Hints respecting the distresses of the poor / By Dr. Lettsom.

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HINTS

RESPECTING THE

DISTRESSES

OF THE

POOR.

BY DR. LETTSOM.

THE SECOND EDITION.

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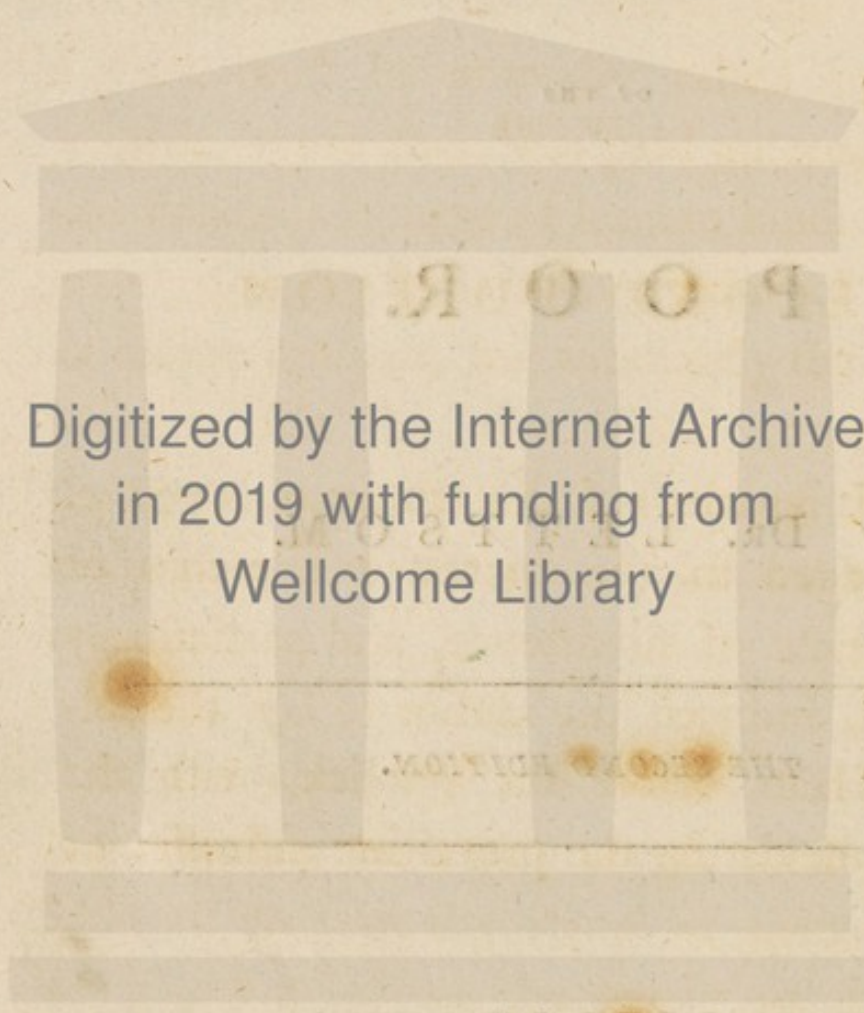

PREFACE

TO THE

SECOND EDITION.

THE ſeverity of the winter of 1794-5, added to the increaſed expenſes of every article of ſubſiſtence, and particularly of bread, induced the author to lay the following Hints before the publick, with the view of alleviating the prevailing diſtreſſes of the poor.

Theſe however ſtill continue, the re-publication, therefore of theſe Hints, may be as uſeful as heretofore; and indeed from the preſent circumſtances of the times, they may continue to be uſeful long after the author

ſhall ceaſe to be ſo. Although the reſtoration of peace, and better crops of corn, may afford ſome melioration of diſtreſs, yet a degree of it, much greater than what the poor ever experienced prior to the war, will moſt probably be ſeverely felt. About four millions a year, muſt be annually raiſed upon the publick, more than was paid antecedently to this dreadful ſcourge of human kind. Taxes may primarily be laid on articles of luxury, or on the opulent, but ultimately the burthen becomes felt by the whole community; the great maſs of which forming the chief conſumers pay the principal ſhare of every impoſt.

If the equipages and horſes of the great land-owners, be highly taxed, theſe will be induced to raiſe the rental of their eſtates; or if the wine-merchant pay an increaſed duty for his liquor, the price of it by retail will at leaſt be proportionally greater; and the ſame ratio muſt eventually reſult in every article of conſumption.

Many means have been ſuggeſted in late publications to alleviate the preſent and avert the future diſtreſſes of the poor: thoſe that appeared moſt conducive to theſe important ends, are mentioned at the end of this preface, or referred to in notes which will enable the reader to conſult the writers at large, at the ſame time the ſize of this tract is thereby very little augmented.

Among other means of utility, encloſures of commons have been of late much recommended; and as improvement of land increaſes its product, the community at large muſt thereby ultimately reap the benefit, more eſpecially ſhould farms of moderate extent be encouraged. The poor in the vicinity of theſe commons, will perhaps be the only immediate ſufferers. In ſome encloſures it has been ſtipulated that the poor who have a right to commonage, ſhould have a piece of land equivalent to this uſage; but this affords merely a temporary relief, as diſtreſs, or the deſire of immediately poſſeſſing a little money, which is uſually

ſoon diſſipated, may induce them to ſell their little portion, which when gone, leaves them more diſtreſſed than they were originally. In lieu therefore, of introducing a temptation which few poor men can withſtand, an adequate aid ſhould be ſubſtituted of cloathing, firing, or other uſeful *permanent* proviſion, and this aid might be increaſed, with the increaſe of children: but no batchelor in health ſhould participate of any fund, as long as indigence is rendered more poignant by the addition of children.

It might be a deſirable object in the encloſure of commons, to allot a certain portion to the clergy inſtead of tythes; that no impediment or diſcouragement may exiſt to the growth of corn; indeed it muſt be ſatisfactory to the clergy, as well as to the laity holding impropriations, could ſome ſubſtitute be found for them, if they muſt be continued. They afford a ſource of litigation, and of diſguſt to the eſtabliſhed religion, and oftentimes of ruinous expenſes or impriſonment to individuals.

Were

Were the proprietors of eſtates, whoſe lands are liable to be tythed, allowed to redeem or purchaſe the tythes at a fair valuation, a fund would probably be raiſed ſufficient to buy land in the vicinity of church-livings of adequate income; or until land could be purchaſed, the product inveſted in government ſecurities, for the maintenance of the clergy in lieu of tythes.

A ſmall tax on all benefices of one hundred pounds value, the incumbent being a batchelor, or of 200l. value if married, riſing gradually in proportion to the income, added to this fund, would ſooner perfect the plan propoſed, and even prove ſufficient to raiſe the ſtipends of the poor clergy, ſome of whom, like day-labourers, cannot ſuitably provide for a wife and children.

The tax on horſes, mentioned in the note on the 10th page, might be ſo extended, as to diſcourage uſeleſs ones, and afford premiums to promote the employment of oxen for draught. Encouragement ſhould at the ſame

time be given to inland navigations, which open new channels of eaſy communication, and of tranſportation of heavy articles, and thereby leſſen the neceſſity for horſes, whilſt they form a conſtant ſource of healthy employment to the poor, and of true national proſperity to the ſtate.

