and it might be expedient at First to take out somewhat more than may be found necessary, rather than risk the taking out too little. Experience will soon shew the proper Quantity, and also remove all Prejudice. But to secure such a Separation of Flour, I would submit to the Committee, whether it would not be expedient to prohibit the Mealmen and Millers from making any other Kind of Flour; and further, that they should keep a daily Account of all Wheat they manufacture, and of the Outcast separated from it. The present Times, I think, would warrant such a Measure; and at all Times it might be useful. At present such an Account is kept by some Millers.

Do you know of any Method of estimating the Stock of Wheat now in the Country?

The most probable Means of forming an Estimate would be, to require every Dealer in Wheat to register his Name as such; and that he should keep a regular Account of all the Wheat he may buy or sell; and that, whenever required, he should transmit an Account of his Stock to Government. Also, that both this Account of Wheat, and the Account of Flour manufactured by Mealmen and Millers mentioned above, should at all Times be subject to the Inspection of the Magistrates, or other Persons appointed by Government. I would further submit to the Committee, as a Precaution against any Combination in the Trade (either of Mealmen or Millers) which might interrupt a regular Supply of Flour, particularly to London, whether the following, or some other Provisions, might not be expedient, viz. That any Persons so combining shall be disqualified, after a limited Time, from following their Profession; that such as are possessed of Mills, if they should suspend the working of them for a limited Time, should be obliged to grind any Wheat brought to their Mills at a Price to be fixed by Law, or by the neighbouring Magistrates: And in case of Refusal, or fraudulently neglecting or delaying to grind such Wheat, that the said Magistrates may appoint Persons to conduct such Mills for a Time to be limited, paying to their Proprietors the Profits which arise from them.

Appendix, N° 21.

Examination of CHRISTOPHER SAVILE, Esq; (a Member.)

WHAT is your Opinion with Respect to the Propriety and Advantage of obliging Millers, during the present Exigency, to grind only One Sort of Flour?

I am of Opinion, that the Method might be so changed as from any given Quantity of Wheat a much larger Quantity of Bread-Meal, highly proper for the Food of Man, might be obtained from such given Quantity of Wheat than is at present; for I believe that the Flour usually sent to London, has not more than about 36lbs. taken from each 60lbs. of Wheat; instead of which, if I might recommend, they should be obliged to take at least 48 lbs. from each 60 lbs. of Wheat, which I would call Bread-Meal.

What kind of Cloth would you use for this Meal?

I am not very clear as to what Sort of Cloth, but I believe one of 12s.; but a 12s. Cloth would produce, more or less, in whatever Degree of Force the Miller chuses to drive his Mill; the same Observation will apply to any other Cloth; and therefore I think the Miller should be compelled to produce a given Quantity of Bread-Meal from a given Weight of Wheat.

What is your Opinion of the Wholesomeness and Nutriment of that Sort of Flour which passes through a 12s. Cloth?

I believe, as well as from Information I have got from Gentlemen of the Faculty, that it will produce Bread more wholesome than when only 36lbs. are taken; and all the Fine being in it, I believe it will be found sufficiently nutritive for the Labourer or any other Person.

What is your Opinion with Respect to the dislike of the common People to Brown Bread; and as to its not being so nourishing as the Fine?

I believe it arises from being made from the Refuse of Wheat, or at least that it contains none of the finer Particles, and, consequently, is deprived of its nutritious Qualities.

What is your Opinion with Respect to the Practice of Double Grinding, after the Fine Flour, which is mentioned as a Proof that a greater Proportion of the Wheat is used as the Food of Man than what is commonly supposed?

I have always understood, both from Millers, Biscuit-Bakers, and others, that all double-ground Stuff, as they call it, loses its Spirit; and my own Experience convinces me of the Truth, because they never would give so much for that Stuff, although finer to the Eye, by many Shillings per Quarter.

Have you any Opinion with Respect to what Bread would be made from an Article so double ground?

I am convinced it would be neither nutritive or pleasant—not nutritive, because it is without any of the best Part of the Wheat in it; and not pleasant, because I have always understood that all double-ground Stuff lost its Spirit, and would not make any thing like good Bread.

