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THE
QUESTION OF SCARCITY
PLAINLY STATED,
AND
REMEDIES CONSIDERED.

WITH
OBSERVATIONS ON PERMANENT MEASURES TO
KEEP WHEAT AT A MORE REGULAR PRICE.

BY ARTHUR YOUNG, ESQ. F.R.S.
AND SECRETARY TO THE BOARD OF AGRICULTURE.

LONDON:

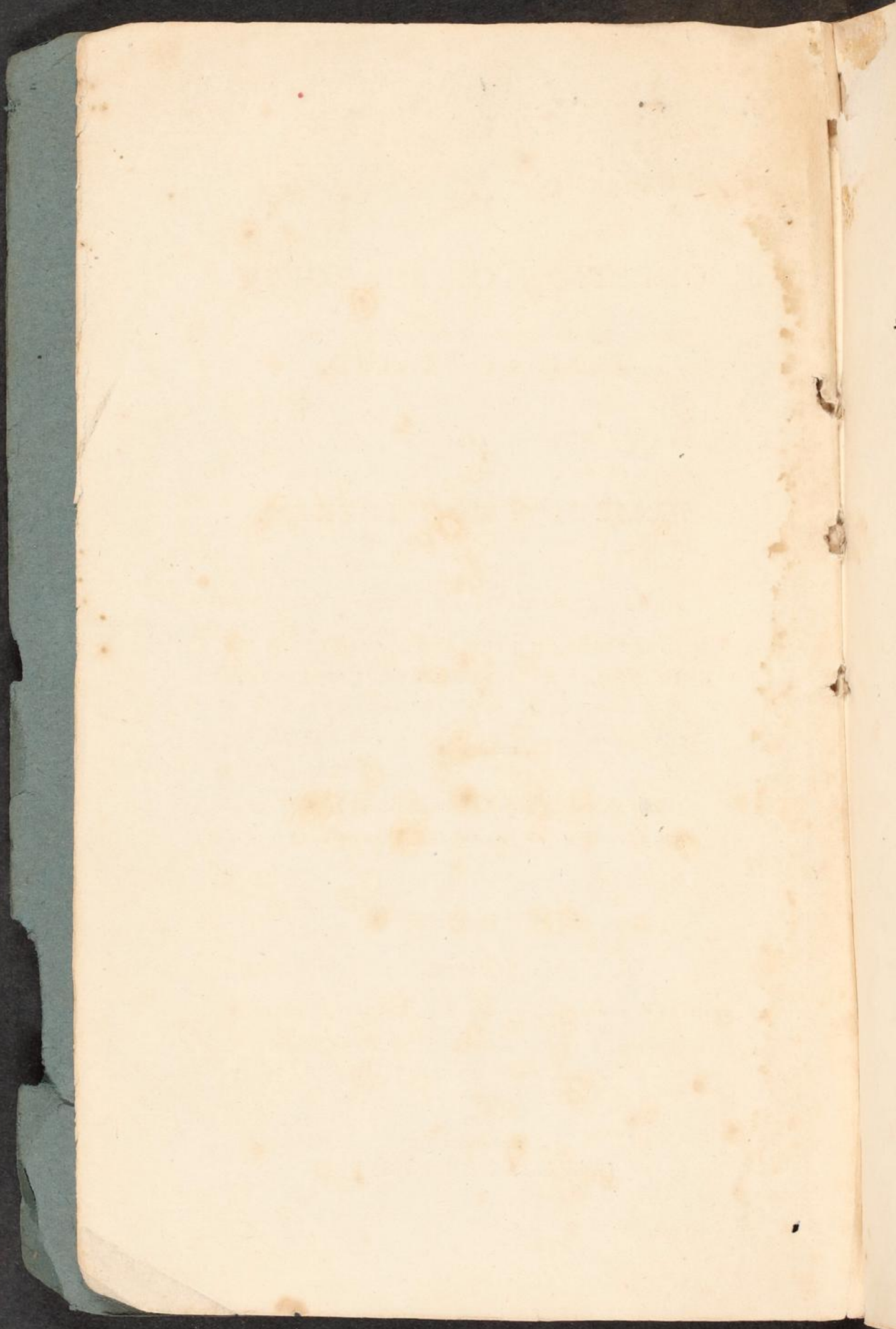
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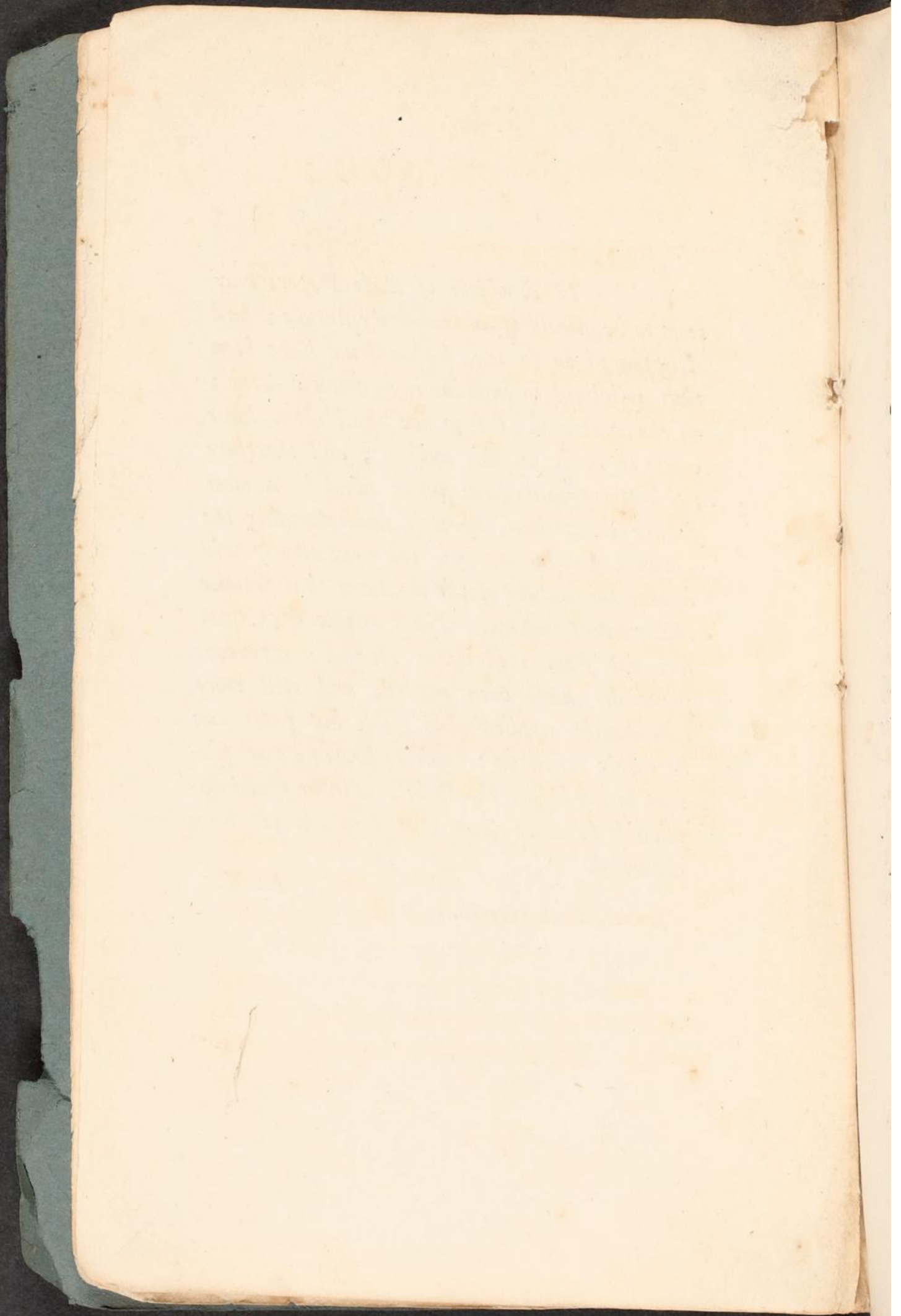




THE object of these Papers may seem to be merely of a temporary nature; had it appeared so to me, I should not have been thus solicitous to examine it so much in detail; on the contrary, I fear we shall often have cause to recur to this subject; and therefore the better prepared the public mind is to meet future discussions, by well understanding the grounds of a former one, the more clearly will appear the nature of the measures that promise the greatest success. The POLICE OF CORN has not been sufficiently studied: erroneous principles have been quoted, and still more erroneously applied—No guide but facts can be safely relied on: such as I venture at present to lay before the Public, will be found applicable to many cases that may not yet have occurred.

A. Y.

London, March 14, 1800.



ADVERTISEMENT.

THE Author of these papers has but one motive in printing, which is that of convincing the people, that the evil they suffer at present, is to be attributed only to the unfavourable seasons; and consequently that there is every reason for submitting with patience to the will of Heaven. The kingdom in general was well impressed with this idea, till certain persons attempted to prove that the scarcity was not real; that the deficiency was small; and the stock in hand last harvest large; manifestly, though perhaps not intentionally, implying that the high price was unjust, and therefore might be easily remedied. The Writer immediately saw the fatal tendency of any such assertions, and took every means to procure better information than what he before possessed; and the event has been to confirm him in opinion, that those persons were not only
A leading

leading the people into an error on the one hand, but, if parliament listened to them, would cause an equally mischievous security on the other.

No human policy can foresee---no human power can change, the seasons: the people of this country are too enlightened to look for impossibilities---they suffer from the hand of God alone; but thanks to the blessings of his providence, the country is full of resources to prevent all ideas of famine, though not to secure a moderate price for the consumers of a very defective crop. Prices, if much too high, cannot be supported; they will either fall of themselves, or be brought down by the wisdom of those exertions which the Legislature will doubtless make. The least sign of discontent or disturbance, can only increase the evil; while patience, quiet, and tranquillity, will second and give effect to every measure that is had recourse to.

THE
QUESTION OF SCARCITY
PLAINLY STATED.

THAT a difference of opinion should prevail on any subject, can never be surprizing, and least of all, when positive facts are difficult to procure. Without undoubted facts, we can have only *principles* to appeal to, which some consider as the basis of all political knowledge; others, and myself among the rest, as conclusions too often drawn from (perhaps able) reasoning, or insufficient data, being in effect, though dignified by the term, nothing more than theories plausibly sketched. Were they corollaries resulting from multiplied experiments, every rational mind would readily submit to their authority.

On the present subject there is another, and a very fertile source of error—Supplying food to a people, depends mostly on agriculture, and every man is a farmer. Not a step can be taken, not a position maintained, but individual *experience* is appealed to; a basis so narrow to support opi-

nion, that, though true in fact, it is utterly incompetent when applied to a whole nation, or even to one county. A man sometimes assumes a sort of authority from the hundreds of acres which are for a few months the scene of his residence and his amusement, very deservedly upon many points—least of all, when the result of his local observations is extended to millions of acres.

A most laudable feeling common to multitudes, becomes another source of error—Fear of aggravating the evil by sounding alarm; and, on the other hand, an equal apprehension, that without alarm the public good will be neglected, and efficient measures rejected for want of knowing the real danger of the case: hence, perhaps, some little exaggeration on both sides.

My object in writing this tract, is to attempt to state the question as clear as I can, between those who are full of apprehensions that the scarcity is so real and great that no measures can remedy it, and others who think it so trifling, that no measures are necessary, except for satisfying the people, and shewing the attention of their rulers. A very plain statement of what I conceive to be well authenticated facts, will, I trust, have the effect of proving that the scarcity is so great as to demand effective measures; but by no means so formidable as to render such measures vain; for I am
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well persuaded that the Legislature *may* remedy the evil completely.

Let us then first inquire into the degree of this scarcity.

And here I must make one previous observation, which I think has been greatly neglected. Inquiries hitherto have gone too much into the *proportion* of the crop, and too little attention paid to the *price*; it should seem as if men would be pretty well satisfied, provided they could prove the deficiency to amount only to a fourth or a fifth, forgetting that the people are suffering a very heavy distress, whatever that proportion may turn out: of what account to them your fine speculations in arithmetic, while they pay five pounds a quarter? What an insult to common sense is it, to hear that the crop has been so moderately failing, that measures are rejected when proposed, *on that account*; as if a *price* beyond the faculties of the poor was not motive sufficient for exerting every nerve to remedy it; for listening with patience to every proposition; for executing with vigour whatever measures promise relief.— When in conversation I have mentioned certain plans which I thought would be beneficial, I have been answered by many very respectable persons, “*Upon my word, Mr. YOUNG, I believe the scarcity is much exaggerated; my Steward, or Mr. Such-a-one, says the crop was not so bad.*” A quartern loaf is the best answer to such gentlemen.

Grant

Grant the fact, and the evil is still more oppressive and afflicting. The providence of the Almighty is to be submitted to with patience and resignation; but an artificial scarcity that shall last for months, must be the sole fault of the Legislature. What short-sighted supporters are those of government, who contend against the existence of a great, real, and unexampled scarcity; who seem to think they gain a point, if they prove the deficiency only a fourth! Do they forget, that in fact they are strenuous only to shew that we have the honour of living under a very bad government, which permits the people to be thus distressed for food in the midst of tolerable plenty!

But to come to the deficiency—let us first examine what is a common crop of wheat.

Thirty years ago I made three agricultural tours through England, which extended little short of five thousand miles; and the average produce of wheat, upon the minutes I took, was 24 bushels per acre. In the last fifteen years I have also made many shorter journies (one, however, of thirteen hundred miles) through many counties, to the extent of about four thousand miles more, and the average produce of wheat in these was also 24 bushels; not a little to my surprise, for I expected it would have been higher; but when I reflected on certain circumstances that had taken place, I found that I had on principle been erroneous in that expectation, and that the
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product ought to have turned out less rather than greater—but such was the fact.

From all these journies, united with other numerous authorities since the establishment of the Board of Agriculture, I formed the following table :

AVERAGE PRODUCTS OF WHEAT IN ENGLAND.

	<i>Bush.</i>		<i>Bush.</i>
Bedford	20	Lincoln	28
Bucks	21½	Middlesex	24
Berks	24	Monmouth	20
Cambridge	23½	Northampton	24
Cornwall	20	Notts	22
Cheshire	23	Northumberland	27
Cumberland	22	Norfolk	24
Durham	21	Oxford	20
Dorset	22½	Rutland	28
Derby	24	Stafford	25
Devon	22	Surrey	23
Essex	24½	Sussex	26
Gloucester	18	Suffolk	22
Hants	22	Somerset	24
Hereford	22½	Salop	20
Hunts	15	Westmoreland	20
Hertford	23	Warwick	24
Kent	24	Worcester	24
Lancaster	24	Wilts	22
Leicester	25	York	22
Average a fraction less than			23

In 1793 and 1794 the whole kingdom was surveyed by order of the Board of Agriculture; unfortunately it was done too rapidly, and those first surveys, cannot upon the whole be appealed to as satisfactory authority; whether upon this point of produce a better reliance on them is to be

be had, I shall not determine.—The following is the result :

	<i>Bush.</i>		<i>Bush.</i>
Dorset -	22½	Leicester -	25
Surrey -	23	Cumberland -	23
Norfolk -	24	Durham -	20
Sussex -	28	York, W. Riding	22
Middlesex (the S.E. arable district only)	28	Northumberland	25
Wilts -	22	Somerset (part of the co.)	25
Hants -	22	Northampton -	26
Cambridge -	23½	Hereford -	22½
Rutland -	28	Stafford -	28
Warwick -	22	Worcester -	15
		Average	23½

But the average produce of wheat, so far as ascertained by the Board of Agriculture, will be found more satisfactorily by the new Reports, with a selection from the old that have not been surveyed again, made on principles which those will understand who are well acquainted with those old Reports.

CORRECTED REPORTS.

Middlesex -	24	Cumberland -	23
Lincoln -	28	Stafford -	25
Nottingham -	22	Somerset, $\left. \begin{matrix} 21 \\ 27\frac{1}{2} \end{matrix} \right\}$	24
Kent -	22	Suffolk -	22
Lancaster -	24		
Northumberland -	27		

FIRST REPORTS.