Late

Late Publications on the Means of alleviating the Diſtreſſes of the Poor.

"ON the beſt Method of providing for the Poor, by W. M." "And Twenty Minutes Obſervations on a better Method of providing for the Poor, by Mr. Richard Pew, F. R. S. E." Bath Memoirs, vol. vi. p. 208, 219.

"A Short Addreſs to the Public on the Monopoly of Small Farms, by Thomas Wright, of Mark Lane, 1795." Price 6d.

This author purpoſes to remedy the evil complained of, by inſtituting a ſociety, to ſubſcribe for the purchaſe of large eſtates, and to let them out into ſmaller ones.

"One

" One Cauſe of the preſent Scarcity of Corn, &c." by a Phyſician, 1795.

He ſlightly glances at the injury from large farms, but principally cenſures the loſs and inconvenience experienced by farmers from being compelled to grow ſuch articles only, and in ſuch quantities, as the landlord, or rather his ſteward ſhall preſcribe to him.

" An Addreſs to the different Claſſes of Perſons in Great Britain, on the preſent Scarcity and High Price of Proviſions," by the Rev. Septimius Hodſon, M. B. London 1795. price 1s. 6d.

The preacher gives a ſtatement of the high price of corn and proviſions in different periods, and ſtates that the late crops have been deficient: hence he infers that the preſent ſcarcity is *totally independent of the war*, and exculpates the miniſters from the leaſt cenſure. Adding admonition to the poor and diſtreſſed to acquieſce in the diſpenſation of Providence, and to *ſubmit to the ruling powers*.

" Thoughts

" Thoughts on the moſt ſafe and effectual Mode of relieving the Poor during the preſent Scarcity." London, 1795, price 6d.

The author adviſes a reduction in the uſe of bread among all claſſes; and cenſures the plan of ſelling bread to the poor at reduced prices, as thereby they conſume more, and conſequently increaſe the real ſcarcity. He adviſes the uſe of ſubſtitutes, and that the poor ſhould be furniſhed with other articles rather than bread.

" A Letter to Sir T. C. Bunbury, Bart. on the Poor Rates, and the High Price of Proviſions, by a Suffolk Gentleman." 1795, price 1s.

See the note reſpecting this judicious performance, p. 9th.

" A Letter to the Right Honourable Mr. Pitt on the Uſe of Hair Powder," by Mr. Donaldſon, 8vo. 1795.

The principal object of this writer is explained, p. 18th.

" On

" On the Neceſſity of adopting ſome Meaſures to reduce the preſent Number of Dogs, by the Rev. Edward Barry, M. D. 8vo. 1s.

The doctor calculates the annual value of the keep of dogs at 2,080,000l. and that a tax of five ſhillings on each dog, would produce a revenue of 400,000l. per annum, or at the leaſt a fourth part of that ſum. See note, page 7th.

" The Caſe of Labourers in Huſbandry ſtated and conſidered," by the Rev. David Davies, 4to. 1795, 12s.

This uſeful work clearly demonſtrates that the pay of labourers, having families, is inadequate to their ſupport. See note, p. 4th.

" Remarks on the Preſent Times, &c." by James M'Phail, London, 1795.

The principal part of this pamphlet is employed on political matters. The author concludes with a table of the quantities of

corn

corn and grain, exported from, and imported into, England and Scotland for 23 years, from 1770 to 1794, with the bounties and drawbacks paid, and the duties received thereon, together with the average price of corn in England under each year.

" Count Rumford's experimental Eſſays. Eſſay I.—An Account of an Eſtabliſhment for the Poor at Munich." London, 1795.

This excellent eſſay ſhould be peruſed by every magiſtrate, and by every manager of work-houſes and poor-houſes, as much uſeful information may be collected from the detail of various publick meaſures, connected with the inſtitutions, which have been adopted and carried into effect in that city, for putting an end to mendicity, and introducing order, and uſeful induſtry, among the more indigent inhabitants of Bavaria. Compare the account of the management of the poor in Hamburgh.

Upon the diſtreſſed ſtate of the poor, and the means of meliorating it, at the ſame time

time of leſſening the Poor Rates, perhaps no perſon has devoted more laudable attention than Sir Mordaunt Martin, Bart.

His obſervations have not yet been publiſhed, but long before the preſent hard times, they had been in the poſſeſſion of thoſe, whoſe political powers alone can give them due effect.

" Some Information reſpecting the Uſe of Indian Corn, &c." 8vo. 1s. Baldwin, 1795.

This is a judicious compilation, and the ſalubrity of Indian Corn is fully aſcertained; but the price of it, is at this time higher than that of flour. Of its great utility, the author of theſe *Hints*, informed the publick, in an eſſay entitled, " Obſervations on Bread-Flour," printed in the Monthly Ledger, vol. i. p. 397, anno 1773, when the Colonies were united to Great Britain. Since this period, the duties on their imports are rated as thoſe of aliens, which has rendered Indian

Corn

Corn too dear for common domeſtic uſe. Were the government of this country to ſuſpend theſe duties, the author of the "Obſervations on Bread-Flour," would re-print them for the benefit of the publick.

"Account of the Experiments tried by the Board of Agriculture, in the Compoſition of various Sorts of Bread." 1795, 4to. price 1s.

Some uſeful hints are communicated in this account, *on the compoſition of various ſorts of bread*; as well as on the beſt mode of preparing different kinds of grain for food. The reſult, however, of the compoſitions of them, are condenſed in one point of view in the annexed table, page 71.

HINTS

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RESPECTING THE

DISTRESSES OF THE POOR.

NOTHING contributes more effectually to the eſtabliſhment of good government among the middle and lower ranks of the community, than that ſpecies of equality which enables every man by his induſtry to procure, at all times, the neceſſaries of life. Without entering at preſent, into the ſources of thoſe difficulties, which the poor, even the induſtrious poor, of this country labour under, it muſt be obvious to every conſiderate perſon, who is placed in a ſituation ſuperior to this claſs of the community, and who minutely calculates his own expenſes, that, with the utmoſt induſtry, the labouring man muſt

find extreme difficulty to preſerve his family from the miſeries of real want, not only of the comforts, but even of the neceſſaries of life. Many labouring men do not earn above eight ſhillings a week, whilſt ſome individuals will earn a guinea; but happy is the labourer who, upon an average, makes half-a-guinea a week, or twenty-ſix guineas a year; and many of the poor have a wife and four or five children to maintain. I know it is often urged, that the poor are improvident, and never avail themſelves of opportunities of ſaving a pittance to provide againſt times of difficulty; ſuch as, being out of work, viſited with ſickneſs, or aſſailed by the rigours of winter. I acknowledge that too many come under this deſcription, but let it be remembered, that one drunken or profligate man makes more noiſe, and becomes more conſpicuous, than a thouſand ſtarving, modeſt, induſtrious, and worthy perſons; as one eclipſe of the ſun attracts more obſervation than the annual brightneſs of this luminary: and cruel would it be, as it is unjuſt, to cenſure a whole claſs for the miſconduct of a few individuals. With equal

juſtice

juſtice might the whole female ſex be cenſured for infidelity; becauſe a few worthleſs women of rank, acquire more notoriety by miſconduct, than a thouſand of the moſt amiable women by their virtues: for true worth ſeeks obſcurity rather than publicity; and I will venture to add, that female virtue and chaſtity of manners never prevailed at any one period in this kingdom, more than at the preſent time.