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Have you ever seen or tasted Bread made of Flour of 52lbs. produced from 60 lbs. of Wheat ?

I cannot exactly say as to the Proportions of Weight, but I have often eat Bread where nothing but the broad Bran and coarse Pollards were taken from it, and I should suppose the Weight of them might not exceed 8 lbs. in the 60 lbs. ; and which Bread, being made from good Wheat, I found extremely good, and much liked by every one who eat of it ; and I am satisfied, when the Whole of the fine Flour is left in the Bread-Meal, it is not necessary to take any thing from it but the broad Bran and coarse Pollard, to produce a Loaf both wholesome, nutritive, and pleafant.

Can you suggest any Means of obviating the present Scarcity of Wheat ?

A general Economy I believe to be absolutely necessary ; but the great Source of Redress must be from Importation, and as that shall be more or less, so the Inconvenience of the present Pressure will be more or less also ; likewise the Adoption of Rice and Barley would tend to lessen the Inconvenience.

Having had much Dealings in Wheat Flour, have you, or have you not perceived a great Difference in the Weight of the Bushels respectively, according to the Quality of such Wheat ?

In the best of Harvests, the Weight of Wheat from the Finest to the most Inferior will vary, even from 7 lbs. to 10 lbs. per Bushel.

Have you observed the Quantity of Flour to be more or less productive from the same Quantity of Wheat according to its Quality ?

Certainly the Quantity of Flour taken from Wheat, depends on the Quality of that Wheat ; a Bushel of Wheat weighing 60 lbs. will produce a considerable deal more Flour than 60 lbs. of such Wheat as weighs but 55 lbs. per Bushel ; and I suppose the former would produce 5 lbs. more of Fine Flour than the latter, and the Bran and Pollards of the latter would be proportionably heavier than those of the former.

Is not the Weight of the Wheat a better Criterion of the probable Quantity of Flour it may produce, than any Measurement by the Bushel ?

Certainly it is ; and which I conceive to be answered by my Reply to the preceding Question.

If so, may not an Assize as derived from Wheat be more correctly estimated on Wheat by Weight than by the Bushel ?

Certainly it may ; I have for many Years past been convinced, that Wheat ought to be bought and sold by Weight ; it differs so much in its Quality, that Measure is quite a vague Criterion to go by as to its Produce.

Supposing Wheat to be sold by Weight, will not such Weight taken in Conjunction with the mean Price as to Quality, form a correct Ground of Estimate for an Assize ?

I cannot doubt it will. When Wheat shall be bought and sold by Weight, it will bring the Prices of the Fine and Middling Sort much nearer together ; the Difference then can only be in Quality ; whereas as the Custom is at present, the Buyer has a great deal less in Weight as well as Quality ; but when Weight shall

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shall be the sole Criterion for the Farmer and Miller, it will induce the Farmer to grow and harvest his Corn in the best possible Manner, and the Miller will be sure of his Weight, and can easily judge of the Difference there will be in the Produce between the Fine and the Inferior. This Business being governed and regulated by Weight from the Grower of the Corn to the Consumer of the Bread, will greatly facilitate the arranging an Assize to do Justice to all Parties.

Appendix, N° 22.

Examination of PATRICK COLQUHOUN, Esq;

ARE you of Opinion, that it would be advantageous and expedient, to the lower Orders of People and to the Community at large, that no Parochial Relief should be given to the Poor in Money or in Corn Bread, but that, as far as respects Food, it should be distributed in Soups, Rice, Potatoes, or other Substitutes ?

I am decidedly of that Opinion. The most effectual Means of obviating the Scarcity will be, by giving Relief to the Poor in any other Article rather than the Produce of Wheat ; in general it would be expedient to sell to the Poor substitutes at reduced Prices, investing the Money received for the Purchase of fresh Articles for their further Relief.

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SECOND

# REPORT

RESPECTING

## BREAD, CORN, &c. &c.

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*Ordered to be printed 6th March 1800.*

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[ 3 ]

R E P O R T.