Dorset -	22½	Rutland -	28
Norfolk -	24	Warwick -	22
Wilts -	22	York -	22
Cambridge -	23½	Essex -	24½
General average			23½

which

which I conceive to be the produce, as hitherto ascertained by the Board of Agriculture.

If the subject is attentively considered, there will not appear much reason to doubt these results upon a question where positive accuracy is unattainable. If we calculate the expences of an acre of wheat, it will be found that a less crop would be utterly inadequate at a mean price: fallows are of vast extent in England, and must on the whole be attended, if not with much profit, at least with no considerable loss.

Estimate of the average expences, produce and profit, of an acre of wheat, on the medium land and rent of England:

Two years' rent	—	—	£. 1 6 0
Tythe, at 5s. in the pound	—	—	0 6 8
Rates, &c. at 5s. in the pound	—	—	0 6 8
Seed, 2½ bushels, at 7s.	—	—	0 17 6
Sowing	—	—	0 0 3
Three earths, at 7s.	—	—	1 1 0
Water cuts	—	—	0 1 0
Weeding	—	—	0 1 6
Reap and harvest	—	—	0 10 6
Threshing 24 bushels	—	—	0 9 0
Carrying out, 2s. per quarter	—	—	0 6 0
Manure	—	—	1 10 0
			<hr/>
			£. 6 16 1
Interest on ditto two years	—	—	0 13 0
			<hr/>
			£. 7 9 1
Twenty-four bushels crop, at 6s.	—	—	7 0 0
			<hr/>
Loss	—	—	0 9 1
Straw to pay it.			

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I sup-

I suppose the rent to be the average of arable land ; which may not be accurate, but is not, I believe, far from the truth. On reviewing the other particulars, I do not see any that are carried too high ; some articles are omitted, as fences, and incidental expences, which enter for something into the farmer's accounts ; and many articles of wear and tear, which the tillage expence will not cover.

Doubtless there is more profit upon wheat after clover or beans, but it is necessary that the product of wheat be equal to the expence of every common preparation ; if it is not, such preparation would be abandoned.

To analyze this point with more precision, let us suppose straw to be worth 10s., and the sundry expences mentioned 3s. ; and allow the farmer 12 per cent. on his capital, which capital may on an average of his farm be called 5l. ; then the account will stand thus :

			£.	s.	d.
Expences	—	—	6	16	1
Add sundries	—	—	0	3	0
			£. 6 19 1		
Deduct straw	—	—	0	10	1
			6 9 0		
12 per cent. on 5l. for two years			1	4	0
			7 13 0		
24 bush. at 6s. 4½d.	—		7	13	0
22 bush. at 7s.	—		7	13	0
20 bush. at 7s. 7½d.	—		7	13	0
16 bush. at 9s. 6½d.	—		7	13	0

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which last ought now to be the price for fallow wheat, *supposing the deficiency only a third.*

I need not be told that straw is in many places worth more than 10s. ; I know it well : but I contend that the price of wheat must be sufficient to pay the farmer, where it is worth very little ; and there are many such districts, not to speak of leases that prohibit the sale.

After a person has travelled nine thousand miles in a kingdom, and not whirled in a post-chaise, or hurried in mails or stage-coaches, but coolly, and expressly for the purpose of inquiring into the state of husbandry—after a Public Board, composed of so many most respectable characters, has with sufficient care and attention procured the surveys of eighteen* counties scattered over the whole kingdom, and such inquiries agreeing in the result—I will not presume to assert that it is infallible, or any thing like it—but he will not be deemed paradoxical, who thinks that the opinion of any individual, however respectable, when not derived from superior means of information, cannot with the smallest degree of propriety be resorted to as authority sufficient to overturn so many concurrent facts. And the reader will observe, that when I stated to the Committee of the House of Commons the produce to be somewhere between 22 and 24

* There are many Reports which give no return of the average produce.

bushels, I kept within the mark, and did not manifest a disposition to exaggerate.

If it should be objected that the mode of taking the average of the facts is erroneous, as Yorkshire would tell for no more than Rutland; I admit it as a fair objection, and for this reason I calculated it upon a different principle. The acres in the following account are from the table published by HOUGHTON in the last century; as the proportion only is wanted, it is of no consequence whether or not they are upon the whole correct.

MEASURE OF COUNTIES.

	<i>Acres.</i>	<i>Parts.</i>
York	3,770,000	10 $\frac{1}{2}$
Devon	1,920,000	21
Lincoln	1,740,000	23
Northumberland	1,370,000	29
Hants *	1,312,500	20 $\frac{1}{2}$
Kent *	1,248,000	32
Essex *	1,240,000	32
Lancaster	1,150,000	35
Norfolk *	1,148,000	35
Sussex *	1,140,000	35
Somerset	1,075,000	37
Cumberland	1,040,000	38 $\frac{1}{2}$
Suffolk *	995,000	40
Cornwall	960,000	42
Salop	890,000	45
Wilts	876,000	46
Stafford	810,000	49
Gloucester	800,000	50
Dorset	772,000	52
Chester	720,000	55 $\frac{1}{2}$
Caermarthen	700,000	57
Derby	680,000	59
		War.

	<i>Acres.</i>	<i>Parts.</i>
Warwick —	670,000	60
Hereford —	660,000	62
Brecknock —	620,000	65
Durham —	610,000	66
Surrey * —	592,000	68
Cambridge * —	570,000	70
Nottingham —	560,000	71½
Leicester —	560,000	71½
Montgomery —	560,000	71½
Northampton —	550,000	73
Worcester —	540,000	74
Glamorgan —	540,000	74
Oxford —	534,000	75
Berks * —	527,000	79
Cardigan —	520,000	77
Westmoreland —	510,000	78
Merioneth —	500,000	80
Hertford * —	451,000	89
Buckingham —	441,000	91
Pembroke —	420,000	95
Denbigh —	410,000	98
Carnarvon —	370,000	108
Monmouth —	340,000	118
Radnor —	310,000	129
Bedford * —	260,000	154
Middlesex —	247,000	162
Huntingdon * —	240,000	166
Anglesey —	200,000	200
Flint —	160,000	250
Rutland * —	110,000	364
—————		
40,000,000		
—————		

The counties marked * contain nearly one-fourth of the total, forming what may be considered as the great contiguous corn district of England.

Bed.

	<i>Acres</i>	<i>Per Acre.</i>	<i>Bush.</i>
Bedford - -	260,000	20	5,200,000
Berks - - -	527,000	24	12,648,000
Cambridge - -	570,000	23 $\frac{1}{2}$	13,395,000
Essex - - -	1,240,000	24 $\frac{1}{2}$	30,380,000
Hants - - -	1,312,500	22	28,875,000
Hunts - - -	240,000	15	3,600,000
Kent - - - -	1,248,000	24	29,952,000
Hertford - -	451,000	23	10,373,000
Norfolk - - -	1,148,000	24	27,552,000
Rutland - - -	110,000	28	3,081,000
Surrey - - - -	592,000	23	13,616,000
Sussex - - - -	1,140,000	26	29,640,000
Suffolk - - -	995,000	22	21,890,000
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	9,833,500		230,202,000
General average per acre		23 $\frac{1}{2}$	

Hence it appears, that in whatever light this inquiry is thrown, the produce amounts to near 24 bushels an acre.

I have nothing to say to gentlemen who are rather inclined to credit their own insulated experience upon some scrap of land, compared to whole counties; or to the more interested assertions of farmers of a certain description, from whom noblemen's stewards derive their knowledge; nor to those who form their estimates of products from being hurried through England post. Those who are willing to credit such sources of information rather than what I have adverted to, are very welcome to their opinion. Should it be true, it only extends the arable
acres

acres of England to a larger breadth (so far as proportion can be gained by the consumption of wheat) than my estimate would go, but does not affect the question of scarcity, which has been every where stated as a deficiency proportioned to the average produce, whatever that produce may be.

POPULATION.

Having thus dispatched the produce, let us next come to the mouths that are to eat it; to examine this point in detail, would require a volume. Some years ago I calculated that England and Wales contained 10,000,000 of souls. This was the result of comparing the population as estimated by Dr. PRICE, from the houses returned to the Tax-office, with the errors discovered in those lists by actual enumeration; and it ought further to be observed, that the indefatigable researches of Sir JOHN CALL, Bart. in every county in the kingdom, have proved fully to his satisfaction, that the people have increased one-third in ten years,* from 1787 to 1797.

DEFICIENCY OF THE LAST CROP.

Anxious to know what was the result of a season which appeared to be almost unexampled in the meteorological annals of this country, I wrote letters of inquiry to many parts of England, &c. and noted from conversation with the most intel-

* If the people are increased a third in ten years, they cannot be short of twelve millions.

ligent and careful persons I met with, such accounts as they could give me—the following table is the result :

Essex.	Wheat scarcely averages on strong or wet land two quarters per acre ; most of it poor, thin, damp stuff. Barley worse. Wheat sowing miserable. Little in, Nov. 12.
Westmoreland.	Deficient one-third.
Hants.	Deficient one-third.
Lincoln.	Wheat three-fifths of a usual crop. Barley, beans and oats three-fourths. Stiff land, too wet to sow, Nov. 13. On dry land, one-fourth deficient in quantity, and one-fourth in quality.
Berks.	Full a third. Ditto above one-fourth.
Oxford.	Deficiency one-third.
Kent.	Average produce East Kent does not exceed 15 bushels per acre: by far the worst ever known. Barley a short crop: oats, beans and pease, an average crop. Wheat sowing more backward than the harvest. Many not begun, Nov. 13.
Notts.	Deficient a third.
Derby.	Deficient near a half.
York.	Not more than half a crop. Much wheat got in by Dec. 1.
Bedford.	Deficient full one-third.
Stafford.	A very large proportion of the wheat totally unfit for the miller's use.
Cambridge.	Deficient above a fourth.
South Wales.	Wheat not half an average crop. Barley and oats average.
Leicester.	Deficient above one-third.
Sussex.	Wheat three-fourths of the average: barley, oats and pease average. Never known so bad

- had a season for sowing. Much thrown out (Dec. 2) for spoiled corn.
- Devon. Not half an average crop.
- Cornwall. Fourteen bushels per acre: if as deficient elsewhere, there will be from 15 to 20 millions of bushels wanting for 10,000,000 people: the deficiency from one-fourth to one-third.
- Short of 16 bushels. Barley deficient one-third.
- Wheat not very much below an average. Deficient one-third, ditto one-fourth.
- Scotland. Deficiency in the south nearly half. Oats the same.
- Norfolk. Wheat four combs instead of five the average, dry land: ditto wet land, deficiency full one-third.
- Suffolk. Deficient one-third. Oats and barley under average.
- Northumberland. The *tail* wheat last year, better than the *crop* this.—Nothing ever like it—we have neither quantity nor quality.

RECAPITULATION.

Essex, deficiency	—	5	in 20
Westmoreland	—	6 2-3ds	in 20
Hants	—	6 2-3ds	in 20
Lincoln	—	8	in 20
Berks	—	6	in 20
Oxford	—	6 2-3ds	in 20
Kent	—	6	in 20
Notts	—	7	in 20
Derby	—	8	in 20
York	—	10	in 20
Bedford	—	6 2-3ds	in 20
Cambridge	—	5 1-half	in 20
South Wales	—	11	in 20
	c		Leicester

Leicester	—	—	7	in 20
Sussex	—	—	5	in 20
Devon	—	—	11	in 20
Cornwall	—	—	6	in 20
Scotland	—	—	9	in 20
Norfolk	—	—	5 1-half	in 20
Suffolk	—	—	6 2-3ds	in 20
Average	-	-	7	in 20

These were the authorities upon which the information I gave the Committee was founded, in which also I spoke moderately.

Finding other, and very different accounts credited, I thought that I might have been deceived in supposing these particulars applicable to the whole kingdom, and therefore sent a circular letter to almost every county, with the hope of procuring a more varied intelligence. The following table will shew the result: I sent a copy of it to Lord HAWKESBURY, Chairman of the Committee.

| what was deficient one-third, it show...

<i>Counties.</i>	<i>Persons.</i>	<i>Deficiency.</i>
Lincolnshire.	Parkinson.	One-half.
	Elmhirst.	Very near, if not quite one-half.
	Amos.	One-third.
	Roccliffe.	—
	Goulton.	—
	Scott.	—

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MISCELLANEOUS CIRCUMSTANCES.

Stock in hand in straw—the fold-yards seem to have as much as common at the season, but difficult to say, as the yield is so deficient, what may be the consequence before the new crop is reaped.—All commons ought to be inclosed by a general act; and states how by counties. Much barley consuming.

Potatoes commonly taken up the beginning of June, and in great abundance the middle of July.—Jobbers and dealers in corn a great nuisance.

Stock in hand considerably less than in 1795. Grant land to the poor for potatoes, in proportion to their families.

The wheat left in the country, with all that can reasonably be expected from abroad, will fall considerably short of our usual consumption. Potatoe crop deficient one-half on the warp lands. I have grown very fine potatoes from sprouts only. All consuming barley.

I know by experience, that the eyes of potatoes scooped two-thirds of an inch diameter, will produce good crops. If the crop of wheat was deficient one-third, it should be remembered that seed and

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<i>Counties.</i>	<i>Persons.</i>	<i>Deficiency.</i>
Lincolnshire.	Scott.	—
Staffordshire.	Tomlinson.	—
	Pitt.	—

MISCELLANEOUS CIRCUMSTANCES.

the farmer's consumption are the same; the deficiency of one-third of the whole is all taken from the quantity brought to market. In closing corn fields a great diminution of wheat grown.

Corn-dealers assert there is a sufficient quantity of wheat within the district of Newcastle, for its own supply: samples now (Feb.), uncommonly numerous; shewing the corn had been kept back; farmers refused 16s. expecting that parliamentary discussion would soon make it 20s. Much oat-bread used here; deficiency of which universally admitted. Perhaps it is not yet too late to prohibit any sort of corn applicable to the food of man being given to horses.—Premiums for potatoes good.

Harvest being a month later than common, have to provide only for eleven. Reduced consumption will serve another month. My opinion is, that the stock in hand is considerable, owing to the wet harvest, and that after March it will come out; but as it will be in fewer hands, no hope of a moderate price. Right to offer premiums to encourage potatoes. Wrong to break commons for one year; but

<i>Counties.</i>	<i>Persons.</i>	<i>Deficiency.</i>
Staffordshire.	Pitt.	—
Kent.	Boys.	Seven in twenty-two.
	Dann.	From one-third to one-fourth.
Lancashire.	Holt.	—
	Jacob.	One-third.

MISCELLANEOUS CIRCUMSTANCES.

ought all to be divided and inclosed. Bounty for corn from Sicily, where the harvest is in May.

Something less than half the wheat on hand common at the season. Remedy—eat more barley in bread, by drinking less in beer. Instance of brown bread and rice saving one-third of the consumption.

The high prices have certainly induced the farmers to thresh and get to market as much wheat as possible; the late harvest was an assistance, but notwithstanding that, I am certain the stock in hand is nothing like equal to the proportion of the year unexpired, even admitting the next should be an early harvest. Premiums for potatoes one of the best of measures; and every exertion to preserve *eyes*.

Barley an average crop; oats not half. A premium for early potatoes absolutely necessary; 300 acres of wheat ploughed up last year in one parish*; commute the tythe on potatoes, though only for one year. Nothing would do so much good as letting the poor have land for potatoes and a cow or two.

Full crops of potatoes are gained here as early as July. Save barley by making beer of treacle—very good for *rd.* a quart. *Eyes* alone bad.

* A circumstance of that season not attended to as it ought.

Counties.
Lincolnshire.

Persons.
Scott.

Deficiency.

MISCELLANEOUS CIRCUMSTANCES.

<i>Counties.</i>	<i>Persons.</i>	<i>Deficiency.</i>
Cheshire. Oxford.	Folliot. Durell.	— —
[24] Norfolk.	Crowe.	One fifth.
	Allen.	—

MISCELLANEOUS CIRCUMSTANCES.