To return to the ſtate of the poor: let him who cenſures their improvidence, reflect upon his own expenſes, aſk himſelf what he expends on coals, on clothes, on waſhing, on houſe-rent; nay, let him only calculate what he ſpends for bread alone, an article in which there is rarely much waſte; and he will then wonder how a poor man, with half-a-guinea a week, feeds and clothes a family, pays rent for his apartment, buys a few coals, and contrives to exiſt. This wonder will be increaſed, if he take into conſideration, that by expoſure to all weather ſickneſs often ſupervenes, and every reſource is, in a moment, annihilated. I ſhudder whilſt I reflect what a dreadful

proſpect is preſented to a tender wife and famiſhed children! Againſt ſuch may the hand of affluence never be ſhut! And if ever there exiſted a nation more humane and generous than another, it is this, where relief of every kind is diſpenſed with a liberality which characterizes it as much for its humanity as for its wealth. But though there is much wealth there is alſo much indigence, and the ſeverity of winter, which ſtops the employment of any labouring man, has nearly the ſame effect on him, as if ſickneſs had confined him to his bed; and, without ſuccour, his family muſt be famiſhed. If to theſe be added an increaſed price of bread, beyond the reach of his earnings, ſuppoſing him capable of working, his miſery is ſtill inevitable, without immediate aid.*

This

* Soon after the firſt edition of this tract appeared, the intereſting work, by David Davies, rector of Barham, Berks, entitled, 'The Caſe of Labourers in Huſbandry ſtated and conſidered,' came under my obſervation. It exhibits numerous calculations, made in different parts of the kingdom, of the expenſes of ſubſiſtence among the labouring poor, which clearly

This is the preciſe ſtate of many poor people at the preſent moment, and laudable are

clearly demonſtrate that the annual expenſes of ſeveral claſſes of them exceed their annual income or earnings. Theſe calculations were made about ſix years ago, when the times were even more favourable to the poor. In theſe calculations certain contingent expenſes are omitted, as conſequent on ſickneſs, accidents, &c.

A performance, entitled 'A Propoſal for a perpetual Equalization of the Pay of the labouring Poor,' made its appearance juſt as this was going to preſs; the author calculates the pay of labour by the price of wheat. "Six ſhillings being aſſumed as the ordinary price of a buſhel of wheat in the time of peace; and in ſeaſons of uſual plenty, let the pay of a day-labourer be apportioned to that, and fixed, never on any account to vary. For inſtance, the daily pay of a labouring man in the pariſh and neighbourhood in which this was written, was one ſhilling a day, until about two years ago, when, in conſideration of the increaſed price of bread, two-pence were added to it. Let one ſhilling therefore per day, or ſix ſhillings per week, be taken as the eſtabliſhed and fixed price of ordinary day labour." He adds, "Let the addition which is made to their pay be given as a ſeparate article of account, and called a *gratuity*. Whenever the price of wheat is at ſix ſhillings per buſhel, or at any price below ſix ſhillings, let the day-labourer receive his pay without any addition. When the price exceeds ſix ſhillings, let him receive a gratuity, beſides his pay, in the proportions given in the following

are the exertions every where making to avert a cataſtrophe dreadful even in idea, of ſtarving in

TABLE:

Price of a Buſhel of wheat.			Gratuity.	
s.	*d.*		*s.*	*d.*
6	0	The daily pay being one ſhilling per day, the correſponding gratuity will be	0	0
6	6		0	1
7	0		0	2
7	6		0	3
8	0		0	4
8	6		0	5
9	0		0	6
9	6		0	7
10	0		0	8
10	6		0	9
11	0		0	10
11	6		0	11
12	0		1	0

This table is ſucceeded by others to ſuit different kinds of labour, but it does not make more proviſion for a married man with children, than for a batchelor.

If every labouring man being a batchelor, or married man without a child, were to pay one halfpenny in the ſhilling of their earning into a pariſh fund, it might, probably, be ſufficient to clothe annually every married man, his wife, and their children, in the ſame pariſh, provided they have three children, or upwards. This would, probably, prove an effectual method of equalizing labour with the expenſes of a family. Another fund might be formed by a tax of one ſhilling on every dog,

The author of the preceding table mentions the practice of a very intelligent and worthy clergyman, his friend and neighbour,

in a land of wealth and luxury.* My intention in writing theſe hints, is to impreſs upon the public that much real inevitable diſtreſs really prevails among the virtuous poor, and that charity cannot be exerciſed more piouſly

bour. "It is, to conſtruct ovens for the poor of his pariſh, and to ſupply them, when uſed, with fuel; the expenſe of which, to the poor, would be but trifling, compared with the proceſs multiplied by the ſame number of individuals baking for themſelves, eſpecially in countries where fuel is ſcarce." Page 23.

In a pamphlet lately publiſhed by Dr. Barry, entitled, "On the Neceſſity of adopting ſome Meaſures to reduce the preſent Number of Dogs;" he ſuppoſes, that a tax on them of five ſhillings each, would produce an annual revenue of 400,000l. This exaggeration is noticed in the Critical Review, vol. 15, p. 336. But the writer of it, on the other hand, underrates the conſumption of food by dogs: every pack of them, conſiſting of ſixteen couple, annually conſume four tons of oatmeal, and forty hundred weight of biſcuit. The product of this moderate tax of one ſhilling on each dog, might be appropriated to portion out poor girls on marriage, or to ſettle young men in farming. To promote early marriages, and ſubſiſtence for the offspring, are objects worthy of a wiſe government; and any government is capable of annihilating the miſery of the poor. If the tax ſhould leſſen the number of dogs, it might at leaſt have this good effect, of proportionally leſſening the number of mad dogs, for whoſe bite no effectual remedy has yet been aſcertained.

* This was written in the late hard winter of 1794-5. And no winter is ſo mild as not to render the obſervations in ſome degree applicable.

than at this ſeaſon, when the price of bread, and of all the neceſſaries of life, is much increaſed.

The plan of buying food, fuel,* and clothes for the poor, whoſe little pittance does not enable them to go to the beſt market, is truly laudable, and may ſave thouſands from debt, famine, and death, till better weather and better times may afford them other means of ſupport. Never be weary, humane citizens, in the godlike work of averting miſery from, and adminiſtring comfort to, the poor man, his induſtrious wife, and their helpleſs children!