*Jouis, 6<sup>o</sup> die Martii 1800.*

**T**HE COMMITTEE appointed to consider of Means for rendering more effectual the Provisions of an Act, made in the Thirteenth Year of the Reign of His present MAJESTY, intituled, "An Act for better regulating the "Affize and making of BREAD;" and who were instructed to consider of the most effectual Means of remedying any Inconveniencies which may arise from the Deficiency of the last Crop of Grain; and empowered to report their Proceedings, from Time to Time, to the House;

**H**AVE, since their last Report, received additional Information respecting the Deficiency of the late Crops of Grain in many Parts of the Country, particularly in Scotland; the Result of which has impressed Your Committee with the Propriety of suggesting such Methods, as appear to them most likely to be effectual, for diminishing the Consumption of Corn, for encouraging the Importation from Abroad, and for bringing into extensive Use such Substitutes as may supply the Place of it; and for this Purpose they are desirous of calling the Attention of the House to the following Points:

- First.—The Expediency of giving a Bounty to encourage the Importation of Corn from the Mediterranean and America.
- Second.

4. REPORT (6th March 1800) RESPECTING

Second.—The Propriety of Individuals reducing the Consumption of Flour in their Families.

Third.—The Propriety of subjecting Millers to some new Regulations.

Fourth.—The Adoption of a new Table of Assize.

Fifth.—The Encouragement of the Use of Rice and Indian Corn.

Sixth.—The Encouragement of the Growth of Potatoes, and other nutritive Vegetables.

Seventh.—The Expediency of procuring a considerable Supply of Food from the Fisheries.

Eighth.—The Expediency of stopping the Distilleries.

1.—Your Committee have received Information, that considerable Supplies of Wheat may probably be obtained from the Countries in the Mediterranean, and from America, which at the present Prices would be imported to very great Profit; but as several Months would elapse before such Supplies could be brought to this Country, and as it is possible that during that Period the Prices of all Sorts of Grain may fall considerably, particularly if there should be a Prospect of a very abundant Harvest; and as such a Fall of Prices might occasion a very great Loss to the Importers, such as took place in the Year 1796, Your Committee are apprehensive that Merchants will not be induced to speculate, unless they receive some Encouragement from Parliament; They therefore suggest, how far it may be proper to offer such a conditional Bounty, as may be likely to secure the Merchants against any probable Losses they might incur in importing Wheat or Flour from the Mediterranean or America, before the Month of October. The Prices of Wheat in the Mediterranean, are stated to be from about 50s. to 60s. per Quarter; the Prices of Flour in America, are about 60s. the English Sack; the Insurance, Freight, and other mercantile Charges, may, in either Case, amount to about 33s. per Quarter, or 30s. per Sack. If Parliament should therefore think proper to provide, that in case the Average Price of Wheat throughout the Kingdom, as stated in the Gazette, should fall below 90s. per Quarter, and the Average Price of Flour should fall below 90s. per Sack, the Difference between the

BREAD, CORN, &c. 5

the Market Price and 90s. should be made up by a Bounty to the Importer, it might afford a very considerable Encouragement to Foreign Supply, consistent with the Reduction of the Prices in the Home Market.

2.—Your Committee have great Satisfaction in being able to state, that many Individuals, in different Classes of Life, have already effectually reduced the Consumption of Bread and Flour in their Families; and that the Saving which has been made in consequence is very considerable, in many Instances amounting to One Fourth, and in some even to One Third, of their usual Consumption. If such a Practice should become general, it would produce the most beneficial Effects. Your Committee recommend, therefore, to every Housekeeper, to reduce the Quantity of Bread used in his Family to One Quarter Loaf per Week for each Person, which has been found, by Experiment, to be sufficient; and likewise, to abstain, as far as possible, from the Use of Flour for all other Purposes.

3.—Your Committee have been informed, that considerable Inconvenience has been felt, from Millers refusing to grind the Sorts of Flour necessary for making the Brown Bread; and They are of Opinion, that to remedy this Inconvenience, it may be expedient to subject Millers to some new Regulations.