A letter, merely to propose a bounty on potatoes.

Stock in hand equal to the average at the season in this neighbourhood; but from the yield at a greater distance, I take it altogether somewhat less than the average. Much the greatest part of the rise owing to illegal tricks in market; corn sold four times in one day, and raised 5s. a load each time. Wheat ought not to be sold by sample. The barley crop exceeded an average.

From the appearance of barns and stack-yards in East Norfolk, I am of opinion there is more wheat in the farmers' hands than is usual at this period of the year. Corn harvested six weeks later than usual; and a very considerable quantity of the crop of 1798 remained in hand after Michaelmas. Less wheat sown this year than common. Remedy—Divide and cultivate wastes and commonable lands. Stock in hand last harvest great.

A great deal of kiln-dried barley shipping from Lynn to Scotland, for bread. There was not wheat in hand last harvest for one month's use. All the granaries in Lynn will contain from 15 to 20,000 quarters.

MISCELLANEOUS CIRCUMSTANCES.

Counties.	Persons.	Deficiency.	
Norfolk.	Allen.	—	Barley certainly not an average crop ; not even in Norfolk, though nearer than in other counties. Approves of a premium for largest, second and third quantity of potatoes planted.
	Becher,	One-third.	In the N. W. part of the county.
	Sir M. F.	One-half.	Ditto.
	Sir M. Martin.	—	Wheat produces $1\frac{1}{2}$ quarters per acre ; barley and oats heavy crops. The village shops glutted with eggs—three a penny.
	Shearing.	One-third.	Stock of wheat in hand nearly as common ; but just not to one-third deficiency. The lateness of harvest, and the bad state of the grain delayed threshing, so as to lessen the period of consumption one-fourth. Much against encouraging an unlimited import at a great expence.
Gloucestershire.	Turner.	One half.	A tolerable stock of old wheat on hand in harvest ; but I fear nearly exhausted, as well as what was carried in the fine weather early in harvest. On the whole, the stock of wheat left on hand now is materially less than general at the time of year. Oats and barley nearly spoiled for human food, Premiums for potatoes may be

the public. One-half, and in some places two-thirds

Counties.

Persons.

Deficiency.

Gloucestershire.

Turner.

One-half.

Berry.

One-third to one-half.

Devon.

Saunders.

—

Pilkington.

Not one-fifth.

Herford.

Doo.

A full one-fourth, but not quite one-third.

MISCELLANEOUS CIRCUMSTANCES.

beneficial. If commons are broke up only for a time, great care should be taken of the course of husbandry, &c.—Cultivate the wastes.

On the Cotteswold hills; and quality 100 per cent. worse. In the vales the crop abundant, and quality good. Very little threshed yet on the hills. Scarce oats enough left for seed; good barley the same; stained; much on hand.

The common people and millers believe there is no scarcity. Barley so black, not fit for bread.

In a letter inserted in the Exeter Evening Post—Stock in hand in South Devon enough to last a month beyond harvest.

As little, or less on hand at this time, than I ever remember in any former year. The remedy obvious; middling barley that will not malt, gradually kiln dried, produces a wholesome good flour in equal quantity with wheaten flour good bread. The labourers tolerably content, because they are convinced the high price is caused by the seasons, and not by an undue advantage taken.

<i>Counties.</i>	<i>Persons.</i>	<i>Deficiency.</i>
Middlesex, Salop.	Wilkinson, Herries.	One-third.
[27] Bucks and Ox- ford.	King.	One-third.
Lancaster and Westmoreland.	Jenkinson.	In many parts one-half, in a few one-third.
Durham.	Edwards.	1-half in quantity 1-third in quality

MISCELLANEOUS CIRCUMSTANCES.

Recommends spring wheat; and right to encourage potatoes.

By far the greatest part of the wheat housed well by 17th September. This county I apprehend contains sufficient till next harvest, one-third barley generally being ground with it. Encourage fisheries, and lower the price of salt. What objection can be made to inclosing commons and wastes of 3 or 400 acres, that will not bear the expence of parliament?

Crop was not brought into consumption before November, therefore hope there may be enough for use till the end of July. Oats and barley good crops, but so damaged, not half fit for man. Right to break commons for one year.

Stale bread trifling with the public: consumption by horses ought to be put a stop to. Premiums for potatoes wrong; but to exclude tythe, good. A general inclosure much better than a temporary act. Oatmeal now 2l. 4s. the 120lb.

Half the population of Barnard Castle, that is, 1500, relieved by the public. One-half, and in some places two-thirds, of the crop of

Counties.

Persons.

Deficiency.

MISCELLANEOUS CIRCUMSTANCES.

Durham.

Edwards.

One-half in quantity and one-third in quality.

wheat consumed, and all the old stock in some parts of the country. Better to exempt potatoes from tythe than give a premium. Right to break up commons.

Collingwood.

Two-thirds.

Nothing done strikes at the root of the malady; corn-factors and monopolizers ought to be regulated. Corn goes from hand to hand with 2s. a boll advance by each. Cutting the eyes out of large potatoes, and laying them in a dry place, is useful; I cut about twelve bushels so last year, two months before planting, which was the 20th of May—crop as good as from whole potatoes, and large sets cut just before planting.

Barrington.

Two-thirds.

Stock in hand about one-half consumption. Barley one-half crop, scarce any left but for seed; oats three-fourths of a crop, about one-third remaining. Potatoes one-half crop. The poor sensible the scarcity arises from the visitation of Providence. Old wheat sold at Darlington at 11. 8s. a bushel; new 12s. to 15s.

Hunts.

Tomlinson.

More than one-third.

From which small crop is to be deducted a larger quantity of seed sown than common, from an apprehension that a great part

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<i>Counties.</i>	<i>Persons.</i>	<i>Deficiency.</i>
Hunts.	Tomlinson,	More than one-third.
Essex.	Walford,	—
	Thurlow.	One quarter.
Essex and Suffolk.	Ambrose, Ruggles.	— Two fifths.

MISCELLANEOUS CIRCUMSTANCES.

would not vegetate: also much lost in harvest. A larger proportion of wheat on hand than common at the season, owing to its having been so wet as to be unfit for the miller; but it will prove very unproductive. Surely it would be right to stop not only the distillery, but also the maltings. I know the objections; but when famine stares us in the face, &c.

Wheat in hand about one-half the quantity grown; barley one-third; oats a considerable quantity. Poor feeding on barley flour, at 10s. a bushel.

Produce 18, average 24. Produce of 380 acres, 855 quarters; seed at $2\frac{1}{2}$ bushels an acre 118; disposable 737; of which in hand 330; consumed 407. Not more barley and oats on hand than enough for seed, and our horses. All the cottagers' potatoes consumed, and none reserved for seed, owing to the high price of flour. I have stored 80 bushels for myself and them. The greater part of the poor are eating barley bread, but the stock will be soon exhausted. Stock of wheat in the growers' hands about one-fourth.

As much of the last crop remains unsold as in general at this

<i>Countries.</i>	<i>Peasants.</i>	<i>Deficiency.</i>
Essex and Suffolk.	Ruggles.	Two-fifths.
North Devon.	Karstake.	One-half.
Berkshire.	Wards.	One-fifth to one-sixth.

MISCELLANEOUS CIRCUMSTANCES.

time of year ; but subject to the deficiency. Of barley, a greater proportion than common ; that crop about four-fifths of an average ; one-third bright and good, one-third stained, not the worse for human food : preferred by the poor to the bright, from its not disagreeing with them ; and one-third much stained : of oats when the seed is got in, there will not be one-fourth of an average crop left in the country. No apprehensions of famine, but that commercial principles of speculating will augment an unproductive crop into a great calamity. Regulate millers—houses and schools of industry—parliamentary inspection and control—parish mills—parish ovens—parish soup shops.

But one-third of the produce of the preceding year on hand at harvest. Quantity now in the country will be sufficient to last, with economy, till harvest. The Act of 13th Geo. III. detrimental : all consider that 5lb. bran in 60 is enough to take out : No wheat ought to be bought but in market.

On his farm, &c. quantity on hand smaller than usual at this time, owing to all little farmers hurrying it to market ; and had none left

Counties.	Persons.	Deficiency.
Berkshire,	Warde.	One-fifth to one-sixth.
Surrey.	Summer.	Nearly half.
Suffolk,	Coussmaker.	More than $\frac{1}{4}$ th.
	Carter.	—
	Redwell.	—

MISCELLANEOUS CIRCUMSTANCES.

even before harvest was well ended. General state of the country: barns empty of wheat; few ricks taken in which are usually supposed to exceed, with great farmers, half the crop; little ones have had none a long time. Beans, oats, and barley, but little deficient in quantity.

His own crop, 14 carriages, in 1798, produced 9 loads.

13 ditto 1799, 5 loads $1\frac{1}{2}$ bushels

Not so much in hand now as at Midsummer preceding.

Labourers live on wheat and rye at 2s. the stone, sold by the parishes. Price of wheat flour 5s. a stone. Stock in hand, of all sorts of corn, less than usual. Overseers might cultivate potatoes for the use of the poor; or the cottagers allowed for themselves, the parish finding land and seed.

Hundred of Blackburn. The poor make their bread of *thirds*; parishes allow 6d. per head per week for every individual; and 1s. if sick, &c.—Stock now on hand of wheat, owing to farms being much laid together, considerably more than half the last crop; and thinks

Counties.
Essex and Suffolk.

Persons.
Ruggles.

Deficiency.
Two-fifths.

MISCELLANEOUS CIRCUMSTANCES.
time of year: but subject to the deficiency. Of barley a about four-fifths of

Counties.	Persons.	Deficiency.
Suffolk.	Rodwell.	_____
	Lodge.	_____
	Dr. Maclean.	_____
York (W. R.)	Radcliffe.	_____
	Payne.	Near one-half.

MISCELLANEOUS CIRCUMSTANCES.

wheat will fall in May 30s. (or 40s.) a quarter. Great advantage would result from parish committees, under the magistrates, allotting portions of commons and wastes to poor families; not to return to common, but made parochial property, paying quit-rents to the Lord—a great spur to industry, and attachment to the constitution.

I get 360 to 525 bushels per acre of potatoes, and good barley after them; common price 3s. a sack; now 9s. Recommends planting potatoes apparently rotten, as they will vegetate; and using maize mixed with other meals.

That bread is nutritious, in proportion as the flour of which it was made has been divested of the bran and coarse pollard, admits of abundant proof: bran and coarse pollard will not keep even pigs in tolerable condition.

Oat-bread the general consumption; potatoes not to be had. Wheat so bad, that it is given to pigs and poultry, not used otherwise.

Stock in hand may be enough for the country villages till harvest, but nothing further; but the towns must be fed by import.—

<i>Counties.</i>	<i>Persons.</i>	<i>Deficiency.</i>
York (W. R.)	Payne.	Near one-half.
	Payne.	More than one-third.
York (Hull) E.R.	Levett.	One-half.

MISCELLANEOUS CIRCUMSTANCES.

Potatoes bad to encourage; they impoverish greatly. Calls aloud for a general inclosure bill; and so they do all.

All but wheat rapidly advancing, and by the time the seed is in the ground, what will remain is questionable. The stock of wheat on hand would soon be exhausted, if consumed in the ordinary way. Of oats, not a third of the usual quantity remains, if reckoned in meal. In barley, some resource, but on threshing, falls short of the lowest estimate; is not much more than half a crop. A most improvident useless waste in planting potatoes: in four sacks, two bushels of eyes quite sufficient: I have proved this many years, and have as good crops as my neighbours.

Average stock of wheat on hand at this season 10 to 15,000 quarters; now just 3000: Hull consumes 500 quarters a week. From 8 to 10,000 quarters of oats on hand; but only 4000 of them fit for human food. About 1000 quarters of barley in the hands of the malsters; no rye. About half the crop in hands of the farmers in Holderness unthreshed. The consumption of flour so little reduced

Counties.
Suffolk.

Persons.
Rodwell.

Deficiency.

MISCELLANEOUS CIRCUMSTANCES.

Great advantage

It is as all hour to a baker: the baker demanded more, as he never

MISCELLANEOUS CIRCUMSTANCES.

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Counties.	Persons.	Deficiency.
York (Hull) E.R.	Levertt.	One-half.
	Frost.	One-half.
Dorset.	Bridge.	Near two-fifths.
	Wickens.	One-third.

as to be imperceptible. The crop of wheat of 1799 not more than one-half that of 1798; and of that one-half, nearly one-third deficient in quality; for average, wheat yields 26 stone of flour the quarter; but that of 1799 only 18 stone.

Wheat in a good year yields 26½ stone flour; this year 20½. Stock in hand not more than half what is usual at the time. Barley an average crop; oats rather under. A bounty on potatoes would do much good; bad to break commons—they would be left in a miserable state. Calls for a general inclosure bill.

The information the Committee of the House of Commons received, was as near the truth as possible: deficiency one-third. Wheat now in hand insufficient to last till harvest, if used according to former practice. But a small proportion of barley and oats fit for human food. Many gentlemen, &c. spare bread at one meal every day, and begin to mix barley. Earl of Dorchester, &c. &c. setting out land to poor labourers for potatoes, which will do much. All barley and oats fit for food and seed, ought immediately to be confined to those objects.

Counties.	Persons.	Deficiency.
Cornwall.	Rashleigh.	_____
	Giddy.	_____
	Gurney.	_____
Pembrokeshire.	Grant.	_____
Hants.	Barnard.	One third.

MISCELLANEOUS CIRCUMSTANCES.

The people live on barley, of which grain there is certainly a great scarcity, and much distress for want of it. Of wheat at present two-fifths short of the common stock. The best relief for us, would be to encourage our fisheries, which of late years have been a losing concern: 6000 quarters of barley arrived from Norfolk, or the consequences would have been ruinous.

Want of corn *real*, and very great.

The food of the poor salt fish and potatoes: much distressed for want of potatoes. Stock of barley nearly exhausted. Stock in hand of wheat apparently as great as ever known at the season, but allowance to be made for bad yielding. To save potatoe eyes, of great consequence; but a price must be fixed for them, to induce it in towns.

The poor eat barley bread. Wheat not much less productive than in common years; but much injured by wet. Barley not half the average of 1795-6-7. Oats deficient as five in seven.

A mealman mixed ten sacks of flour with one of pea-meal, and sold it as all flour to a baker: the baker demanded more, as he never

Counties. | Persons. | Deficiency.
 York (Hall) E.R. Leveitt. | One-half.

MISCELLANEOUS CIRCUMSTANCES.
 as to be impracticable. The crop of wheat of 1790 not more than

half. Pease three-fourths. Stock of wheat exceed a half.

Canties.

Persons.

Deficiency.

Hants.	Barnard.	One-third.
Sussex.	Earl of Egremont.	—
Gloucestershire.	Swayne.	—
Leicester, Derby, Stafford, Warwick, around Measham.	Wilkes.	One-fourth.

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MISCELLANEOUS CIRCUMSTANCES.

had flour that rose so well, and made so good a sponge, and light a bread. The wheat, barley and oats, might all be threshed out by May-Day.

Most important experiments on flour and bread, tending in every stage to shew the superiority of coarse to fine flour. (See Appendix.) Taking wheat, oats and barley together, the deficiency is not more than one-seventh.

The poor are eating barley bread; the best sells at 10s. 6d. a bushel. The stock of wheat left in hand, to appearance considerably larger than at this time of the year in the last scarcity; but subject to the deficiency of the year: what is threshed was so, and the rest will be more so. Of oats, there are scarce any fit for human food. Plenty of bad barley. Potatoes exceedingly scarce. Not a pound of rice at Bristol. Against premiums, or attending to the eyes. Against breaking up commons in the way proposed.

Stock in hand last harvest about an average quantity; reduced consumption, the late harvest, and import, will nearly cover the deficiency.

<i>Counties.</i>	<i>Persons.</i>	<i>Deficiency.</i>
Northumberland.	Culley.	Full one-half, perhaps more.
	Wilson.	Full one-half.
<i>Counties.</i>	<i>Persons.</i>	<i>Deficiency.</i>
Hants.	Barnard.	One-third.