But I cannot here avoid noticing ſome acts, *intended* as acts of charity, which appear to me not only uſeleſs, but even injurious to thoſe for whoſe benefit they are deſigned. It is not unuſual for the opulent in rigorous ſeaſons of

* As the poor of London ſuffer much in winter from the high price of coals, it might become a laudable inſtitution to authorize the church-wardens, or certain humane perſons in each pariſh, to buy in a ſtock of coals when cheap, and ſell them to the poor at prime coſt in ſeaſons of diſtreſs.

the year to treat the poor with a whole ox or oxen, and regale them with hogſheads of ale. I doubt not but they get well repleniſhed for the day; but alas! the day of feaſting, only makes them feel more poignantly its reverſe, the day of faſting. It neither tends to good morals, nor to perſevering induſtry; but, on the contrary, is deſtructive of both. Much more charitable would it be, to expend the money which the donation of oxen and ale would coſt, in fuel, warm clothing, and other neceſſaries, which would laſt beyond the day of feaſting and fulneſs, and warm the indigent with comfort through the winter. You opulent and great in the land, whilſt I reſpect your intentions, permit me to direct your beneficence into channels of real charity, to the permanent ſuccour of diſtreſs and pining want.*

A re-

* Conſult 'A Letter to Sir T. C. Bunbury, Bart. on the Poor Rates, and the High Price of Proviſions, with ſome Propoſals for reducing both. By a Suffolk Gentleman.'

The Monthly Review, vol. 18. N. S. p. 318, gives the following account of this performance: "The intelligent writer of this pamphlet regards, as the cauſe of many public evils, the

A religious ſociety, conſiſting of about fifty thouſand members, for the moſt part of the

the practice of uniting ſeveral ſmall farms into a large one, and the conſequent failure of the race of independant yeomanry, who formerly cultivated their own farms, from forty to fourſcore pounds a year. The miſchiefs reſulting from this practice are clearly laid open, and a plan is ſuggeſted for reducing the poor rates, and the price of proviſions, which may merit the attention of the public. It is briefly this; that every owner of land, to the amount of one hundred pounds a year, within three miles of a populous market town, ſhould build and let a cottage, with at leaſt an acre of land adjoining. The immediate advantage to the public which the author expects from this project, are the increaſe for ſale of many of the ſmall articles for houſe-keeping, and the reduction of the poor rates. As a more remote conſequence he expects the revival of the old ſyſtem of ſmall farms."

With reſpect to the price of labour, there ſeems to be ſingular difficulty in appreciating it. As the times now are, a ſingle man may live comfortably with the preſent price of labour; but a man with a wife and four or five children, cannot poſſibly be decently ſupported. Perhaps the beſt method would be to exempt every married man with three children from certain taxes, or give him ſome allowance from the county, in proportion to the number of his offspring. Compare the notes p. 6, 7, and 11.

Farms, however, ſhould not be too ſmall, as each will require a team, and very ſmall farms will not afford the expenſe. As one horſe conſumes as much land as would about maintain a family, every horſe that is kept may be ſaid to annihilate a family, or eat up the ſupport of one; an additional diſtinct tax, therefore, of about a ſhilling on every horſe, might be appropriated ſolely as a premium for keeping oxen.

middle

middle and lower claſſes, has exiſted in this country upwards of a century, in which abject poverty is the condition of none. Surpriſing as it is, that a ſect debarred, by reſtrictions in government, from enjoying any public office or emolument, and from ſharing its penſions, perquiſites, and ſinecures, ſhould have formed a conſtitution, that prevents the miſery of want, in the midſt of poor rates amounting to two millions three hundred thouſand pounds a year,* of which they do not partake: it is ſtill more ſurpriſing, that the community at large ſeeing this, and feeling the weight of taxes, ſhould never have inquired of this ſect, Tell us your ſyſtem? At the ſame time, this

* Were a tax upon all batchelors, except labourers, apportioned to the other taxes they reſpectively pay, as five ſhillings, or any other ſum in the pound, riſing five ſhillings in the pound, every ten years, or one ſhilling in the pound every year, after the age of twenty-one, till a certain period of age, it might afford a ſubſtitute for the poor rates. Married men having no children ſhould be included; and, perhaps, a ſmaller tax on thoſe having only one child, but never to extend to thoſe having three. Or to ſimplify ſuch a tax, the parochial rates might be doubled to batchelors, and this additional moiety applied to the extinction of the poor rates.

ſyſtem is comprized in two words, PRINCIPIIS OBSTA,—*remove the cauſe of diſtreſs in its commencement.* A prominent part of this ſyſtem I ſhall explain. The moment any individual of this ſociety applies for relief, two perſons in the reſpective meeting are appointed to viſit him, and to adminiſter ſuch aid as the nature of the caſe may require. If the object of diſtreſs be a female, two of the ſex are deputed to pay this charitable viſit; and ſometimes a family in want is cheered by the united attention of both ſexes.

Sudden diſtreſs, in poor families, may ariſe from ſudden illneſs, and by a moderate temporary relief, in the ſeaſon of affliction, ſubſequent aid is rendered unneceſſary; but from whatever ſource it may ariſe, when a perſon becomes involved in diſtreſs, unleſs that diſtreſs, and the cauſe of it, be early removed, accumulated miſery enſues, and the reſult uſually is a workhouſe; or, what is ſtill worſe, intoxication to drown care, or diſhoneſty in the deſperate hope of overcoming it. Bad indeed is the beſt; for, in general, the moment a family is ſo involved by the miſerable

miſerable policy of the preſent poor laws, as either to ſtarve or to enter the doors of a poor-houſe, all pride of independence, reſulting from induſtry, is annihilated; that kind of independence which is the boaſt of an Engliſhman. Every paſſion that gives energy to ſoul and body ſeems buried in the common wreck of his independence; his offspring imbibe the ſame inertia, and a mean, beggarly, ſqualid race is generated, doomed to become a burthen to themſelves, and to the community, as long as the ſame policy is purſued. This ſubject, however, I now relinquiſh, to be reſumed in a future eſſay.

The *principiis obſta*, as already obſerved, implies the immediate attention to diſtreſs, which, by early removal, prevents its ſubſequent evils. To this end, it would be adviſeable to inſtitute a ſociety in every pariſh, or even in ſmaller diſtricts, of the inhabitants of both ſexes, to receive the applications of any individual in the diſtrict, who may have lived above pariſh aid; but who, from ſickneſs, or other unforſeen event,

may

may want temporary aſſiſtance; and to adminiſter ſuch relief as the preſſure of diſtreſs may require, agreeably to the plan adopted by the ſect alluded to.

By ſuch ſuperintendence of the opulent over the indigent, pariſh poor would gradually ceaſe, or exiſt in a very ſmall degree.

When the individual of a large community falls into diſtreſs, leſs attention, in proportion, is paid to his particular diſtreſs. It would therefore afford the exerciſe of more active humanity, were ſocieties formed in ſmall diſtricts; and in every ſociety, two of each ſex ſhould be deputed every month to hearken to the voice of miſery, and to endeavour to adminiſter relief.

By this pious ſuperintendence, the rich would ſee the diſtreſſes of their poor neighbours, and learn, in this ſchool of active morality, the unaſſuming enjoyment of their ſuperior bleſſings, and the habitual exerciſe of Chriſtian charity. To ſee gentlemen entering the hovel of the poor man, and ladies ſympathizing

pathizing in the chamber of the poor woman, would elevate the dignity of human character; and whilſt it cheered poverty, it would tend to promote a virtuous exertion to overcome it by induſtry.