4.—For Reasons given in their former Report, Your Committee cannot recommend any compulsory Law for the Use of only One Sort of Bread, or the grinding of only One Sort of Flour; but strongly impressed with the Advantage that might result from the Use and Consumption of Bread made of the Whole Meal, or of a great Proportion thereof, they think proper to observe, that by the Manner in which the Assize is now set, the Profit of the Baker is far more considerable upon the Fine Wheaten Bread, than on that of a coarser Quality; and Your Committee recommend, therefore, that a new Table of Assize should be framed, to remedy this Inconvenience, and to promote the Use of coarser Meal.

5.—Your Committee have great Satisfaction in stating, that a considerable Supply of Rice and Indian Corn may be obtained from

from America; that, mixed in certain Proportions with Wheat, they make a most wholesome and nutritious Bread; and that the most damaged Wheat may not only be used, but rendered palatable by a Mixture of Rice, which, by repeated Experiments, has been found to correct the Defects of it. This Consideration, that much damaged Wheat and Grain, otherwise unserviceable, may be made into wholesome and palatable Bread, by being mixed with Rice, suggests the Importance of extending to this latter Article the same Oeconomy as that which is recommended in the Use of Wheat, and of reserving it as much as possible for the above important Purpose.

Your Committee, sensible of the important Use of Rice at the present Moment, are induced to recommend, upon a comparative View of the Prices of that Article in this Country and the other Countries in Europe, that a Bounty should be given, on the same Principle as that with respect to Corn, on the Importation of Rice, which should secure to the Importer the Price of £. 1. 15s. per Cwt. if the Market Price should fall below that Sum. And Your Committee likewise submit, whether it may not be expedient that some Bounty should also be given, on the same Principle, on the Importation of Indian Corn.

6.—Your Committee are of Opinion, that it is probable that considerable Relief may be afforded; if proper Encouragement is given to the Growth of Potatoes, and other nutritive Vegetables; and they recommend therefore to Landlords, to permit and encourage their Tenants to break up a limited Quantity of Land, according to the Circumstances of the Estate, for the Cultivation of Potatoes and Pease: and Your Committee suggest, that it may be expedient that Provision should be made by Law, for a given Time, to enable Lords of Manors, or Individuals, or Parish Officers on Behalf of the Parish, with the Consent of the Lord of the Manor, to break up a Quantity of Common Land, and to cultivate it with Potatoes.

7.—It has appeared in Evidence before Your Committee, that in some Parts of Scotland and in Cornwall, the lower Orders of People are consuming at this Time great Quantities of Fish, which

which make no inconsiderable Part of their Sustenance; and Your Committee understand that a large Quantity of Swedish Herrings may be obtained from Gottenburgh and the neighbouring Ports, at a very reasonable Price; They recommend, therefore, that the Swedish Herrings should, for a limited Time, be imported Duty-free. And as an Encouragement to our own Fisheries, and to increase the Supply at the present Moment, they suggest the Propriety of giving a Bounty equivalent to 2s. 8d. per Barrel (if proper Regulations can be adopted to provide against Fraud) on the Cure of Mackarel, or of other Fish caught in the Mackarel Fishery, for Home Consumption; and Your Committee, under the present Circumstances, strongly recommend the Distribution of Fish as an Article of Parochial Relief, which may be obtained in many Parts of the Country, in great Quantities, at a very moderate Price.

8.—An Opinion being prevalent in many Parts of the Country, and particularly in Scotland and Wales, that a great Increase of Food for Man might be obtained from stopping the Distilleries in England, Your Committee thought it their Duty thoroughly to investigate this Subject. The Quantity of Barley consumed in the Distilleries has been stated by several of the Persons engaged in the Trade, whose Evidence is completely corroborated by that of one of the Commissioners of Excise, who has delivered in to Your Committee Calculations on the Subject, so nearly agreeing with the Accounts given by the Distillers, as to satisfy Your Committee that they are sufficiently accurate for the Purpose of forming their Opinion.