MISCELLANEOUS CIRCUMSTANCES.

It is agreed that 40lb. of good oats will make 20lb. of oatmeal: all used here in hasty pudding. The wheat crop here full half deficient, quantity and quality considered. Barley and oats not more than one-third defective, and quality tolerable in dry districts: but towards the moors lamentable. Beans and pease failed totally in all the northern counties: our people all eat bread of pease and barley; the pease from Norfolk. The poor are supplied at reduced prices. At the end of last harvest very little grain of any kind was left in the growers' hand; but the corn merchants, &c. might have wheat to the amount of two months consumption, with the little the growers had; oats and barley, next to none. From the present appearance of stack-yards, I fear we shall fall a good deal short. Against premiums for potatoes; and breaking commons temporarily. Spring-sown wheat best both in quantity and quality: barley not very defective in quantity, but very bad in quality. Oats full one-third deficient, taking the county through. Potatoes half. Beans half. Pease three-fourths. Stock of wheat left in hand will not exceed a half.

MISCELLANEOUS CIRCUMSTANCES.

had flour that rose so well, and made so good a sponge, and light a bread. The wheat, barley and oats, might all be threshed out by

RECAPITULATION.

Essex	—	—	6 1-half	in	20
Kent	—	—	6	—	20
Norfolk	—	—	6 2-3ds	—	20
Suffolk	—	—	8	—	20
Sussex	—	—	5	—	20
Surrey	—	—	8	—	20
Berks	—	—	4	—	20
Hants	—	—	6 2-3ds	—	20
Bedford	—	—	6 2-3ds	—	20
Cambridge	—	—	5 1-half	—	20
Hertford	—	—	5 1-half	—	20
Hunts	—	—	7	—	20
Average of this great corn district	}		6 1-4th in 20		
Lincoln	—	—	8 1-half	—	20
Gloucester	—	—	8	—	20
Devon	—	—	7	—	20
Salop	—	—	6 2-3ds	—	20
Bucks	—	—	6 2-3ds	—	20
Oxford	—	—	6 2-3ds	—	20
Lancaster	—	—	7	—	20
Westmoreland	—	—	7	—	20
Durham	—	—	12	—	20
York W. R.	—	—	8	—	20
York E. R.	—	—	10	—	20
Dorset	—	—	7	—	20
Derby	—	—	5	—	20
Northumberland	—	—	10	—	20
General average	—	—	7 1-3d in		20
Scotland	—	—			

Examining the deficiency in another light, let us compare the degree of it with the space of the counties in which it is found; and here we will call the corn district 12,000,000 of acres—the deficiency 6 1-4th.

In Northumberland, Cumberland, Westmoreland, Lancaster, Durham, and York, there are in the same account, 8,450,000 acres—the deficiency 9.

Remains for the rest of the kingdom (to make up Houghton's total of 40 millions), 19,550,000 of acres—the deficiency of the rest, not included in the other two divisions, is 7 1-6th.

These deficiencies we will call bushels per acre; not that they are so, but the supposition will give us the proportion in one sum, for the whole kingdom thus divided :

12,000,000 at 6 1-4th	—	75,000,000
8,450,000 at 9	—	76,050,000
19,550,000 at 7 1-6th	—	140,108,333
<u>40,000,000</u>		<u>291,158,333</u>
General average deficiency	—	7 1/4

Relative to the stock in hand at present, the information is various :

Lincoln.	As much in straw as common; but subject to the deficiency in yielding.
Stafford.	Sufficient to last.
Kent.	Something less than half the common stock.
Oxford.	Not quite equal to the quantity usual at the season.
Norfolk.	Accounts contradictory.

Glou.

Gloucester.	Materially less than common. Very little threshed on the hills.
Hertford.	Less than ever.
Salop.	Sufficient till next harvest.
Bucks.	Hope there may be enough till end of July.
Durham.	From one-half to two-thirds consumed.
Hunts.	Larger quantity than common, but will prove unproductive.
Essex.	As much as common ; but very deficient. Not half left.
Devon.	Enough to last.
Berks.	Smaller than usual.
Suffolk.	Less than usual. More than half.
Surrey.	Not so much as the year before.
York.	Less than half. Enough for villages. Half.
Dorset.	Not more than half what is usual.
Cornwall.	Two-fifths short of the common stock. Great as ever known, but subject to the deficiency.
Hants.	All corn might be threshed by May-day.
Northumberland.	We shall fall short a good deal. Will not exceed half.

In six counties, the return favourable.

In ten, unfavourable.

In five, doubtful.

There are seven counties, of what I call the great corn district of the kingdom, and the account favourable only in one.

When particulars have been procured from so large a range of country, there appears to me no probable cause of doubt, much less any reason
for

for neglecting such information in favour of a few local exceptions, which must necessarily exist, whatever the general result.

I have all the original letters, which may be consulted by any gentleman who wishes to examine them. Those of the correspondents from whom most of the information was derived in which the first table is formed, have been already printed in the Annals of Agriculture.

I have very little reason to doubt the accuracy is as great as can reasonably be expected in such objects; nor have I any doubt of the truth individually of the accounts, very different from those which have been brought forward by other gentlemen.—I dare say they are all equally true. The only doubt that can rationally be entertained, is upon the propriety of extending such cases to the whole kingdom: this can be done only with propriety, when the *particulars* are so numerous that the error on one side may probably be corrected by counter errors on the other; and in this respect, these inquiries have been so extensive, and the number of counties reported so large, that I have no great apprehension of any material error affecting the general average.

This, instead of lessening the degree of the deficiency, rather increases it; and the only plausible conclusion to be drawn is, that it amounts to more than a third.

If the accounts I have received in conversation relative to Scotland, be correct, the deficiency is
amous

amounts to half there. The preceding minute is nine in twenty.

Wheat which thrives well in the Greek islands, where the heat, as TOURNEFORT observes, perfectly calcines the earth; and which in Spain, where rain has been known to cease for twenty-two months together, produces some of the finest grain in the world, will not bear a wet season in England. No year was ever here too dry for this plant, nor did ever a wet one produce a good crop. Can any one then be surprized at a very short produce in such a year as 1799? As far as the season was concerned, the deficiency of one-third does not seem proportioned to the insubriety of the weather.

In order to bring the deficiency to a given number of quarters, two considerations occur: the number of people that consume barley and oats; and the quantity of wheat eaten per head.

CONSUMPTION OF WHEAT.

The very careful and accurate MR. SMITH, author of the *Three Tracts on the Corn Trade*, published forty years ago, estimated the consumers in England,

Of wheat and rye	—	4,638,000
Of barley and oats	—	1,362,000
		<hr/>
		6,000,000
		<hr/>

In this period the consumption of wheat, on comparison with that of oats, &c. must have increased

creased greatly; however, to avoid all exaggeration, let us suppose that two millions are supported in a common year by lent corn: there then remain 8,000,000 to feed on wheat.

The same gentleman, from a great variety of authorities, carefully collected and compared, found that the consumption of wheat was eight bushels per head per annum; and that of oats twenty-three.

To corroborate the estimate of eight bushels of wheat, I may observe that the magistrates in Suffolk with whom I have the honour of acting, upon occasion of the scarcity in 1795 and 6, made numerous and most careful inquiries through forty-two parishes of our division, in order to ascertain the general consumption; and we found it half a stone of flour per head per week, or a pound a day, or 49lb. in seven weeks: call this a bushel of wheat, and it is 7 1-half bushels a year; but as an average bushel of wheat does not produce 49lb. of flour, it is sufficiently near eight bushels per annum.

Eight millions of people consume therefore as many quarters*; from which quantity the deductions to be made are the import that has taken

* I have no motive for adopting the proportion of 8,000,000 as the number of wheat eaters, but that of wishing to avoid exaggeration; for I do not believe that there are two millions who live on barley or oats. I should think one million much nearer the truth, in common times.

place, being 220,000 quarters, and the stock in hand of the preceding crop.

STOCK IN HAND LAST HARVEST.

I know the last article is highly calculated by some ingenious gentlemen, who are willing to believe that we have been living for some months pretty much on that old stock. Two circumstances are to be taken into consideration—Whether such persons do not reside in districts where the farms are very large, as in Wiltshire, &c. ? If they do, their local conclusions are wide of the general purpose; for it should be remembered that England is in general divided into small, or very moderate farms, in the hands of men who are known to be no hoarders, and who thresh long before July and August; consequently millers, mealmen, and merchants, had it not in their power to buy up large stocks, except in very particular situations, however the complexion of the seasons might induce them to do it. The wheats saved early in harvest, and some were every where in the South saved early, would thresh, and were actually brought to market, as every one well knows in the East of England*.

* The same in Berkshire—See Mr. WARDE'S intelligence. Here let me note, that I am informed by a very respectable merchant at Lynn, in Norfolk, the river of which is the embouchure of eleven counties, and carrying on at all times an immense corn trade, that all the granaries there will not hold more than from 15 to 20,000 quarters;—where are they to be found for just one hundred times as much?

The

The granaries of millers and mealmen will hold much, but are not filled when wheat is 3l. 12s. a quarter, the price of last August, without a capital that deserves attention. Every one knows that at such a price, it would be folly to look for great stocks of corn as a general object, any where but in the rick-yards of great farmers, and there accordingly it is asserted to have existed. These are visible to every one; and whatever might be seen in one or two districts by certain gentlemen, sure it is, that through by far the greater part of the country, such spectacles were too few to found any such conclusions as have been drawn *for the whole kingdom*.

In addition to this, it is further to be considered, that a certain stock in hand is necessary at harvest; probably not less than a month; by which I mean a month's consumption of the whole kingdom: the only deduction to be made therefore, is the *excess* of the old stock last harvest, supposing there was any such.

If the deficiency amounted only to a fourth, and we had three months stock in hand at the last harvest (and let it be well remarked, that these two suppositions have come more than once from the same quarter), there can be no real scarcity whatever; not of a kernel:—now, can any reasonable person conceive it possible for the farmers and dealers, with an average consumption in hand, to raise the price to 5l. or 6l. a quarter!!

There is something so grossly absurd in such an idea, that it has been with utter amazement I have heard and read it. It extends further still, for with an average consumption in hand, the people have been put to short allowance for four months at the end of February, by the high price which has prevailed during all that period. Consider what this saving amounts to—if, as I calculate, that reduction is from eight bushels to seven per annum, it equals 333,333 quarters: we have imported 220,000; consequently, with a crop and stock at setting out equal to twelve months supply, we have in addition 550,000 quarters on the 1st of March, and yet wheat is above 5*l.* a quarter!!! And this supposition, which has the invention of poetry, is believed by thousands who might reasonably be contented with prose.

Another circumstance brought in aid of the same erroneous reasoning, is that of threshing: it is contended that the farmers are but just beginning to thresh wheat, which it is well known is spring and summer work. No arguments are so apt to deceive as those which have some truth to support them: there is a certain degree of truth in this assertion, for that many great farmers do keep their wheat stacks till summer, is well known; but who in general are they?—Those who live in the vicinity of great cities, where there is a regular demand for straw in summer as well as in winter; or those who are rich
 enough

enough to speculate in price. Will it bear examination with others who, wanting such a market, or such ability, give it to cattle? which every one knows to be the case with numbers in great corn countries, not in the neighbourhood of such markets. Let those who use such arguments go to Norfolk or Northumberland, and see what is done with straw in those counties, and yet not deficient in great towns. Gentlemen, to draw their ideas from London, Bath, and Bristol, or a district of very great farms in such vicinities, and suppose that what there takes place is to be mentioned as generally prevalent, must surely deceive themselves. The fact is, that through a very considerable portion of the kingdom, wheat is almost uniformly threshed early in, or in the depth of winter, on account of cattle at that season doing better on the straw than they would do in spring: add to this, the enormous price which it has every where yielded throughout this winter; a price not to be expected in summer, when so many horses go out to grass (certainly not fewer this year, on account of the price of straw, hay and oats), and which has therefore proved, in addition to the high price of the grain, a direct premium upon threshing.

Three months consumption are 2,000,000 quarters; such an enormous quantity to be on hand in harvest, beyond the stock which must ever be in hand at that season for the mere routine
of

of the supply, would occasion the commodity to regorge in the markets, and to depress the price to an incalculable degree; instead of that, the price was constantly rising through autumn, while the majority of the farmers, a very great majority being little ones, were hurrying their corn to market after the beautiful season through the South, with which the harvest opened.

He who travels as much as I have done, and still do, knows perfectly well, that for one district where old wheat stacks *abound* in harvest, there are ten where you will look in vain for more than a few solitary ones in the hands of here and there a great farmer. And as to the speculations of millers and mealmen, consider the amount of the inducement, which is always marked by the price; wheat, upon the average of England, was 8s. a Winchester bushel in June; rising in July, and 9s. 1d. in August—Were these prices for general speculation? Some might speculate in August, but what is that, when the amount is so enormous upon which any argument can be built? It is not every man that would venture to speculate, either by keeping or buying, at such prices. Some ever do, unquestionably; but what is the amount? Let us examine this in another point of view.

Looking back to any past years, in speaking of the crops of those years, to what are we to appeal but the prices?

Aver-

Average price of corn for the year following the harvest of 1798 :

	<i>England.</i>		<i>London.</i>	
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
October 1798	—	6 0	—	6 0
November	—	5 11	—	5 10
December	—	6 0	—	5 11
January	—	6 2	—	6 5
February	—	6 2	—	6 5
March	—	6 3	—	6 4
April	—	6 8	—	6 9
May	—	7 7	—	6 2
June	—	7 11	—	7 7
July	—	8 4	—	8 4
August	—	9 1	—	8 7
September	—	9 5	—	8 9
		—		—
Average	-	7 1	—	6 11
		—		—
Per quarter	-	56 8	—	55 4

Here is a table which shews how just these notions of threshing are, and ought, with every practical politician, to sweep away such ideas for ever, and leave a conviction upon the mind, that threshing is governed by no such maxims. When did threshing go on most in this year? In winter, with the price at 6s. ? or in summer, with the price at 8s. ? This fact is worth an hundred arguments, and comes as near to demonstration as the subject admits. Let me add, that it is not an uncommon instance; for the summer price is higher than the winter, at least in two years out of three.—Do these gentlemen want

want

want to be told that the farms of England are upon the whole small? or do they suppose that the size of them in Wiltshire and Dorset is a representation of the whole? or can they want to be informed that little farmers carry their corn early to market?

But I desire to make another use of this table, and I conceive it a very material one to refute completely, were there no other evidence, the idea of two millions of quarters remaining on hand last harvest, or any thing like it. The average of the year is just 10s. a quarter higher than the average price of twelve years. There were no committees, no alarm, to do this; it formed itself quietly between demand and supply; and let me ask these gentlemen, if after such a price, it is conceivable that a great stock in hand should remain?

Let it be remembered, that the wheat in the South was in general well got in, by all who made use of the three fine weeks which came at that season: in this point, a great variety of information agrees, and every person's recollection must be fresh. The influence of this season extended even into Shropshire, as appears by the letter of Mr. HERRIES. This circumstance, with the stock in hand of old wheat, whether it amounted to a month or to six weeks consumption, and the import of 220,000 quarters, is fully sufficient to account for what we were eating through
the

the winter; and for the good bread remarked at London, a place sure to be supplied with whatever is to be found in the kingdom. Under such evident circumstances, to suppose that we have been living for four or five months on old stock in hand, may be a pleasant comfortable speculation for those who are willing to be deceived; but price is a fact worth an hundred speculations*.