It may be urged, that many of the poor are too depraved to merit attentions of this kind, which would be adminiſtered in vain. From an extenſive knowledge of the ſubjects of human infelicity, I am convinced, that few individuals are ſo depraved as to become irreclaimable by kindneſs. The lion will lick the hand of him who draws the thorn from his foot. Were the plan, however, of early relief, once adopted, this hardened ſtate would not be acquired; for depravity is not habitual, where oppreſſion is not permanent. There is no expreſſion more illuſtrative of the character of Chriſt, than the epithet contemptuouſly applied to him, "*Behold the friend of publicans and ſinners.*"

I may here advert to an order ſanctioned by the late worthy Lord Mayor, to leſſen the

the price of bread, forbidding the barbers from uſing flour inſtead of hair-powder made of ſtarch, under a penalty of ten pounds. Were the barbers to uſe ſtarch-powder alone, the product of their induſtry would not enable them to live, and above one half of them are not each worth the penalty to be inflicted; ſo that if this old act, recently revived, were put into execution as generally as it is now eluded, the priſons would be crowded with more accumulated miſery than now exiſts.

Happy for the poor it is, that this act does not reſtrain the barbers and hair-dreſſers from mixing about four pounds of wheat-flour with one pound of ſtarch, otherwiſe the deſtruction of wheat-flour would become a more ſerious evil; for, as full two pounds of wheat-flour are deſtroyed in manufacturing one pound of ſtarch, it follows that, were the barbers and hair-dreſſers to uſe ſtarch-powder alone, agreeably to act of parliament, twice the quantity at the leaſt of wheat-flour would be conſumed upon the head inſtead of repleniſhing the ſtomach. It would therefore be much

much more humane in the legiſlature to paſs an act immediately, forbidding the barbers from uſing ſtarch at all, and confining them, if powder muſt be uſed, to flour alone; and at once, generouſly and humanely ſubmit to forego the duties on ſtarch, till the return of better times for the diſtreſſed poor. If, inſtead of roaſting bullocks and ſquandering ſtrong beer for one unhappy day of feaſting them, the great men and women of the land would allow their hair to be cheriſhed by nature, and totally relinquiſh the dirty faſhion of ſtarch and greaſe, the poor might really experience the benefits of their forbearance of a cuſtom, filthy to clothes, and abſtractive of perſonal charms. Till then all the heavy exciſe duties, and improvident revenue acts of parliament, reſpecting ſtarch and wheat-flour, are perhaps deſtructive of the very end propoſed —the feeding the poor with bread. Previous to paſſing the hair-powder bill, it appeared, by the accounts from the Exciſe-Office laid before parliament, that 8,170,019½ pounds of ſtarch were manufactured in Great Britain in one year. The miniſter at the ſame time ſtated

the number of hair-dreſſers to amount to 50,000. The author* of a letter to him, ſuppoſes from theſe facts, that, if each hair-dreſſer uſed only one pound of flour a day, it amounts on an average to 18,250,000 pounds in one year, or 5,314,284 quartern loaves, at the uſual allowance of $3\frac{1}{2}$ pounds of flour for a quartern loaf: and ſuppoſing only four times this quantity of flour uſed by thoſe who dreſs their own hair, and others who are not profeſſed hair-dreſſers, will make 21,256,936 quartern loaves; thoſe three numbers being added, amount in all to 30,571,226 quartern loaves at 9d. each, which is $4\frac{1}{2}$d under the preſent aſſize, and amount to 1,146,421 pounds ſterling.‡

But as every hint for immediately diminiſhing the conſumption, and conſequently

* John Donaldſon, eſq.

‡ Dr. Reuſs, profeſſor at Tubinguen, in his 'Medico-Economical Inquiry, concerning the Properties and Effects of pure and adulterated Hair-Powder,' publiſhed in 1781, calculates, that 7200 buſhels of wheat are annually conſumed in this manufacture, in a country inhabited by 10,000 perſons, if only a thirtieth part of them uſe it,

the

the price of flour, is of more or leſs utility, I cannot conclude without recommending the uſe of potatoes as a partial ſubſtitute for bread.*

One-

* In the Memoirs of the Academy of Sciences of Paris, M. Beaumé has given a deſcription of a mill to grind potatoes, and of the method of preparing ſtarch or flour from them. See alſo the Repertory of Arts and Manufactures, No. 13, for June 1795, in which is inſerted the manner recommended by him of preparing flour or ſtarch from potatoes, in the following tranſlation:

"In order to prepare flour or ſtarch from potatoes, any quantity of theſe roots may be taken, and ſoaked in a tub of water for about and hour; they are afterwards to have their fibres and ſhoots taken off, and then to be rubbed with a pretty ſtrong bruſh, that the earth, which is apt to lodge in the inequalities of their ſurface, may be entirely removed; as this is done they are to be waſhed, and thrown into another tub, full of clean water. When the quantity, which we mean to make uſe of, has been thus treated, thoſe which are too large are to be cut into pieces about the ſize of eggs, and thrown into the mill; that being already fixed in the oval tub, with the proper quantity of water; the handle is then turned round, and, as the potatoes are grated, they paſs out at the bottom of the mill. The pulp which collects about the mill muſt be taken off, from time to time, with a wooden ſpoon, and put aſide in water.

"When all the potatoes are ground, the whole of the pulp is to be collected in a tub, and mixed up with a great quantity of clean water. At the ſame time, another tub, very clean, is to be prepared, on the brim of which are to be placed two

One-fourth of potatoes in the loaf renders it equally pleaſant and wholeſome as if the whole were of wheat; I ſpeak from indubitable

wooden rails, to ſupport a hair ſieve, which muſt not be too fine. The pulp and water are to be thrown into the ſieve; the flour paſſes through with the water, and freſh quantities of water are ſucceſſively to be poured on the remaining pulp, till the water runs through as clear as it is poured in. The pulp, which is after this left in the ſieve, is commonly thrown away as uſeleſs; in this manner we are to proceed till all the potatoes which were ground are uſed.

" The liquor which has paſſed through the ſieve is turbid, and of a browniſh colour, on account of the extractive matter which is diſſolved in it; it depoſits, in the ſpace of five or ſix hours, the flour which was ſuſpended in it. When all the flour has ſettled to the bottom, the liquor is to be poured off, and thrown away, being uſeleſs; a great quantity of very clean water is then to be poured upon the flour remaining at the bottom of the tub, which is to be ſtirred up in the water, that it may be waſhed, and the whole is to ſtand quiet till the day following. The flour will then be found to have ſettled at the bottom of the tub; the water is again to be poured off as uſeleſs, the flour waſhed in a freſh quantity of pure water, and the mixture paſſed through a ſilk ſieve, pretty fine, which will retain any ſmall quantity of pulp which may have paſſed through the hair ſieve. The whole muſt once more be ſuffered to ſtand quiet till the flour is entirely ſettled; if the water above it is perfectly clear and colourleſs, the flour has been ſufficiently waſhed; but, if the water has any ſenſible appearance either of colour or of taſte, the flour muſt be again waſhed, as it is abſolutely

dubitable experience. This was about the proportion of potatoes recommended by the late Dr. Fothergill. I have eaten a pleaſant bread

abſolutely neceſſary that none of the extractive matter be ſuffered to remain.