It appears that the whole Quantity of Barley consumed in the English Distilleries, amounts only to between 220 and 250,000 Quarters annually; that in consequence of the Distillers having been allowed the Use of Sugar at the Low Duties, the Consumption of Grain has been very much diminished; that the Distillers continue working from the Month of November until the Middle or End of May; that all that can be wanting to complete their Works in the present Year cannot exceed 53 or 55,000 Quarters; that the Distillers were prohibited the Use of Wheat, the only Grain used in the English Distilleries besides Barley, by an Act passed in the Month of October last; and that in consequence

§ REPORT (6th March 1800) RESPECTING

quence of the Deficiency of the Crops in the last Harvest, and to remove all Dissatisfaction on Account of their Trade, they entered into an Agreement to make use of no Barley in their Distilleries but what was damaged, or of inferior Quality; to which Agreement, by the Evidence before Your Committee, they appear to have strictly adhered. It appears, likewise, that very large Numbers of Swine and Cattle are actually fed from the Refuse of the Distilleries; and that if they were prohibited from Working, the Supply of Meat would be diminished, or the Feeders of Cattle and Distillers, in the Neighbourhood of the Metropolis, would be under the Necessity of using, at a great Expence, a Quantity of Grain in feeding their Swine and Cattle, which, perhaps, would not fall very far short of that which would in the First Instance be consumed in the Distilleries; and Your Committee cannot avoid observing, that in either of these Cases, the Price of Meat must be expected to rise considerably, so as very materially to affect the lower Orders of the People, who are now deriving extensive Relief in the Metropolis, and in many Parts of the Country, from the Establishment of Soup Shops, and to bear with still greater Pressure upon those Classes of the Community which are immediately above them.

Your Committee have purposely avoided stating the Effect which the stopping of the Distillery might produce on the Revenue, being anxious that no Consideration of Revenue should interfere, provided the expected Relief could really be obtained; but when They consider how small would be the Quantity, and how inferior the Quality of the Barley that could be saved, and the Effect likely to be produced on the Prices of other Articles, and the Course of other Trades, they cannot see any Advantage that would result from it, sufficient to justify Your Committee in recommending it to the House.

Your Committee have omitted to subjoin any Proposal for prohibiting the Use of Wheat in the Manufacture of Starch, conceiving it to be a very inconsiderable Object; and being further informed that Measures have been taken to procure a Supply of this Article by Importation from Abroad, and that the principal Manufacturers have voluntarily relinquished the Use of it. They

however

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however think, that, in Justice to them, the Difuse should be made general by a Prohibition.

Your Committee have great Satisfaction in stating, that the Measure adopted by the Legislature, for prohibiting the Sale of any Bread which had not been baked Twenty-four Hours, has already produced the most beneficial Effects. By the Declaration of the Master, Wardens, and Court of Assistants of the Company of Bakers, annexed to this Report, it appears that the Consumption of Bread in the Metropolis is reduced, in consequence of it, at least One Sixth Part.

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A P P E N D I X.

Appendix, N<sup>o</sup> 1.

Examination of WILLIAM JACKSON, Esquire, Commissioner of the Excise.

HAVE you any Means of judging what is the Quantity of Barley used, upon an Average, in the Distilleries in England, Annually, and what would be the Saving of Barley if the Distilleries were stopped from this Period ?

[Mr. Jackson delivered in to the Committee the following Paper.]

Upon the Quantity of Spirits made in the Year ended 5th July 1792, if the Duty be computed according to the present Rate, that Duty would amount to about	£.	1,082,000
In the last Year, ended the 5th July 1799, the Duty amounted to about		958,000
Total		2,040,000
Medium of the above Two Years		1,020,000

There has been paid into the Excise Office, to the 19th February Instant, for the Current Year	£.	575,653
Received and paid for Charges of Management, say		4,000
Spirits made, and for which the Duty is not received; and Materials already prepared or in Preparation, must be equal to at least Forty Days Distillation; and the Duty on Forty Days Distillation, according to the usual Mode of Working, would amount to		180,000

Making the Total of the Duty on the Spirits made, and on the Materials prepared	}	759,653
Leaves		260,347

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No. 1. Evidence of William Jackson, Esq;	Page	13
No. 2. Experiments by Mr. Nicholas Ward Boylston		15
No. 3. Declaration of the Master, Wardens, and Court of Assistants of the Company of Bakers		18

If it be admitted that a Medium of the Years 1792 and 1799 is equal to the Annual Consumption of British Spirits in England, it follows that the Spirits already distilled, and the Materials prepared or in Preparation, is nearly equal to Three Fourths of the Year's Consumption.