Another point, is the capital necessary for these vast supposed stocks in hand: the price in August was above 9s. a bushel, or 3l. 12s.: two millions at that price come to 7,200,000l.: millers and mealmen may be rich, but he is a more credulous politician than I profess to be, who believes that there are any such capitals to be found locally scattered; for in much the greater

* So complex a subject as corn, and the causes which influence its price, admit of so many exceptions to every rule that seems general, that much attention is necessary to discriminate between circumstances that are true upon a certain scale, but false if that scale is extended. Summer is the season for threshing wheat—true to a certain degree; false when applied to the year's consumption: and here is another instance, speculative hoarding, or rather reserves of corn, are proportioned to cheapness. This is a general truth, but it is not universal: there are men who will speculate *most* when it is *dearest*; a conduct governed by several causes. All I contend is, that such exceptions, though perfectly true in fact, are erroneous in argument, *applied to the whole kingdom*; and that such speculations can, so late as August, have but a small sphere to act in; the quantity of corn in the whole kingdom then being small, and every part of it *necessarily* possessing a share of that small portion.

part of the kingdom, it is known that such speculations were not, nor could be made.

Whatever is urged, which tends to throw the scarcity and price upon any other cause than the seasons operating upon a cultivation on the one hand not sufficiently encouraged, and on the other, upon a population rapidly increasing, must have the mischievous effect of giving a wrong direction to the public attention. What is it that we do not hear of monopolizing, jobbing, and sample selling? Consider that these practices have not sprung up with the evil; but if they have existence at all, have existed for these thirty years: they were complained of in 1772, &c. as much as they can be at present. But I wish to know what they were doing from 1796 to 1799. The price of wheat in 1797 was 6s. 7d.: in 1798 it was 6s. 2½d.; and for the four first months of 1799 the same. If these evil practices have such power, why was it not exerted in that period? The inclination and the capital existed; yet nothing of the sort happened; but let the seasons affect the crop, and every one knows the quantity will lessen; then prices rise; and while the plainest of principles, that of *price*, being combined of *quantity* and *demand*, are operating, the evil is felt; and people who know little, observe superficially, and think lightly, will attribute it to some cause connected with popular clamour, and rail at a war, a miller, or a jobber—attending to
any

any thing rather than the real cause. They will dwell on evils that regulation can remedy, and then every talker has his nostrum.

The experience of centuries may tell us, that the price of corn will not rise in exact proportion to the deficiency; indeed it is impossible it should; because it is some time before the ratio of a deficiency is known; and every man able to keep his corn, will speculate on the probable rise: it is upon the whole fortunate they do, for many minds take many seasons for selling, and thus all are supplied. I believe in general, that as much is lost as gained by these speculations; in other words, that they are as much for the benefit of the consumer as of the farmer or the miller.

But suppose corn in autumn and winter is cheaper than it ought to be, from little and poor farmers carrying too much to market, the consumption of the people will be in some measure proportioned to the price, and they will be eating more than the crop allows. Now I ask, whether it is not in such a case much to be desired, that jobbers, or millers, or monopolizers, should take advantage of the price, and lay in great stocks? For what is the effect? They take *from* the market when there is plenty, and they bring *to* the market when there is scarcity; thereby equalizing both price and consumption.

As to selling by sample, there could be no regulation that would not do mischief: a farmer

lives within a mile of a mill, and ten from market ; if he is forced to carry his wheat ten miles, and the miller to take it ten back again to his mill, is this an operation that will make the flour cheap? Allow exceptions, and your law would be like so many others, nugatory.

I am anxious to do away these errors, because I conceive them to be most mischievous ones.

In the first place, they tend to blow up the people into sedition and riot, for which object nothing can be so well calculated as to impress any idea of the price being enormous without scarcity ; and next, they must, if often repeated, have another tendency scarcely less pernicious, that of influencing the minds of legislators and ministers, to consider by what policy causes of the evil may be removed, that have little or no existence. It is turning that attention to jobbers, and monopolizers, and speculators, that should be given to wastes and production—to ameliorating the condition of the labouring poor by means OF LAND ; and to embracing a wiser system in various practical points, far enough removed from jobbing, and hoarding, and sample-selling.

But to tell the people, as so many persons have done, both in and out of parliament, on the authority of one or two districts, first that the deficiency was only a fourth, and next that the stock in hand more than covered it, nay, almost twice over covered it ; to give a long detail (con-
nected

nected with such assertions) of stacks here and
 stacks there ; to speak in the same breath of the
 immense profits made by men of a certain de-
 scription, who had been great purchasers—What
 was all this, but directly to tell the people,
 “ *you are deceived and cheated by monopolists and
 millers ; you are paying an unjust price ; a price not
 the result of seasons, or deficiency, but of keeping back
 that corn which ought now to be in the market.* ”—
 Language could scarcely devise a surer means of
 inflaming the people to madness, and pointing
 their enmity to a set of men against whom they
 are ready enough of themselves to harbour an ill-
 will : is it conceivable that the very men who
 have been forward in such representations, are
 those who accuse my evidence to the Committee,
 as tending directly to kindle a general mutiny !—
 Mark the difference of our language—mine has
 been, *the deficiency is great and real ; the stock in
 hand small ; a very high price the necessary conse-
 quence—the evil is from God.* Patience and sub-
 mission the only conclusion.—What has their’s
 been ? *No ; the deficiency was small ; the stock in
 hand great : there is plenty of corn, but they will not
 let you have it.* Who could have wondered, when
 such was the language, had the enraged populace
 proceeded to violence ? But (no thanks to these
 persons) the people were wiser ; they knew what the
 seasons had been ; they knew the shortness of the
 crop ; they knew that a high price was the necessary
 con-

consequence ; and trusting to the wisdom of parliament, and the benevolence universally expanding through the country, remained quiet and unoffending.

Such is the estimate which I cannot but form on the idea of there being three months consumption more than there must always be, on hand last harvest : what, therefore, am I to say to the so much more extraordinary assertion, that there was in all six months consumption in hand at that time* ?

The deficiency seems well ascertained †. The stock in hand at harvest can now only be estimated by the price.

A late harvest is another point which should in all safety be left quite out of the question, because it depends on that which is to come : the next harvest may be as late as the last ; we know before-hand, by the time of sowing, that it

* “ If there was left of the old stock at harvest only enough for three months (and I say there was double the quantity), where is the cause for alarm ?” *Letter of Mr. Thomas Davis.*—Very great cause of alarm ; for the price would have been so low, that cultivation would be discouraged. Six months surplus, after a year, the price of which had been 10s. a quarter beyond the average, notwithstanding the import of near half a million of quarters, is a position which, on more consideration, I should suppose this gentleman (a very able and ingenious one) would not persist in.

† “ It seems now to be very generally agreed, that the deficiency amounted to one-third.” — *The Speaker's Speech, March 6, 1800.*

must

must in all probability be late, as nothing but an uncommonly fine summer can bring on the late-sown wheats, which were caught by the frosts as soon as they came up so well as to cause an early ripening. To calculate circumstances so absolutely contingent on the seasons, is equally uncertain and unsafe; for there is no security but in being provided for the worst. Yet have I seen calculations which boldly pronounce that we want only nine months consumption to be supplied by the last crop. Such assertions seem to me to be at least *very rash*: for what is it, but asserting that the Legislature may safely overlook three months consumption; that is to say, two millions of quarters! by supposing either that the stock in hand amounted to that enormous quantity at the end of last harvest (supposing the harvest had ended at an average period), or, that such vast supplies are to depend on the gratuitous expectation of an early harvest this year, while we have every reason to expect a late one?

QUANTITIES CALCULATED.

If we are a fortnight forwarder this year than we were the last, it will deduct 291,666 quarters at the reduced consumption, which it is necessary to admit and explain.

A quarter per head has been stated as the common average quantity eaten per annum; but when wheat is so dear as it has been through the
months

months of November, December and January, we are not to suppose a consumption in that ratio. We cannot fairly calculate on more than the proportion of seven bushels; this is seven pecks a head for three months, or 1,750,000 quarters. To this we are to add 220,000 quarters already imported. The account will stand thus :

		<i>Quarters.</i>
A year's common consumption	- -	8,000,000
Deficiency of crop, 1-third	2,666,666	
Consumed in Nov. Dec. and Jan.	1,750,000	
		4,416,666
		3,583,334
Import	- -	220,000
		3,803,334
Stock in hand Feb. 1st	- -	3,803,334
But nine months consumption, at 7 bushels a head, is	- -	5,250,000
	Deduct	3,803,334
		1,446,666
Deficiency to be provided for	- -	1,446,666
If the next harvest is a fortnight earlier than the last, it will de- duct	} 291,666	
Expected import, as stated by Lord Hawkesbury	} 446,666	
Stale bread, estimated at a fort- night's reduced consumption	} 218,749	
		956,081
Still remains unprovided for	- -	490,585

This table proves that a very small reduction of the general consumption is far more effective than all other measures put together; and it likewise shews the extreme difficulty of effecting it :

it: a deficiency of only 500,000 quarters in the year, seems not to be very formidable, when all sorts of substitutes are considered; barley, oats, potatoes, rice, soup, and many other articles, have been resorted to with an eagerness on one hand and a liberality on the other, beyond example; yet with all these exertions, the price has been enormous, so great as to force wheat to market earlier than common, by many farmers; aided by the immense price of straw, which must be threshed out, for that price, in winter, while the demand for it is greater by far than in summer, as the farmers well know, and felt it to be a premium for threshing. Yet with so strong a motive to thresh, both in price of grain and straw, with substitutes for wheat forcing in every part of the kingdom, with a consumption reduced in the ratio of a million of quarters, and with a large import, still, in spite of every thing, the price has risen steadily and gradually: is this conceivable, without as steady and real a cause? Is it within the bounds of possibility to have thus happened, without any cause at all? which would have been the case with a deficiency of only one-fourth, covered by a stock in hand of a fourth.

It is true, that at the present moment we are to add to the deficiency of 490,000 quarters the expected import, making together 937,251 quarters; but this import, though partly ideal, is certain in some measure; and the apprehension

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490,585

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of it operates to induce the farmers to carry corn to market while the price is high. Every one must know that 5*l.* a quarter will force corn from every country that has it ; the mere notion therefore of an import, tends to fill the markets, and the uncertainty of the amount may as well operate to that end, from its supposed magnitude, as to encourage hoarding from the expectation of its falling short.

But let us, while we contemplate this moderate deficiency of 500,000, not forget that it is *possible* to turn out 1,446,666 quarters, as all after that quantity in the above estimate is contingent. If next harvest proves late, the 291,666 for which credit is taken, disappear in the account ; stale bread may not make the difference expected ; and import may not yield what it is calculated. All is possible ; and something of it is probable ; should this be the case, the deficit would demand very effective measures indeed.

But in any case, the *price* is the object to view with the greatest solicitude ; while the poor are forced to pay (whatever the scarcity may be) so very high a price, the evil presses so severely, that every nerve should be exerted to procure remedies of every description.

If the farmers, insulated as they are, and scattered over forty millions of acres, are able by combination, or any other means, to raise their corn to an excessive price, measures should
be

be taken to reduce it, and to such a degree as to make them cautious another time how they awaken and bring into activity the dormant resources of the country : whatever therefore may be the quantity of wheat in hand, every possible exertion ought to be made to reduce the price, by proving to all that relief may be had long before the next crop can be in the market.

When I was summoned to attend a Committee of the House of Commons, I had apprehensions that mischief would be done ; but as concealment there might lull the Legislature into a dangerous security, I felt it a duty to conceal nothing. In my opinion, it would have been wiser to have had no public Committees, but private means taken to ascertain the fact ; and nothing talked of till bills were prepared ready for the Legislature.

In what degree the measures taken *have* raised the price, is worth examining.

	<i>England.</i>
	<i>s. d.</i>
Price of wheat June 1799	7 11
July	8 4
August	9 1
September	9 5
October	10 5
November	11 3
December	11 8
January	11 10
February	12 8

From this table it appears that apprehensions of a sudden rise, from the late inquiries, are un-

just ; for no such event has been the result ; the rise has been gradual from June.

These prices are so enormous, so much beyond the ratio of the deficiency, that a question naturally arises on the subject, how far the prices of a necessary of life can rise : And what are the circumstances that may limit it ? *Price* being formed by competition to possess, it may rise while competition continues, and to any height. If the rich feed the poor, which is very much the case at present, the price is no longer bounded by the faculties of the poor, for the wealth of the whole kingdom comes into competition for food : as long as such demand continues, *price* may rise.— And this has been the case for the last five months. Had the poor in many of the counties been left without this support and assistance of the rich, they must have perished for want of food, till numbers had lessened to the proportion of the supply. But the prices have arisen high enough to drive the people to other food, which lessening the competition for wheat, the price sunk, or rather looked downwards, the second week in March*. It was improbable it should do
other-

* This fall of price was, however, more an object of conversation than fact : it might more properly be said to cease to rise.

	<i>Wheat.</i>	<i>Barley.</i>	<i>Oats.</i>
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Average England, week ending } Feb. 22, 1800 - - - - - }	106 2	50 3	35 3
March 1 - - - - -	107 6	52 0	37 4
8 - - - - -	107 3	53 8	37 9

It

otherwise, in proportion as the people quitted the food for barley or oats; when once such a consumption becomes general, the competition for wheat in an extraordinary degree will cease, and the price must fall to the proportion of this contracted consumption; but from that time oats and barley become the necessaries of life; and these might be expected to rise in proportion to the quantity demanded, which would certainly take place to a degree perhaps equally distressing, but for one fortunate circumstance, which is the quantity of barley too bad to malt, but not too bad for making bread; that which some of my correspondents call *stained*, but not *black*. The full effect of this circumstance does not yet appear, though barley and oats have risen to the 8th of March. It has demanded from 3 to 4 months to bring the people to this change in their food; had they taken to it at first, the price of wheat might have been high, but not comparably to what we have seen.

But under such circumstances of consumption changing, no fall in the price of wheat will prove any thing against the scarcity being real; let that deficiency amount to half a crop, still if it is not demanded, the price must fall; if by means of

It is astonishing how little accuracy we find in conversation: who would conceive, from what has been reported, that 3d. a quarter would have turned out the fall in this last week!—much more than balanced by the rise in the other two necessaries of life, as they are now become.

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d.	s. d.
3	35 3
o	37 4
8	37 9
	It

other articles of food the consumption of wheat is reduced in a greater proportion than such defect in the produce, the price will be regulated, not to the crop, but undoubtedly by the consumption alone.

But under the case of so very deficient a crop of both wheat and oats; of barley below the average, and one-third of that worse than *stained*; with a great demand for every thing in the North and in Scotland; it would be great imprudence, from any fall in price likely to be experienced, to be tempted into any relaxation in the measures that have been in contemplation for giving ease to the people. Vibrations in price may be looked for; but there is not any reason to expect, even with the assistance of a forced importation*, that the exertions of the Legislature will be unnecessary. Those exertions should be without remission, and gradually (as the pressure of the present moment lessens) take perhaps a more important direction in those permanent measures that shall give the kingdom in future

* Average of wheat and flour imported from the North of Europe for twelve years, and from the States of America previous to 1796:

	<i>Quarters.</i>
Wheat and flour from the North of Europe for twelve years, per ann. - - -	} 127,819'4
Greatest quantity ditto in one year - - -	329,281
Average of wheat and flour from North Ame- rica for twelve years - - -	} 27,525'5
Greatest quantity from ditto in one year -	93,724

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the blessings of a more regular price of the great staff of life.

REMEDIES.

The first object I shall mention, is to encourage powerfully the culture of potatoes: the correspondence shews that seed would be wanted in some districts, but in many there is plenty: they are in common largely planted in Essex, to take up in July (according to the demand), and the same practice is found in Lincolnshire. If they are not wanted, the more are left to perfect their growth, and are taken up in the autumn. Thus the husbandry recommended is not a novelty; it is merely the extension of a practice common: these early products amount to about half a crop, that is, from 150 to 200 bushels an acre. If it is objected that this culture would rival better crops, it is forgotten that they form the fallow, or preparation for corn; that the land, if not planted, would be sown with turnips, and yield a produce for cattle instead of man. If it is said it would exhaust the soil, it is answered by common practice, granting the fact, which is however much disputed, does not wheat exhaust the soil? Even more than any other sort of corn; but was that ever brought as a reason against the cultivation? Besides, the circumstance is prepared for by the manuring generally applied for this crop. *But why encourage it by a premium? the demand will be sufficient.* To answer this objection,

tion, we have only to open our eyes, and see through every street of this great city, the *setts* every where thrown away with the parings ; these are to the whole root nearly as 8 to 50 ; eight ounces in fifty might be saved for seed, which would include all that is seed, and the rest consumed.—Setts enough to plant 30 acres are *every day* wasted in London.