" When the flour is ſufficiently waſhed, it may be taken out of the tub with a wooden ſpoon; it is to be placed upon wicker frames covered with paper, and dried, properly defended from duſt. When it is thoroughly dry, it is to be paſſed through a ſilk ſieve, that, if any clotted lumps ſhould have been formed, they may be divided. It is to be kept in glaſs veſſels, ſtopped with paper only.

" N. B. Almoſt all the flour of potatoes that is to be bought contains a ſmall quantity of ſand, which is perceived between the teeth: it is owing to the potatoes not having been properly waſhed; for the ſand, which lodges in the knobs and wrinkles of theſe roots, is not always eaſy to get out. The operation of cleaning potatoes, although ſimple in appearance, requires a great deal of care and attention: the ſame obſervation may be made reſpecting the care neceſſary to procure the flour of a proper degree of whiteneſs. It is, when properly made, perfectly white; but, to obtain it in that ſtate, it muſt be thoroughly ſeparated, by ſufficient waſhing, from all extractive matter. It muſt alſo be made in very clean veſſels, and in ſuch as are not capable of communicating any thing to it. Veſſels of earthen or ſtone ware would be the moſt convenient, but ſuch veſſels cannot be uſed for operations on a large ſcale; we are, therefore, obliged to employ wooden tubs, and we ſhould, as much poſſible, make uſe of none but ſuch as are

bread made of equal quantities of potatoes and wheat-flour.* The Board of Agriculture has publiſhed the following receipt, " Chooſe the

made of white wood; oak-wood tubs, or caſks, never fail to communicate to the flour more or leſs colour, unleſs they happen to be exhauſted of their extractive matter, by having been frequently, and for a long ſpace of time, kept full of water.

" As the mill is plunged into water, while it is uſed, it is not much diſpoſed to be clogged; it is, however, proper to remove, from time to time, the maſs of ground potatoes which is collected under it. We may, if we chuſe it, waſh the pulp as ſoon as it is ground; for this purpoſe, we muſt put it into the hair ſieve, as it comes from the mill, and pour a ſufficient quantity of water upon it to ſeparate the flour from it. What remains in the ſieve is the fleſhy pulp of the root, deprived of the ſediment already ſpoken of. This pulp is very nouriſhing; it may be boiled in water, and uſed as food for animals. The manner of employing it is an object which deſerves ſome conſideration, particularly when potatoe-flour is made in large quantities.

" The firſt ſeparation of the pulp, which is made by means of the hair ſieve, is very convenient, as by it we quickly get rid of a great quantity of pulp; if a little of it ſhould paſs through the ſieve, it ſettles after the flour, conſequently falls on the ſurface of it, and gives it a dirty colour; but that is of no conſequence, for, as it is more groſs than the flour, it is eaſily ſeparated from it by the ſilk ſieve, of which we have already ſpoken."

* My friend, Mr. Cook, of Barking, has introduced potatoe-bread into his family, and which I have ate of, and found as

the moſt mealy ſort of potatoes, boil and ſkin them; take twelve pounds, break and ſtrain them well through a very coarſe ſieve

as agreeable as any bread I ever taſted. His ſiſter favoured me with the method of preparing it.

" A quantity of potatoes is boiled in the ſkin, over a ſlow fire, by which they fall to pieces throughout more effectually. After long boiling, they are peeled, and the moſt mealy ſelected; theſe are well bruiſed by a broad wooden ſpoon; and equal quantities of this and flour by weight, are kneaded up with yeaſt for the oven. To take off the bitterneſs of the yeaſt, a ſmall quantity of bran and milk, with a little ſalt are added to it; theſe, after ſtanding about an hour, are run through a hair ſieve. Probably the milk may add to the whiteneſs, for the potatoe-bread I ate, was as white as wheaten ſtandard-bread, and it is found to make the bread eat ſhorter and pleaſanter, for without this addition the bread taſtes a little bitter.

" It may be proper to obſerve, that after the whole is kneaded into dough, it is laid on the hearth before the fire, placed on a diſh, and lightly covered with a cloth about an hour, which promotes a kind of fermentation, and renders the bread lighter in eating."

Since the firſt edition of theſe Hints, I have alſo introduced potatoe-bread into my family, made of equal quantities of potatoes and flour; it ſo much reſembles the ſtandard wheaten bread, that when both kinds were cut together into the bread baſket, I could not eaſily diſtinguiſh one from the other.

of hair, or a very fine one of wire, in ſuch a manner as to reduce the roots as nearly as poſſible to a ſtate of flour; mix it well with twenty pounds of wheaten flour; of this mixture make and ſet the dough exactly in the ſame manner as if the whole were wheaten flour. This quantity will make nine loaves of about five pounds each in the dough; and when baked about two hours will produce forty-two pounds of excellent bread." The following receipt of Dr. Fothergill, is copied verbatim:—" Take two or three pounds of potatoes, according to the ſize of the loaf you would make, boil them as in the common way for uſe; take the ſkin off, and, whilſt warm, bruiſe them with a ſpoon, or a clean hand does better; put them into a diſh or dripping-pan before the fire, to let the moiſture evaporate, ſtirring them frequently that no part grow hard; when dry, take them up and rub them as fine as poſſible between the hands; then take three parts of flour and one part of the prepared potatoes (or equal quantities of each will make good bread)

bread) and, with water and yeaſt, make it, as uſual, into bread. It looks as fine as wheaten bread, and taſtes agreeably; it will keep moiſt near a week, and ſhould not be cut till it is full a day old, otherwiſe it will not appear ſufficiently baked, becauſe of the moiſture which the potatoes give it. Never cut potatoes in ſlices with a knife, either raw or boiled, break or bruiſe them with the hand or ſpoon, or they will not be ſoft." *

In December, 1795, was held at Bath, the anniverſary meeting of the Weſt of England Agricultural Society, when the following method of making potatoe-bread, of which a ſpecimen was produced to the Society, met with general approbation. "To any given weight of flour, put half the weight of potatoes; let the potatoes be well boiled, peeled, and maſhed; mix them up with flour whilſt warm, then add the yeaſt, and proceed as in the common method of making bread, obſerving to make the bread as dry as poſſible."

* See the receipt in the Appendix, p. 44, from M. Parmentier.

"Twelve

"Twelve months uſe of this bread in one family, has proved it to be both wholeſome and palatable. The following experiment will ſhew the increaſe of bread to be obtained from the mixture of potatoes:—eighteen pounds of flour, without any mixture, made twenty-two pounds and a half of bread:—eighteen pounds of flour, with nine pounds of potatoes, made twenty-nine pounds and a half of bread.*"

"Seven pounds of bread are gained by nine pounds of potatoes. The flour employed was three-fourths wheaten and one-fourth barley flour; the bread excellent."