For it appears, by the foregoing Statement, that to complete the full Quantity of Spirits for the Year's Consumption, would require as much more Materials to be prepared (beyond what has been already prepared) as would give of Duty

£.  
260,000

Whereas One Fourth Part of the Medium Duty above mentioned is

255,000

The Medium of the Two Years Duty before mentioned, when reduced to Spirits, gives

Tons.  
17,663

It is generally understood that Fourteen Quarters of Barley will produce One Ton of Spirits, 17,663 Tons of Spirits multiplied by Fourteen gives

Quarters.  
247,282

which may be considered as the Average Quantity of Grain Annually consumed in making British Spirits for England.

But by the Use of Sugar and Melasses, it is believed the Quantity of Grain employed in making a Ton of Spirits does not on the Average exceed Twelve Quarters.

17,663 Tons of Spirits multiplied by Twelve give

Quarters.  
211,956

One Quarter of which Quantity is

52,989

which it is presumed is the Quantity of Barley that might be saved and applied for other Purposes, if all further Preparations of Grain for the Corn Distillery were stopped at this Moment.

Appendix, N<sup>o</sup> 2.

Experiments by Mr. NICHOLAS WARD BOYLSTON, for mixing Rice with Wheaten Flour.

THE FIRST EXPERIMENT was—Six Ounces of Rice boiled in One Quart of Water till it was dry and quite soft; Two Pounds of Flour were then added; and the whole with Two Table Spoons-full of Yeast well worked into Dough together, with the usual Quantity of Salt, giving it rather longer Time to rise, which it was found it required.

The Loaf thus made, when baked was light in Quality, sweeter and more palatable than the common Bread, and produced Three Pounds Seven Ounces and a Half.

From this Experiment the following Fact appears, that Rice gains in Weight, in a double Proportion to that of any other Grain, as will be seen by this Statement:

	Oz.		Oz.
Two Pounds of Flour is	32	} Bread produced - -	55½
Rice - - - - -	6		} Deduct as per Contra -
	38		17½ gained

To make a Quartern Loaf is } generally used Three Pounds and Half of Flour, is 56 Oz.	} When baked is by Standard to weigh Four Pounds Five Ounces Eight Drams, is 69½	Deduct as per Contra - -	56
			Gained 13½

Therefore the Difference is, that Two Pounds of Flour and Six Ounces of Rice, produce Four Ounces weight more than Three Pounds and a Half of Flour made into Wheaten Bread.

SECOND EXPERIMENT was—In doubling the Quantity of Rice to the same Quantity of Flour; which was found to answer for immediate

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mediate Consumption, but would not answer for general Purposes; from whence it may be concluded, that One-Fifth of Rice may be used with Flour to great Advantage to the Public, by increasing the Subsistence, and with Profit to the Baker, who can afford to sell it at One Penny Halfpenny under the Assize, and gain Double what he does by baking the Standard Bread.

It is to be observed, that this Experiment was made singly, and consequently weighed less than it would have weighed, had it been baked in a Batch.

In making the foregoing Experiments, it was proved that Nine-Tenths Flour and One-Tenth Rice, and in the same Way as directed for making Bread (except using Yeast and Salt) produced a finer Crust in Pastry than using Flour alone.

To prove the Advantage to the Public, and the Profit to the Baker, the following Table is submitted:

THE Price of Flour is One hundred Shillings per Sack; and Four Pence Farthing per Pound, is allowing Five Shillings per Sack to the Baker above the present Price.