It is asserted by some, that *eyes* thus cut do not yield a good crop ; the contrary is positively asserted by others ; and I have little doubt of both parties speaking truth. In soils not well adapted to the culture, and in fields not properly prepared, or planted with a heavy furrow turned on the seed, it may probably be found that large cuttings are superior ; and if in scooping out the eyes, too small a tool is used, so as to take little more than the skin, the embryo plant may want the nourishment it derives for some time from the mother sett. But let it be considered, that at a moment like the present, when every exertion ought to be made to increase the sustenance of mankind by all possible efforts, an inferior crop of potatoes is an object of no inconsiderable consequence ; and that a saving of this sort for providing a greater plenty of seed, is with such views worthy of immediate attention.

Well-imagined premiums for the encouragement of this culture, would be extremely advisable ; they would certainly secure a larger plantation

tion than is likely to take place without such motives. And if four or five thousand pounds, given to the greatest quantities, were only to secure some hundreds of acres more of so useful a root, the public money would be wisely and prudently dispensed.

It would turn the attention of every one to saving seed with the utmost care: this is not done; and therefore we have a plain proof that a high price is *not sufficient encouragement to enlarge production beyond a certain scale*, and therefore one of these wise principles falls to the ground. Potatoes throughout the kingdom are at so high a price, that many a person in weak circumstances will be tempted to sell, and reserve less than common for seed; and many will be deterred from buying. The object is extremely important; because they might be so largely extended as to support half the people of England for a month; and they would be ready to eat, if wanted, full two months before the wheat will be in the bakers' shops. Such was the proposal, but ADAM SMITH prevailed: political principles were thought more nourishing.

As to the effect which would have been produced, we have nearly a case in point: in the scarcity of 1795, a Member of the Board of Agriculture proposed a premium of 1000*l.* for the largest breadth planted on land which had not yielded them before, to exclude the great Es-

sex plantations. It occasioned much conversation, and got into the newspapers, as if actually offered. The Board received some letters, and I had private ones from various persons, inquiring into the terms, and stating that the writers were making great exertions to become candidates. A premium of 1000*l.* is a new case; none such was ever offered, and therefore no one can say that it would not have had much effect. And supposing a large quantity was drawn from the market at present to save for seed, the benefit would much exceed the evil; for if the scarcity continues and increases, every pound so drawn from the markets would produce ten before harvest, or twenty after: at all events, no evil could ensue.

Another measure which would have proved absolutely effective, was to prohibit feeding horses kept for pleasure, on oats. If 500,000 such horses are thus fed at present, and eat one bushel a week, they consume in nine months 18,000,000 of bushels; or enough at 25 bushels each person per annum, to support a million of people during that period, or four millions of people for nine weeks: such a resource is equal to the urgency of the moment. Whatever unpleasant circumstances might result from such a measure, what can be the consequence or the amount, when compared with the evils of such a price of wheat as 5*l.* per quarter? And what reasons can be offered against it, when considered

sidered as a proof to convince the people that their rulers will submit to any inconveniencies, in order to afford them every relief that can be devised? Nothing is so simple as the mode of manufacturing the oaten cakes (the *girdle-bread*) of Westmoreland, &c. which the reader may find in the Report for that county, by Mr. CULLEY.

Other measures that have been proposed in parliament, will have a good effect unquestionably; but calculate the amount, and compare it with this—the extent of their operation is doubtful: there can be little doubt of the extent of this. It is an effective and powerful measure, and therefore proper for such an exigency.

The farming bailiff I sent to the Duke of LIANCOURT ten years ago, is now in London, having left France but a fortnight, and has given me many accounts of French husbandry; one circumstance of which deserves notice—that every scrap of waste and neglected land is converted into little possessions by the poor, and cultivated most assiduously; much by means of potatoes. I have drawn, at the request of a Member of the Board of Agriculture, the skeleton of an act for rendering assistance of this sort to the poor permanent, which I believe would raise thousands of families from a state of poverty, and dependance on rates, to a situation of ease and comfort; equally beneficial to landlords, farmers, and themselves.

And here it well deserves attention, that on the estates of the Earl of WINCHILSEA and Sir

CECIL WRAY, in Rutland and Lincoln shires, the benefit of the labourers having gardens and grass for one or two cows, has been prodigious : the Earl informs me, that of seventy about Burley, only two widows have applied on occasion of the present scarcity, for parochial relief ; all at their ease. It is the same with Sir CECIL. What a powerful motive for extending wherever possible, so admirable a system !

As to the measure of breaking up commons by parish officers, *for one year*, there are so many objections to it, that I take for granted it will either be so much altered in the House as to become a very different measure ; or, that lords of manors will every where put a negative on it : as much time may probably be employed upon such a proposition, as would mature a plan for dividing the commons in such a manner as to become a permanent blessing to the poor. On some soils, and in some climates, such would cover themselves again with white clover and grass ; but in general, they would become a bed of thistles, to the annoyance of all the surrounding country. The culture would be neglected till every man's private business was finished—the produce would be trifling, and the result an evil. At present, they are a great resource that may be applied to admirable purposes ; better remain so, than, for the sake of one crop, to convert them into fields of desolation.

But

But let me hasten from temporary measures to others of a permanent nature, to secure a more regular price of wheat.

The high price at present I consider as entirely arising from the seasons; but as a deficiency in the crop, of 33 per cent. ought not to be attended with a rise of 100 per cent. some measures ought to be adopted, difficult as they may be, to prevent an inequality so oppressive to the poor.

1. Ascertain the prices of corn.
2. A general inclosure.
3. Give land to cottagers.
4. Parochial assistance in food to be in rice, &c.
5. Number the people.
6. Register the acres of wheat and rye sown.

The first object is to ascertain prices with more precision.

The corn returns at present are in every degree inadequate. Blanks, by reason of no returns, are numerous; from some places the same prices have generally been transmitted; from others, grossly misrepresented. While there remains so much uncertainty at the fountain of all regulations (including that of the assize of bread), it is impossible to alter or amend them but in the dark. That bakers should be under an assize, and millers and mealmen under none, is a gross absurdity long seen and felt, but not easily remedied while the price of wheat is unascertained. What I would propose is, that the magistrates,

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when met at the quarter-sessions, should make the return (signed individually by all present), of what has been the price of every sort of grain for the preceding three months. To discover the price of every market-day, is almost impossible; but there is no country justice who is not acquainted perhaps personally with the price for the last quarter. This would come very near the truth indeed; and as to the inconvenience of the price of one quarter being taken as a guide for another quarter, it does not appear that the evil would exceed the benefit; they would balance each other. If the price from Midsummer to Michaelmas in some years would set it too high or too low for the period from Michaelmas to Christmas, the contrary might take place in the two succeeding quarters. For instance, in the present moment, the price of last summer would have been too low for the quarter from Michaelmas to Christmas; but that from Christmas to Lady-day, regulated by the price from Michaelmas to Christmas, would have restored the balance; and so it would generally be found. The inconvenience would be small, compared with the benefit; and as to all the race of wealthy millers and mealmen, who keep large stocks on hand, it would come much nearer the truth than by any other way whatever, for such men do not in the quarter sell the meal all of that quarter, but much of the preceding one. Some of the corn consumed between Michaelmas and Christmas (in some years a large portion, where
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the farms are large), is always bought between Midsummer and Michaelmas.

When the price of wheat was thus correctly ascertained, there would be a fair basis for any regulations which the wisdom of the Legislature might think proper to lay upon millers and mealmen.

The next article I shall name, is a very important one,

A GENERAL INCLOSURE.

To name it is sufficient. It has long been looked for by the whole kingdom with eager anxiety; nor has one powerful or sufficient reason been offered against it. The measure has been sanctioned by one House of Parliament; and might certainly be so arranged as to obviate all the smaller objections that have been made to it. The former scarcity brought forward the proposal: surely the present one will not pass without maturing it! To state that the expence by fees, of the officers of the two Houses, amounts to 209l. (per parish, however many there may be in an act), is alone sufficient to shew that the measure ought to pass; but this is in many instances the smallest object. To maintain and pay solicitors and witnesses at London, waiting for the business and forms of the two Houses, fighting in litigious and interested contests, run up the expences enormously; render it utterly impossible

possible to come to parliament for small inclosures, and are a very heavy impediment to large ones.

But there is another circumstance deserving the greatest attention at the present moment, because it goes to the question of a scarcity of corn. The great profit by inclosing, is upon those soils which are convertible to grass. Upon dry land well adapted to corn, the benefit is far inferior, and the consequence is, that immense tracts of this sort of land remain open and waste, while the heavy rich deep soils that have been constantly yielding wheat under a low rent, are inclosed and converted to grazing land under double or treble that rent; such soils, where the parishes are large, will bear any expence, and these have been thus taken from corn that is the food of the poor, and thrown to bullocks to feed the rich.

I am not so absurd as to reason against these measures: they are wise and necessary, and the prosperity of the kingdom has been the result; but it is a most powerful motive for removing every impediment from the inclosure, and consequent culture under corn, of all dry and poorer wastes, upon which the profit is so much less, as not to induce an equal desire to encounter those heavy expences which press at present upon such acts of parliament.

From these circumstances I draw the conclusion, that while the people are rapidly increasing, and the culture of wheat not advancing in a similar

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milar proportion, scarcity must be often at our doors. I conceive it to be a gross contradiction, for a man to admit, as some do with whom I have conversed, that the culture of wheat has not advanced, and at the same time to contend, that so untoward a season as the last should not occasion a great, real and unquestioned scarcity. The combination forms a very critical and dangerous situation, highly deserving the attention of the Legislature.

The immense wealth of the kingdom has created so enlarged a demand for the products of grass, that with all the measures of inclosure, and all our improvements, the supply has not been adequate. That demand rivals the lower classes who feed on corn; they must be brought to harmonize, or the evil can never be radically cured.

Combine the various circumstances I have touched on in different parts of these papers, such as the great increase of population, the prodigious increase of horses in the last 30 or 40 years, the decline in the use of oxen in husbandry, the culture of wheat not sufficiently advancing, the vast tracts of land laid down to grass, to provide for the demand for the products of pasturage, with several other circumstances of less importance; and it will appear that no one can reasonably be surprized that an unfavourable season should have very distressing effects.

One of my correspondents (Mr. RUGGLES), says, "let the Minister bring his herculean mind

to this (general inclosure act), and similar objects, and difficulties will vanish." And Sir CHARLES MIDDLETON, whose knowledge of agriculture is famous, says, and most justly, in a letter to the President of the Board of Agriculture, "As long as land is rendered unproductive, and tied up for want of a general inclosure bill, we can have no reasonable ground to complain of scarcity."

It is supposed that three millions of persons are employed in the agriculture of England, on about 30,000,000 of acres; and they feed 10,000,000. In this proportion, seven millions of waste acres would feed 2,333,000; but demand to cultivate them no more than 700,000; consequently they would raise food for 1,630,000 persons more than those who were employed in the cultivation: a large portion would doubtless be added to the class of artizans and manufacturers employed by such 700,000 cultivators, but still there would doubtless be a very considerable excess; sufficient to cut off the present necessity of importation, and prepare the means of feeding that vast increase which is every ten years augmenting the population of this kingdom. The periodical scarcities with which we are visited, call imperiously for this measure.—It cannot be delayed without the most serious evils resulting.

The means which would of all others perhaps tend most effectively to harmonize these jarring
in-

interests, and most surely prevent future scarcities, so oppressive to the poor as the present, would be to secure to every country labourer in the kingdom, that has three children and upwards, half an acre of land for potatoes, and grass enough to feed one or two cows. These are the poorest people there are in the kingdom, and therefore most want assistance: the mode of relieving them at present, is by selling wheat or flour at half price, which in such periods is mischievous, as it prevents that short allowance in this article, which can alone make a short crop hold out: but if each had his ample potatoe ground and a cow, the price of wheat would be of little more consequence to them than it is to their brethren in Ireland.

Every one admits the system to be good, but the question is, how enforce it? Some difficulties might occur. The magnitude of the object should make us disregard any difficulties, but such as are insuperable: none such would probably occur, if something like the following means were resorted to:

I. Where there are common pastures, to give to a labouring man having children, a right to demand an allotment proportioned to the family, to be set out by the parish officers, under the controul of two justices, and the sanction and register of the sessions; and a cow bought. Such labourer to have both for life, paying 40s. a

year till the price of the cow, &c. was reimbursed : at his death, to go to the labourer having the most numerous family, for life, paying shillings a week to the widow of his predecessor.

II. Labourers thus demanding allotments by reason of their families, to have land assigned, and cows bought, till the proportion so allotted amounts to one _____ of the extent of the common.

III. In parishes where there are no commons, and the quality of the land adequate, every cottager having _____ children, to whose cottage there is not within a given time, land sufficient for a cow, and half an acre for potatoes, assigned at a fair average rent, subject to appeal to the sessions, to have a right to demand shillings per week of the parish for every child, till such land be assigned ; leaving to landlords and tenants the means of doing it. Cows to be found by the parish, under an annual reimbursement.

IV. A county inspector appointed, to whom returns of all cases to be made, to be annually reported to an office in London ;—the Board of Agriculture competent to the purpose ; difficulties would thus be analyzed, and might be provided for.

If it is said, that by any such measure you injure the right of turning live stock on the common, possessed by those cottagers to whom allotments are not made, I reply, that the bill now
before

before parliament, to enable parish officers to break up commons, will do exactly the same, but probably, if made effective, to a larger amount. The distribution of the potatoes will be to those who want them most, and not to the persons in proportion to the supposed injury they may receive by ploughing the common. It is therefore admitted, that this ideal property may be violated: in inclosure acts, it is in many instances overlooked. But the fact is, that these rights of common are, nineteen times in twenty, nuisances to the owners, who have no means of winter-feeding the stock kept by the common in summer. The nearest farmer by his flock sweeps the whole, and starves the flock of the poor. To the parish the plan would be eligible, for it would be a great ease of poor rates. And if each lot paid a small quit-rent to the lord of the manor, and remained subject to tythes, there does not seem to be a single interest that could be adverse to the plan.

The great object is, by means of milk and potatoes to take the mass of the country poor from the consumption of wheat, and to give them substitutes equally wholesome and nourishing, and as independent of scarcities natural or artificial, as the providence of the Almighty will permit.

Another method of attaining the same object, would be to pass an act prohibiting parochial, relief

lief so far as subsistence was concerned, in any other manner than by potatoes, rice, and soup ; not merely as a measure of the moment, but permanently. Very great consequences would flow from this : it would secure a vast culture of potatoes, or a great and regular import of rice ; and it would infallibly spread throughout the kingdom the habit of consuming them ; habituate the poor to a cheaper way of satisfying their hunger, and their taste would be weaned from the dependance on bread, so general at present.— This measure is a powerful one, for it would affect the distribution of perhaps two millions sterling on an average, and give new habits to probably two millions of people*, and these the poorest in the nation.

Public granaries have been mentioned ; the idea has been refuted an hundred times. The only granaries admissible, would be for rice to be sold so cheap as to promise the gradual introduction of that food : these would not affect the price of wheat when cheap ; and when dear, would be a source of great importance. Something useful might be done in this way ; and the best means of effecting it would be, by inducing the India Company so to provide themselves, as to render an act feasible which should direct, that as soon as wheat shall rise on the average of

* The number of parish poor relieved, has been shewn in many places by the very able Mr. HOWLETT, to amount to near one-third of the total population.—*Annals*, v. 18, p. 573.

the kingdom to 4l. per quarter, and so long as it remained at or above that price, the Company should sell rice in hundred weights, to all persons demanding, at 25s. per hundred weight, or any other price which shall on an average of years be adequate.

The next measure I shall propose, is not a law, but a regulation in the mode of inquiry, whenever Government or the Legislature wanted information relative to scarcities, real or imaginary.