That humane and excellent character, Admiral Waldegrave, in a letter dated Portſ-

* This is different from all my experiments, for on baking dough of equal quantities of flour and potatoes, of the weight of twelve pounds, the loaf on being taken from the oven never weighed more than nine pounds. Leſt ſome deception might have occurred, different bakers were employed, but the reſult was the ſame; had the loaf been of flour alone, it would have weighed about eleven pounds and a half.

mouth,

mouth, October, 1795, gives the following receipt for making potatoe-bread.

" Take ſixteen pounds of large mealy potatoes, boil them well, and break them in pieces. They muſt be then ſet out in the open air for half an hour, that the watery particles may evaporate; then rub them in with twenty-eight pounds of flour, till all the lumps are reduced; after which, mix a proper portion of yeaſt, and knead it into dough.

" This is for a large baking; but may be reduced by only allowing two pounds of potatoes to three pounds and a half of flour, or ſix pounds of potatoes to eight pounds of flour."*

" We are now making bread of equal proportions of flour and potatoes. It anſwers admirably."†

* " The weight of the potatoes here conſidered, is in its ſtate juſt previous to its being mixed with flour."

† Vide Hints for the Relief of the Poor, p. 14.

Dr.

Dr. Johnſon, in his letter to the Admiral, dated Haſlar, October 19, 1795. Obſerves, that he has made trial of the potatoe-bread, in the proportion of three pounds and a half of flour to two pounds of potatoes, and found it preferable (from the concurrent teſtimonies of many who taſted it) to the fineſt baker's bread; and, after keeping it four days, retained its lightneſs, and acquired no acidity.

In ſome of the northern counties of England, it is cuſtomary in ſeveral families to make pies of ſtandard dough, and to fill the inſide with ſliced or maſhed potatoes, and a layer of bacon, or any ſpare meat; when well baked it affords wholeſome food, and is, perhaps, the cheapeſt hitherto uſed.

A friend of mine has informed me of the experience he has had in his own family, of the ſuperior advantages of pies, in preference to roaſting or baking. Four pounds of mutton were made into a pie, with one pound and a half of wheat-flour; this pie, with eight

ounces

ounces and a quarter of bread, dined eight perſons fully; whilſt three pounds three quarters of mutton roaſted, with two pounds one ounce of bread, dined only five of the ſame perſons: which prove, that baking pies is a cheaper way of uſing meat than roaſting, and (which at this time is of great importance), it conſumes leſs flour.*

I would alſo recommend to every family, who ſeriouſly wiſhes to mitigate the diſtreſſes of the poor, to ſuſpend the conſumption of bread one day in the week, except at break-

* It was I think impolitic, to enter into combinations, as ſome members of adminiſtration and many opulent perſons in London have done, to eat no paſtry at all, though the motives were certainly laudable. In boiling meat, except the liquor be ſaved for broth or ſoup, a conſiderable diminution of the meat may be obſerved; and perhaps ſtill more loſs is ſuſtained by roaſting, but in the form of pies, nothing is loſt, whilſt in reality leſs flour is conſumed, as is judiciouſly obſerved above. The objection might probably be uſeful as applicable to the little paſtry of the ſhops, but by no means in families; at the ſame time the paſtry might be made of flour mixed with potatoes, rye, barley, oats, or rice; each however of theſe, except potatoes, is at preſent dear.

faſt,

faſt,* and ſubſtitute either boiled or roaſted potatoes or potatoe-bread.† If every perſon will not ſubmit to this trivial ſacrifice, or others deem that a few individual examples are inadequate to any benefit of the community at large, let ſuch remember that of the ſmalleſt atoms maſſes of the greateſt bulk are compoſed. And oh! thou, who piouſly feeleſt for human miſery, if thou art not

* For young people, and indeed in general, ſome preparation of milk would be more ſalutary than tea and bread-and-butter. Milk-pottage is preferable to milk alone, that is, equal quantities of milk and water, boiled up with a little oatmeal; this breaks the viſcidity of the milk, and is, perhaps, eaſier digeſted than milk alone. Oatmeal alſo affords a warmer nuriſhment than wheat-flour, and generally agrees with weak ſtomachs. Rice likewiſe with milk is a good ſubſtitute for wheaten bread, and, by way of variety, might be taken inſtead of milk-pottage, not only at breakfaſt, but likewiſe at ſupper.

† Various other means might conduce to leſſen the price of meat, and of proviſions in general. Were each family to live one day in each week without animal food, the conſumption of it would of courſe, be one-ſeventh leſs in the year, and it would become, probably, proportionably cheaper.

By habituating myſelf to good mealy potatoes at dinner inſtead of bread, ſince bread became ſo dear, I now prefer potatoes to any bread except potatoe-bread.

enabled

enabled to extend thy light and warmth afar off, thy little embers of charity may cheriſh and revive ſome ſtarving palſied hand; and if, by thy ſingle ſacrifice of the conſumption of bread one day in the week, thou ſhalt be the means of keeping alive one helpleſs infant, thou only doeſt a portion of thy duties towards God and thy fellow-creatures.

APPENDIX.

APPENDIX.

THE following letter is ſo applicable to the ſubject of this tract, that I annex it, as containing hints worthy of further inveſtigation.

" SHEFFIELD,
27th of the 5th Month, 1795.

" Eſteemed Friend,

" I duly received thy kind favour of 13th current, and, according to thy deſire, as ſoon as conveniency would allow, I procured a buſhel of potatoes; when the dirt was waſhed off they weighed 75¾ lb. avoirdupois weight: theſe were peeled with a knife; the peelings weighed 15lb. the potatoes were then reduced to a pulp upon a bread grater, and then put

into a hair ſieve, and the fecula waſhed out by frequent effuſions of clear water into a tub, having a quantity of water previouſly put into the tub for the fecula to fall through. This purification was ſeveral times repeated, till the water came off colourleſs, or nearly ſo; there remained in the ſieve a ſubſtance which would not paſs with the water, weighing 20lb. I had one pound of this, cruſhed very fine betwixt two ſtones, and it then yielded ℥xiſs. of fecula when dried. This I have ſent for thy inſpection; it is not of ſo good a colour as the other, which I think was owing to the ſtones not being ſo well cleaned as they might have been; one of my young men did it when I was not aware of it.

" Perhaps it may be worth remarking that when the fecula came out of the laſt waſhing, to my ſurprize it was of a bad colour, which was owing to ſomething having paſſed the ſieve which ſhould not; but on mixing it with juſt as much water as was ſufficient to ſuſpend it, it ſoon cleared itſelf of the greateſt part of the impurities, forming a thin

a thin ſtratum on the top, and ſome little of the heavieſt particles a thin ſtratum at the bottom; when theſe were pared off the reſt was of a beautiful white: I purified theſe parings in the ſame way; and when the whole was dried it weighed 6lb. 14oz. avoirdupois, which with ℈xiſs. multiplied by twenty, makes what might have been produced from the whole reſiduum, viz. 230 ſcruples, and reckoning 21 ſcruples an ounce avoirdupois, is ſomething more than 10 oz. which in all is 7lb. 8oz. of ſtarch per buſhel. I am informed by a perſon much accuſtomed to the growth of potatoes, that an acre of good land, well managed, will generally yield 300 buſhels, and would make 20 cwt. 1 quarter of ſtarch, as appears from this experiment. An acre of good land, on the average, I am informed, yields 30 buſhels of wheat, and if very good grain and well dreſſed, will weigh about 63lb. $\frac{1}{3}$ viz. 14 ſtones per load, each load being 3 buſhels; the produce of the whole 30 buſhels then is 17 cwt. 2 quarters; how much ſtarch this will yield, I am not able to learn, but moſt likely that may eaſily be come at in London.