Three Pounds and a Half of Flour, is the Weight used in the Quartern Loaf; its Cost to the Baker is Fourteen Pence Seven-Eighths, and when baked weighs Four Pounds Five Ounces and Eight Drams, and sells by Assize, Fifteen Pence Farthing; he therefore gains only Three-Eighths of a Penny exclusive of the Five Shillings per Sack, as above.

By using Two Pounds and a Quarter of Flour and Eight Ounces of Rice, will give the same Weight of Bread, which cost (reckoning Rice and Flour at the same Price) Eleven Pence Five-Eighths; therefore, allowing it to be sold at One Penny Halfpenny under the present Assize, (viz. Fifteen Pence Farthing for the Quartern Loaf,) is Thirteen Pence One-Eighth; but to make the Price the more easily divisible, say, the Fraction shall be in Favour of the Baker; he will then gain Two Pence Farthing per Loaf by baking, which will more than doubly compensate beyond his present Gain, for the extra Trouble in this new Process of his Business.

N. B.—Ground Rice after repeated Trials was found not to answer the same Purpose as Rice boiled—the Bread made from it was heavier, and did not keep so well.

Memorandum:

471.

Memorandum:

Flour at 100s. per Sack, and Rice at 40s. per Cwt. is equal Price (viz.) Four Pence Farthing per Pound. But should Bakers not be inclined to make this Sort of Bread, Housekeepers will find all the Advantages mentioned in the First Experiment, by buying Flour and making it themselves, and sending it to the Bakers.

Bread thus made keeps longer moist than Wheaten Bread, and is better the Second than the First Day. Rice may be steamed rather than boiled; and if the Quality of the Rice is good, Half a Pound steamed in little more than One Quart of Water, till it is quite dry and soft, gains Two Pounds, that is, Four-Fifths in Weight.

As some Doubts have arisen whether Bread made with a Mixture of Rice and Flour, will keep so well as Wheaten Bread, I am able to answer to this Question upon repeated Experiments, and have now the Honour to submit to the Opinion of the Committee, Part of a Loaf which has been made Eight Days, of Four-Fifths Flour and One-Fifth Rice. And with it, a Specification of the making of the Rice Bread, of which the Loaf now offered is a Specimen.

2 1/2 lb. Flour }  
1/2 lb. Rice }

The Rice to be boiled or steamed in rather more than One Quart of Water, till it is quite dry and soft; when sufficiently steamed or boiled, if the Rice is good, will yield 2 1/2 Pounds.

The Rice while warm to be worked together with the Flour till it is perfectly incorporated, adding the usual Quantity of Salt, and Double the Quantity of Yeast used in making Wheaten Bread, which will be from Two to Three Table Spoons-full, giving it longer Time to rise than common Bread requires.

The Dampness of the Rice makes it unnecessary to use any Water in making the Dough. It will be better to make a Hole in the Dough and put the Yeast in it, covering it with Flour, or, as the Bakers term it, "Setting the Sponge;"—letting it stand Two Hours by the Fire to rise; and just before it is put into the Oven, work it over into the Shape of the Loaf you intend to make.

If the Yeast is good and the Loaf well baked, it will weigh from Four Pounds Two Ounces to Four Pounds Six Ounces, which is a Gain in the original Weight of 50 per Cent.

E

Bread



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Bread thus made will keep sweet and perfectly moist from Eight to Ten Days; if not eat till the Second or Third Day it will go further in Consumption than Wheaten Bread.

Appendix, N° 3.

DECLARATION of the Master, Wardens, and Court of Assitants of the Company of BAKERS.

WE the Master, Wardens, and Court of Assitants of the Worshipful Company of Bakers, attending,

Beg Leave to state, that the Operation of the late Act of Parliament has had a very material Effect on their Trade, inasmuch as it has reduced the Consumption at least One Sixth Part.

(Signed)

Tho' Loveland,  
Andrew Wright,  
Ja' Lovell,  
Edw<sup>d</sup> Herbert,  
J. Blew,  
William Fisher;

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