Examinations by a Committee of either House of Parliament, with reports made public to the world, are perhaps the worst means that could be used; and this results first from the great importance of a legislative body; and secondly, from the necessity of publishing the result, be it what it may—what is communicated to 500 individuals, is published, whether in print or in manuscript. Interested men, who speak to a Committee composed of persons who have the power to make laws that shall materially affect their employments or trades, are not likely to forget their own interest, which lessens the dependance that is to be placed in their evidence; and the weaknesses, prejudices, or errors of others, may equally tend to impress mistaken ideas. The very importance of the body before whom individuals are called, creates these and other sources of error; and making public the particulars of the examinations, may either spread a false alarm, or an equally pernicious security.

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There seems to be a method of obtaining information free from these great objections.

Public Boards that are instituted for national purposes, those of conducting, inquiring into, or encouraging any branch of revenue or industry, are the proper bodies for reporting on the state of the kingdom respecting, or nearly respecting their business and ordinary inquiries. The Board of Agriculture is singularly proper for such objects as concern cultivation, products, the labouring poor, and the manufacture of wheat; every inquiry into the last of these objects, should be as much as possible by actual experiments, easy and not expensive to make. By their very extensive correspondence with every part of the kingdom, they would be able to make inquiries silently, and consequently without creating any alarm; and they might easily, by repeating such inquiries annually, and registering the result, be able to discover how far their information was accurate, by comparing it with the prices of the year. But if more sudden knowledge was wanting, it would not be difficult at any time to procure it, without the least probability of exciting that sort of alarm which might be made an ill use of by interested individuals. When such an institution is established at the public expence, it seems to be no more than reasonable to have some degree of confidence in its capability of being essentially useful in inquiries so intimately connected with its immediate business.

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Upon the present very important occasion, I have no doubt but had the Board been early called upon to institute a proper inquiry into the state of the last crop, and the means of preparing for any deficiency that might be the result of so unfavourable a season, they would have been able to furnish Government with information truly important.

Twenty-nine years ago I published a pamphlet, entitled, *Proposals to the Legislature for numbering the People*; so long a period has elapsed, but nothing of the sort thought of. I beg to repeat the idea at present, as one which becomes more and more necessary: and it should be attended by another, which would enable Administration to form nearly an accurate judgment of the proportion between the food raised and the mouths that eat it; and this is, to have an annual return of all the acres sown with wheat in the kingdom: this would be very easily done; and if it were found that in five or ten years the mouths multiplied out of proportion to the acres of wheat, it would be sufficiently clear that our situation respecting food must necessarily be precarious.—What farmer sees his herds and flocks augmenting, without paying any attention to increasing their food? Had the people and acres been numbered in 1788, and again in 1798, and the one found to increase nothing, but the other one-third, who would be surprized at scarcity?

The conclusions which may be drawn from the whole business are these :

- I. That an average crop is between 22 and 24 bushels.
- II. That the people increase more than cultivation extends.
- III. That the deficiency amounts to above one-third, and therefore accounts for the scarcity, without recurring to any other cause.
- IV. That the stock in hand last harvest, on an average of the kingdom, was not greater than common.
- V. That the parliamentary measures hitherto proposed are insufficient, however meritorious.
- VI. That the application of oats and barley reducing the consumption of wheat, have had effect at present, and might, with a very extended cultivation of potatoes, complete the remedy.
- VII. That the return of similar situations may be expected, with so increasing a population.
- VIII. That the best prevention is—to render as general as possible the system of cottagers having land for potatoes and cows ; and to pass a general inclosure act as speedily as it can be done.

But I shall not conclude without an observation which such a subject calls for. It is the hand of

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THE ALMIGHTY which has afflicted the nation; and he little deserves the name of Christian, that does not turn his mind on such occasions to the Great Author of every blessing. On His seasons we depend for subsistence; and when they are uncommonly adverse, it would be idle not to attribute the apparent evil to the inscrutable decrees of His Divine Providence. If the spirit of infidelity has increased, and men live as without God in the world; if in the discussions and conversations that take place on the subject, we never hear a word that tends to recognize that Unseen Power which holds the world in Its hand; but recur to other causes than an offended Deity, and other remedies, as if they could be efficacious without His blessing—we may add to the sins that have excited His wrath, an impious inattention to His providence; but we shall not find such the road to plenty. Proud in wealth, and gorged with prosperity; flourishing amidst a general misery, and rearing aloft the banners of victory and security; possessing all the blessings of the Gospel of our Saviour, with peace at home, while the nations of Europe lie in ruins around us:—have we been grateful to Heaven for such mighty blessings? Irreligion, luxury, extravagance, and perpetual dissipation, mark too many in the higher walks of life: while profligacy, idleness, immorality, vice, and depredation, the sure effects of neglected education, prey amongst the lower classes. Are

our poor provided for in the manner they ought to be, in a kingdom that expends forty millions per annum? These are great and essential points, which cannot escape an all-seeing eye; nor can they be seen without offending HIM by whom kings reign and kingdoms stand or fall. It may not be in the councils of the Almighty, that this nation should be conquered by foreign arms, or destroyed by internal commotion; but it evidently is His will that it should be chastized; or the punishment we feel at present would not have taken place.

The wisdom of legislation, the means of policy, ought all to be exerted with vigour and activity, but still in a full reliance on the blessing of the Almighty to give them effect, and a firm persuasion that without it, all will prove but vain and nugatory.

APPENDIX.

No. I.

FLOUR AND BREAD EXPERIMENTS, BY THE EARL OF EGREMONT.

PRODUCE OF A LOAD OF WHEAT OF FORTY BUSHELS. (RED WHEAT).

	Dressed into		Difference.
	<i>Seconds</i> (through a 26s. <i>ten Flour</i> (thru' bolting-cloth.)	<i>Standard Flour</i> (thru' a 13s. cloth.)	
Flour	Bush. gal. lb.	Bush. gal. lb.	Bush. gal. lb.
Pollard	33 0 3	38 5 2	5 4 6 (more.)
Bran	2 1 2	0 0 0	2 1 2 (less.)
Waste	6 0 3	3 0 5	2 7 5 (less.)
Total weight of wheat	0 0 69	0 0 42	0 0 27 (less.)
Total weight of wheat	42 4 0	42 4 0	

N.B.—The standard wheaten flour is directed by stat. 13 Geo. II. c. 62, to be “without mixture or division, the whole produce of the grain, the bran or hull thereof only excepted, and shall weigh three-fourths (at least) of the weight of the wheat whereof it shall be made.”

It appears from this account, that a load of wheat of 59½ lbs. per bushel, dressed into seconds, yields 1851 (being about 4-fifths of the weight of the wheat); and into the standard wheaten 2380 (being about 11-twelfths of the weight of the wheat), in flour; so that the standard wheaten furnishes a proportion of 1-sixth more than the seconds, for human food.

they ought millions al points, nor can by whom It may hat this arms, or it evi- zed; or not have policy, tivity, of the persua- in and ENDIX.

(EARL OF EGREMONT'S EXPERIMENTS CONTINUED).

February 27, 1800.

PRODUCE OF FLOUR MADE INTO BREAD.

	<i>Standard Wheaten, dressed as above.</i>		<i>Seconds, dressed as above.</i>		<i>Difference.</i>	
	<i>lb.</i>	<i>oz.</i>	<i>lb.</i>	<i>oz.</i>	<i>lb.</i>	<i>oz.</i>
Flour - - -	28	0	28	0	0	0
Weight of yeast, water, and salt, mixed with the flour - - - }	17	0	14	10 $\frac{1}{2}$	2	5 $\frac{1}{2}$
Weight of flour and ingredients - }	45	0	42	10 $\frac{1}{2}$	2	5 $\frac{1}{2}$
Weight of dough	43	14	41	10 $\frac{1}{2}$	2	3 $\frac{1}{2}$
Loss of weight in dough - }	1	2	1	0	0	2
Weight of bread hot from the oven }	38	11	36	11	2	0
Loss of weight in baking - }	5	3	4	15 $\frac{1}{2}$	0	3 $\frac{1}{2}$
Weight of bread 24 hours after baking }	38	1	36	4	1	13
Do. 48 hours after do.	37	12	36	3	1	9
Do. 72 hours after do.	37	11	36	2 $\frac{1}{2}$	1	8 $\frac{1}{2}$

CONSUMPTION OF OATMEAL.

The three following minutes are of Irish consumption :—That a man, his wife, and four children, consumed 40lb. a week of oatmeal ; or 2080lb. in fifty-two weeks, being 391lb. per head : if a barrel of oats be four bushels (as it is of wheat), and yields 80lb. of meal, it is 20lb. for 40lb. of oats. At this rate the 391lb. of meal is the product of 782lb. of oats, which divided by 40, gives 19 bushels and 1-half for the consumption per head per annum.

By another account, a barrel of oats lasts such a family a week : this, at four bushels the barrel, is 34 bushels per head per annum.

By a third account, it is a quart of oatmeal per diem : this is eleven three-eighth bushels per annum of meal, or twenty-two three-fourths of oats. This account agrees exactly with SMITH'S estimate.

The price of meal in Scotland, and in the north of England, agrees well with his account : that price has been from 4s. 6d. to 5s. a stone of 14lb. while oats have been at 3s. 8d., &c. per bushel. This implies that a bushel of oats does not yield a stone of meal *this year* ; at which proportion, the consumption per head per annum must be at least 25 bushels.

In Mr. CATHERWOOD'S corn table for Scotland, Feb. 13, 1800, the average price of oats is

30s.

NUED),
7, 1800.
AD.
Difference,
lb. oz.
0 0
2 5½
2 5½
2 3½
0 2
2 0
0 3½
1 13
1 9
1 8½
No. II.

30s. 11d. per quarter of eight Winchester bushels ;
and that of oatmeal 31s. 10d. per boll, of 128lb.
Scotch troy : it should seem, therefore, to take
about eight bushels, or (if at 40lb.) 320lb. of oats,
to yield 128 troy pounds of meal, subject to the
addition for the expence of manufacture. This
also agrees with SMITH.

PRICE OF RICE IN INDIA.

In 1795, I made the following minutes from the information of gentlemen perfectly conversant with the trade of India.

Rice in the Carnatic, 90 *pagodas* at 8s. the *gass* of 9256lb. ; that price high. In Bengal, 40 or 50 *pagodas* ; 40 are 3s. 10s. per cwt. or one two-thirds farthing per lb.

Price of the best rice in India per cwt.	£.	0	5	3
Freight by the Company's ships	-	0	12	0

In England	-	-	-	£.	0	17	3
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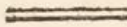
Rice is seldom higher at Calcutta than two sicca rupees the bag of 168lb. ; for cargo rice three one-half. It has been bought in the districts at five *mauns* the rupee, or 400lb. for 2s. 4d.

By writing over land in December, it may arrive by the beginning of next winter. By writing in September, it might arrive in the April following.

What could have been done in December 1795, could be done in December 1799 ; and I take it for granted was done by order of government. Considering the last wheat sowing, as I hope it has been considered, we may look forward to such an importation with no slight satisfaction.

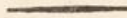
At present, there is no India rice to be had in London ; and that of Carolina is 48s. per cwt.

There is no other article of so much importance to keep cheap, and thereby to give the habit of consumption to our poor, as rice. Of what consequence would the present scarcity be, if we had now enough for one or two month's consumption?



No. IV.

IMPORT OF CORN.



IMPORT OF WHEAT FROM 1781, INTO ENGLAND.

			<i>Quarters.</i>
1781	-	-	159,766·7
1782	-	-	79,778·6
1783	-	-	505,161·2
1784	-	-	173,398·0
1785	-	-	94,631·1
1786	-	-	50,587·5
1787	-	-	50,467·1
1788	-	-	123,242·7
1789	-	-	93,347·3
1790	-	-	216,948·0
1791	-	-	459,494·5
1792	-	-	22,140·3
1793	-	-	482,766·6
			<hr/>
			25,11,757·6
			<hr/>
Average	·	·	193,212·0

IMPORTED INTO GREAT BRITAIN.

	Wheat.		Wheat Flour.		Oats.		Oatmeal.		Barley.		Rye.	
	qrs.	bs.	qrs.	lbs.	qrs.	bs.	bolts.	lbs.	qrs.	bs.	qrs.	bs.
1794	208,018	7	11,129	23	845,483	2	21,317	54	125,765	7	20,900	0
1795	287,893	1	90,447	22	440,245	2	24,250	41	17,952	5	11,471	0
1796	818,814	1	204,405	0	740,348	1	76,717	10	39,963	1	160,486	1
1797	454,882	7	14,906	11	563,743	4	57,043	114	64,197	2	8,257	6
1798	394,447	1	3,182	21	721,547	5	65,321	55	116,278	7	6,819	2
1799	472,991	4	60,413	20	492,423	6	43,307	121	19,536	3	22,044	4

Wheat — — — — — 2,637,047 5 qrs. bush.
 Flour, at 2 bush. per cwt. — — — — — 96,121 0

6)2,733,968 5

Average — — — — — 455,661 0

Average import of 1796, 1797, 1798 and 1799, — — — — — 535,283 qrs.

Throw all these imports into one mass, and the amount will be found very great: and though any one article may bear a small proportion to the total consumption, yet the effect of it in sinking the price must be considerable.

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M.

REGULATION OF MILLS AND MARKETS.

The Earl of EGREMONT has established a regulation at Petworth, which deserves universal imitation : he secures to the consumer an absolutely fair price of bread, *proportioned to the price of wheat* at the last market day ; and this price is ascertained by what I shall call a Jury carefully selected ; the table is stuck up immediately in the town ; and the consequence flowing, has been entire satisfaction. It has resulted from his being an enlightened and active magistrate, and landlord of the mill : what is thus shewn to be practicable on the scale of a town of 2000 souls, may by parliament be applied to ten millions.

FEB. 1800.—MINUTE RESPECTING THE MODE
OF CALCULATING AND ASCERTAINING THE
PRICE OF FLOUR AT COULTERSHAW MILL.

The first step requisite, is to obtain a fair average of the price of wheat (per load of 40 bushels Winchester measure), at the Petworth market on each Saturday.

The second point is to settle a fair average of the weight of wheat usually sold at Petworth market. According to the report of the Corn Committee on 14th June, 1774, the seven several kinds of wheat whereon their experiments were founded,

founded, weighed from 51lb. to 61lb. per bushel, giving a medium or average of 56lb. per bushel. But, as these experiments were made from the growth of different parts of the kingdom, and as the wheats from the clay soil in the neighbourhood of Petworth, and usually brought to market there, are considerably heavier than the general average of the kingdom at large, it may be fair to take their weight at from 56lb. to 62lb. per bushel, giving an average or medium of 59lb. per bushel; or if this, on further examination, should be found too high, it might be set at 58lb.

The next article will be the allowance to the miller; and that may be formed on some such computation as the following; whereon it may be observed, that all the items except the last, are stationary, and not increased or diminished by the alteration of the price of wheat; as it seems unreasonable that the profit of the miller should be augmented, and the price raised on the public, in times of scarcity, except only on his expenditure for the price of the commodity; on which, as a greater capital will be demanded to procure it in dear than in cheap seasons, a per centage is allowed.

1. Grinding and dressing, per load	—	£. 0 10 0
2. Delivery out at Petworth, or at any other place distant from the mill, in small quantities, and the loss of weight consequent thereon; and the risque of loss by bad debts	—	0 12 0
3. Profit or commission, per load	—	0 5 0

(Mr. DALE states the commission at $2\frac{1}{2}$ per cent. but this seems too much; for the reasons above stated, it ought not to depend

depend on the price of wheat; and taking 15l. per load as a fair medium price, the commission at $2\frac{1}{2}$ per cent. would be 7s. 6d. per load.)

4. A per centage of $2\frac{1}{2}$ on the average of wheat on the preceding market-day (which gives 5l. per cent. interest on the capital, supposing the price, one part with another, to be returned to the miller within six months from his purchase of the wheat.)

To this must be added the price of the wheat; and after a deduction therefrom of the value of the bran, the result will be the selling price of the flour produced from the load of wheat.

It will then be necessary to ascertain what number of bushels of flour, of a given dressing, a load of average wheat ought fairly to produce; and the dividing the price of the load by that number of bushels, will give the price per bushel.

Thus by way of recapitulation and explanation:

Suppose the price of a load of wheat to be 27l. and that it be dressed into standard wheaten flour; and suppose the medium weight of a bushel of wheat to be 59lb. which gives for the weight of the load

- - - -	lb.	
	2360	
And by actual experiment will produce of flour	2163	
Bran	170	
Waste	27	
	2360	

The account will stand as under:

Allowance to miller for,		
1. Grinding and dressing, per load	—	£.0 10 0
2. Delivery out at a distance and in small quantities, and loss of weight consequent on the latter, and risque of loss by bad debts	—	0 12 0
	}	3. Pro-

3. Profit or commission	—	—	—	£.	s.	d.
4. $2\frac{1}{2}$ Per cent. interest on capital of 27l.	—	—	—	0	13	6
Allowance to miller	—	—	—	2	0	6
Price of wheat	—	—	—	27	0	0
				<hr/>		
				29	0	6
Deduct value of 170lb. of bran at 1s. 6d. per bushel				}	0	8
of 32lbs.	—	—	—			
				<hr/>		

Selling price of the flour of the load of wheat — £. 28 12 6

This flour being 2163lbs. = 38 5-8th bushels, costing 28l. 12s. 6d. will give a selling price per bushel of 14s. 9 $\frac{1}{4}$ d. = per gallon 1s. 10 $\frac{1}{4}$ d.

The same account, as applicable to seconds flour, instead of standard wheaten, will be as under :

					lb.
Produce of a load of wheat, of 59lb. to the bushel,				}	2360
weighing	—	—	—		
In seconds flour	—	—	—		lb.
Pollard	—	—	—		1851
Bran	—	—	—		121
Waste	—	—	—		339
					49
					<hr/>
					2360

Price of a load of wheat, and miller's allowance, as					£.	s.	d.
before	—	—	—	—	29	0	6
Deduct value of 121lbs. pollard, at 5s.				}	£.0	10	9 $\frac{1}{2}$
per bushel (of 56lb.)	—	—	—				
Deduct value of 339lbs. bran at 1s. 6d.				}	£.0	15	10 $\frac{1}{2}$
per bushel (of 32lb.)	—	—	—				
					<hr/>	1	6
						8	

Selling price of the flour of the load of wheat — 27 13 10

The flour being 1851lbs. = 33 bush. 3lb. costing 27l. 13s. 10d. will give a selling price per bushel of 16s. 9d. or per gallon 2s. 1d.

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2360

2163

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2360

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£.0 10 0

e } 0 12 0

3. Pro.

Difference of price of seconds, more than standard wheaten :

		<i>per bush.</i>			<i>per gall.</i>		
		£.	s.	d.	£.	s.	d.
Seconds flour	— —	0	16	9	0	2	1
Standard wheaten	— —	0	14	9 $\frac{3}{4}$	0	1	10 $\frac{1}{4}$
Seconds more than standard wheaten		0	1	11 $\frac{1}{4}$	0	0	2 $\frac{3}{4}$

N. B. The average weight of a bushel of wheat, and its average produce in flour, should be founded on experiment ; and if, on the result of that experiment, those articles, or if, on further inquiry, any of the other items should demand to be corrected, that correction may readily be made ; but the principle of the calculation will still obtains.

EXAMPLE.

Date.	Average of wheat per load (of 40 bushels)	Flour.				Bread, per gallon loaf.			
		Wheaten Stand.		Seconds.		Wheaten Stand.	Seconds	Wheaten Stand.	Seconds
		per bs.	per gall.	per bs.	per gall.				
1800.	£. s.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
March 1st,	29 15	16 4 2	0 $\frac{1}{2}$	18 4 2	3 $\frac{1}{2}$	2 2 2	2 2 2	5 $\frac{1}{2}$	
8th,	27 5	15 0 1	10 $\frac{1}{2}$	17 0 2	1 $\frac{1}{2}$	2 0 2	2 0 2	3 $\frac{1}{2}$	
15th,	27 5	15 0 1	10 $\frac{1}{2}$	17 0 2	1 $\frac{1}{2}$	2 0 2	2 0 2	3 $\frac{1}{2}$	

Prices of Grinding at Coultershaw Mill.

		<i>per load.</i>			<i>per bushel.</i>		
		£.	s.	d.	£.	s.	d.
Wheat	— — —	0	10	0	0	0	7
Wheat and rye mixt		0	10	0	0	0	7
Wheat and barley mixt		0	10	0	0	0	7
Rye	— — —				0	0	7

Bar-

					<i>per bushel.</i>		
					<i>£.</i>	<i>s.</i>	<i>d.</i>
Barley	-	-	-	-	0	0	6
Oats	-	-	-	-	0	0	8
Peas	-	-	-	-	0	0	5
Beans	-	-	-	-	0	0	5
Barley and rye mixt	-	-	-	-	0	0	7
Barley and peas mixt	-	-	-	-	0	0	6
Barley and beans mixt	-	-	-	-	0	0	6
Barley and oats mixt	-	-	-	-	0	0	7
Oats and peas mixt	-	-	-	-	0	0	7
Oats and beans mixt	-	-	-	-	0	0	7

REMARK.

The first observation likely to be made on such an account is, that a Nobleman of great and well-merited influence, can effect things on his own estate, which would be impracticable to apply to a whole kingdom; and thus the laziness of mankind is ever converting difficulties into impossibilities. To go through all the steps necessary to precede an Act of Parliament which should effect this blessing to the kingdom, would demand experiments, detail, and perseverance, and probably could not be so well done in a Committee of the House of Commons as if entrusted to a Public Board. Parish mills have often been demanded, and wherever tried, the effects have been excellent; why not attach parish ovens to them, lett to a miller and baker, under articles grounded on the same prin-

more than

per gall.

£. s. d.

0 2 1

0 1 10 $\frac{1}{2}$

0 0 2 $\frac{1}{2}$

bushel of

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Bread,
per gallon loaf.

Wheaten
Stand. Seconds

s. d. s. d.

2 2 2 5 $\frac{1}{2}$

2 0 2 3 $\frac{1}{2}$

2 0 2 3 $\frac{1}{2}$

Mill.

per bushel.

£. s. d.

0 0 7

0 0 7

0 0 7

0 0 7

Bar-

ciple as guided the Earl of EGREMONT in his agreement with the Coultershaw miller? Where there is water, a water-mill; where none, a wind-mill: where parishes are large, by a single parish; where small, three or four uniting; and the union to depend on population. In village districts, the parishes to deliver corn by weight to the miller, and the baker to sell bread proportionably to the price of corn. There do not appear to be any insuperable difficulties in such a plan, which, if made coercive, would have great effects; but as to leaving it voluntary, it would then be worth neither experiment, detail, nor perseverance to produce. I do not comprehend the system of employing wisdom, talents, and persevering industry to frame laws, and then leave their acceptance to ignorance, stupidity and negligence: intended for the benefit of one class, distressed by prices; and to be rejected by another, to whom those prices are so much profit.

FINIS.

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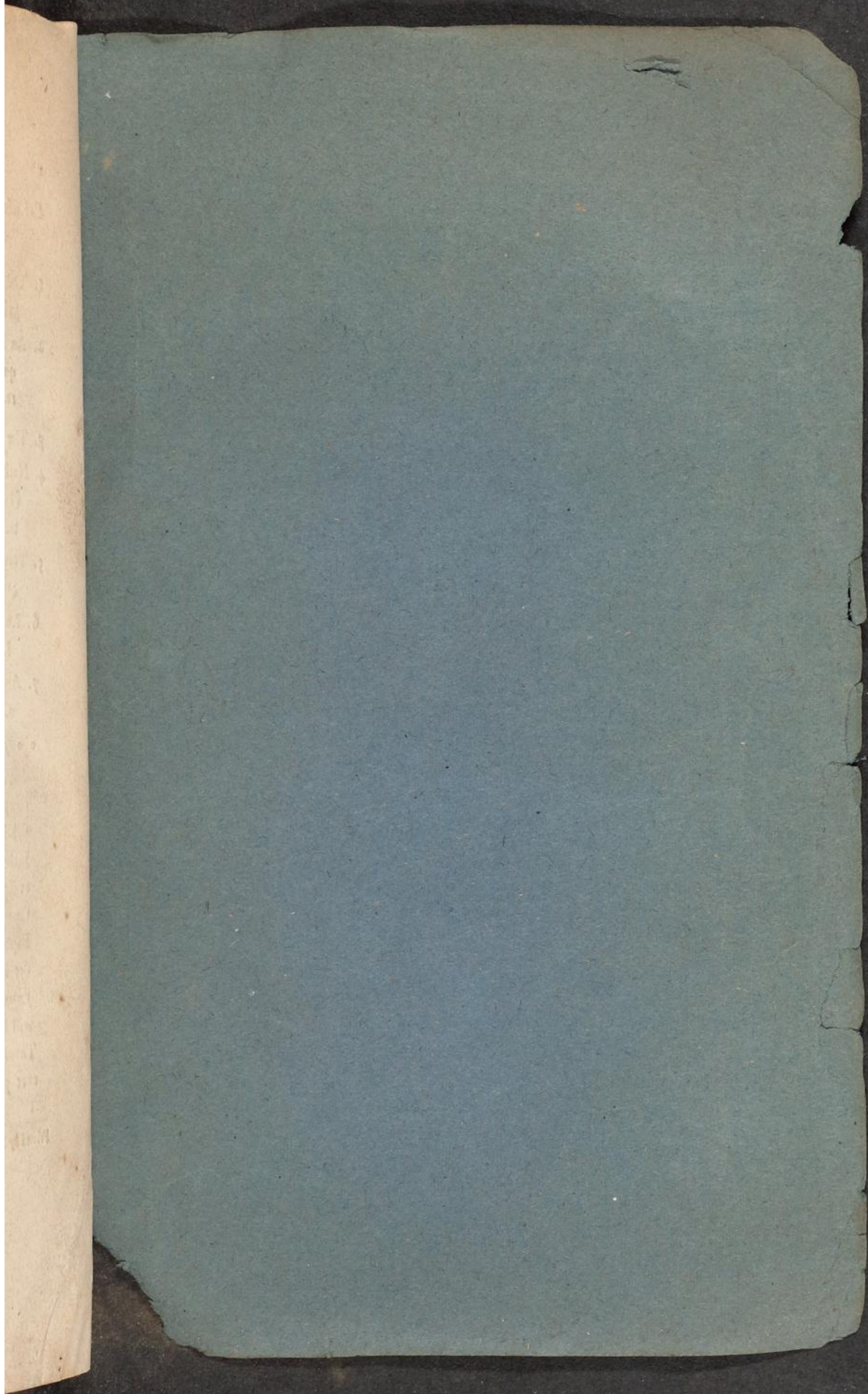
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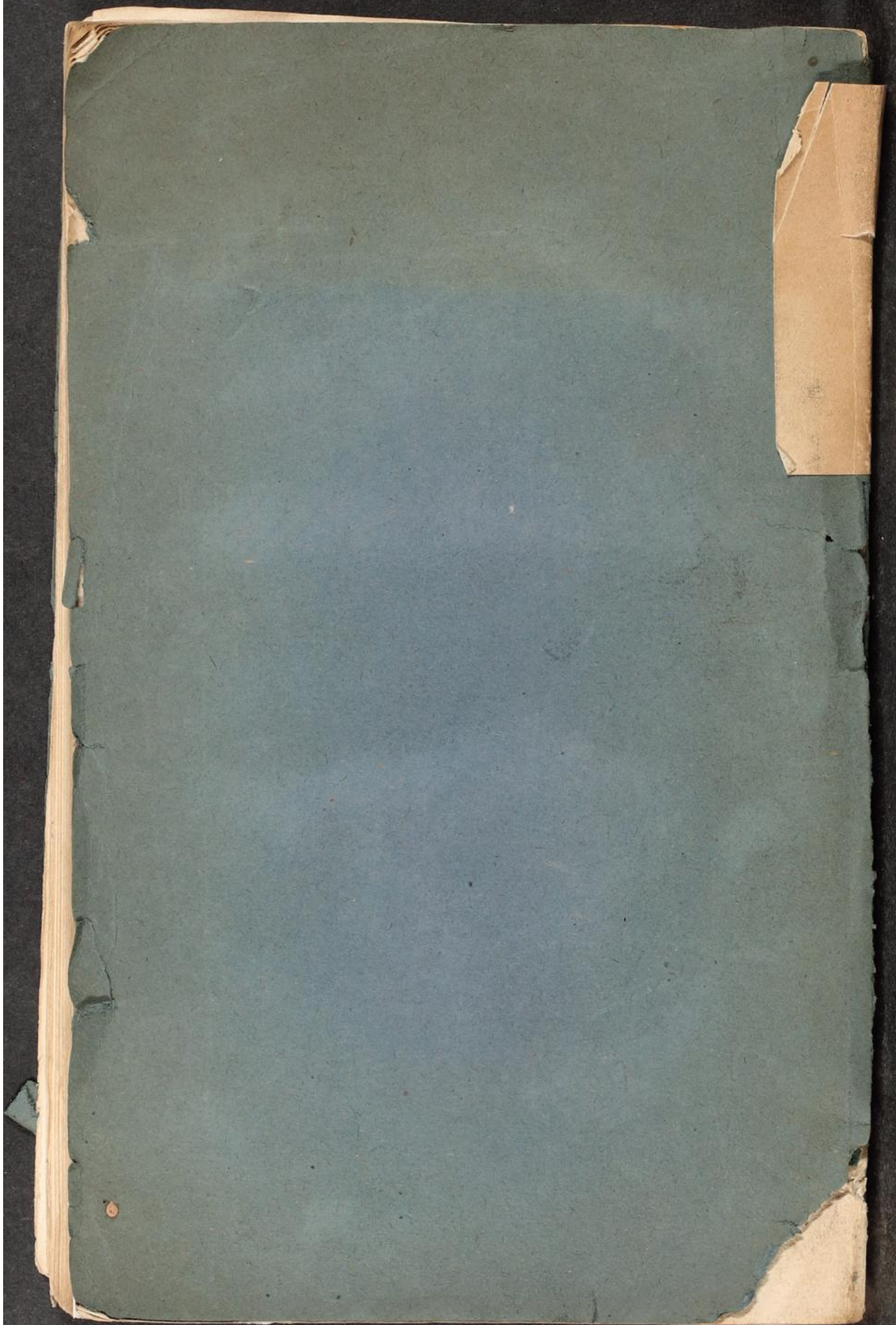
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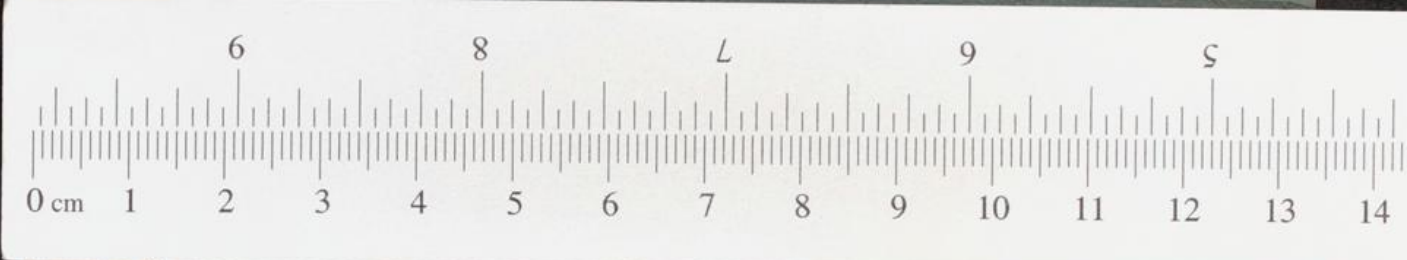
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Colour & Grey Control Chart

Danes Picta

Blue	Cyan	Green	Yellow	Red	Magenta
White	Grey 1	Grey 2	Grey 3	Grey 4	Black