The following Table ſhews the expenſe of cultivating an acre of land for both wheat and potatoes.

An acre of land, from the beſt information, I find, when the work is hired out, coſts for wheat as under:

	£.	s.	d.
Fallowing	2	18	0
Manure	4	4	0
One load of ſeeds average price	1	1	0
Ploughing and ſowing	0	12	0
Reaping	0	10	0
One year's rent and taxes, ſuppoſe	2	10	0
Allow the ſtraw for thraſhing	0	0	0
	£. 11	15	0

An acre of land, from good authority, appears to coſt, when cultivated for potatoes, as under:

	£.	s.	d.
Preparing the lands, including ploughing and ſetting	2	2	0
Setts, 30 buſhels, at 1s.	1	10	0
Manure	4	10	0
Digging up the crop at the cloſe of the year, at 5d ℔ load	2	1	0
Rent & taxes, ſuppoſe	2	10	0
	£. 12	13	0

"If an Act of Parliament were made for the entire prohibition of the uſe of wheat for making ſtarch, it might be attended with the greateſt benefits, as there are thouſands of acres in ſome parts of this country where wheat can never be grown to perfection, and where good potatoes might be raiſed; and

theſe

theſe ſituations, being moſtly mountainous, are beſt calculated for erecting mills for the extraction of potatoe-ſtarch, the ſprings being ſtrong enough often to turn a ſmall wheel, and exceedingly clear for waſhing the fecula.*

" It appears to me that it would be the beſt way to have a ſmall machine made to cruſh the potatoes effectually, and to make the experiment on a larger ſcale, in order to obtain proper knowledge of the quantity of fecula yielded from a given quantity of potatoes. If any one ſhould think it worth his while to purſue theſe reſearches, it might be proper to have ſomething like a cyder mill, by a ſtone running on edge in a circular trough, having a hole in its ſide to fix a ſieve or fine riddle in to let the fecula through; which may be done by a ſmall tube diſcharging a continual gentle ſtream of water into the trough, to be ſtopped by a cock at pleaſure. The ſieve will want clearing, which may be done with a bruſh fixed to the ſtone which turns round; the fecula being carried forward are to be

* See note page 19.

waſhed into the tub through another ſieve, by a cock over it; and ſo forth, till it is clear and pure, and then dried in flat bottomed baſkets covered with cap paper hung in a ſtove with a gentle heat.

" I believe that potatoes do not all yield an exact quantity; ſeveral experiments have yielded more in proportion than theſe.

" Thou deſiredſt to know what uſe could be made of the refuſe in feeding pigs, &c. I gave the peelings and the matter which was left in the ſieve to a perſon who boiled them, and gave them to a pig; but, not being accuſtomed to this kind of food, it would not eat it without the addition of a few grains, which made it go down very well. But, perhaps, the beſt method would be to cruſh all the refuſe, and diſſolve the fecula with boiling water, to which, adding a ſmall quantity of an infuſion of malt, or ſome ſaccharine ſubſtance, ferment with yeaſt for the diſtillation of vinous ſpirit. The coloured water from the firſt waſhing is conſiderably thickened, and ſhould be uſed to extract the fecula from the refuſe.

" There

" There is a machine in uſe at Ackworth School for peeling potatoes, which probably would be an uſeful addition to a potatoe-ſtarch manufactory. It conſiſts of a bucket, whoſe ſides are lined with rolled iron, tinned and punched like a bread grater, in the middle whereof is placed a wooden cylinder, which is covered with the ſame kind of grater; there is a ſpace betwixt the cylinder and the ſides of the bucket, ſufficient to allow ſeveral potatoes to lie by the ſide of one another; this being nearly filled with the roots, water is added, and covered up, when the cylinder is turned round, and in ſome time the ſkins are found floating in the water.

" R. S."

The ſcarcity of grain, and particularly of wheat, at the preſent time, has given riſe to the uſe of various ſubſtitutes, and to the publication of ſeveral eſſays, deſigned to prevent or leſſen the threatened ſcarcity. The ſubſtitutes moſt generally adopted, have been rice or potatoes. The former is too expen-

ſive for the community at large, but whatever quantity of it is conſumed in the place of wheat-bread, affords a ſaving of the latter for the nouriſhment of the poor. The water in which the rice has been boiled, anſwers every purpoſe of ſtarch, and, in this point of view, is alſo a ſaving in the conſumption of wheat, by precluding the uſe of ſtarch made from it.*

In general, however, if we except rye, oats, and barley,† which are at this time ſcarce and

* Perhaps other ſubſtitutes beſides wheat and potatoe-ſtarch may be diſcovered, as from the horſe-cheſnut, or acorn.

† Governor Pownall has juſt publiſhed, "Conſiderations on the Scarcity and High Prices of Bread-Corn and Bread." Amongſt a variety of uſeful, political, and œconomical reflections, he obſerves, that one great evil is *the undue diviſions of the meal into flour*, by which a brown bread not ſufficient in its nature for the nouriſhment of a labouring man, or a white or wheaten bread too high for their wages to afford, are prepared. This ſeems confirmed by the following reſolution:

The Committee appointed by the Houſe of Commons to examine the ſeveral laws now in being relative to the aſſize of bread, have come to the following reſolutions:

October, 1795.

"That it is the opinion of this Committee, that if the Magiſtrates were by law permitted (when and where they ſhall think

and dear, the potatoe affords the moſt pleaſant and cheap ſubſtitute hitherto made uſe of in this country. In favour of its wholeſomeneſs, much

think fit to ſet an aſſize of bread), to introduce again, under certain regulations and reſtrictions, the old ſtandard bread made of flour, which is the whole produce of the wheat, the ſaid flour weighing, on an average, three-fourths of the weight of the wheat whereof it is made, it would tend to prevent many inconveniences which have ariſen in the aſſize and making of bread for ſale.

" That it is the opinion of this Committee, that the columns calculated for the wheaten bread, in the now repealed tables of the Act of the 8th of Queen Anne, intituled, " An " Act to regulate the Price and Aſſize of Bread," would be the proper aſſize for ſaid ſtandard wheaten bread: and that the twelvepenny loaf of this ſtandard wheaten bread, containing the whole flour of the wheat (the ſaid flour weighing, on an average, three-fourths of the weight of the ſaid wheat) would, upon a medium, contain one pound of bread in weight more than the twelve-penny loaf of the preſent wheaten bread, made under the Act of the 31ſt of George II."

On the 12th of December,

Mr. Ryder brought up the Report of the Select Committee appointed to take into conſideration the preſent high price of corn, and moved—that the Houſe do agree to the following reſolution:

" To reduce the conſumption of wheat in the families of the perſons ſubſcribing ſuch engagement, by at leaſt one third of the uſual quantity conſumed in ordinary times.

" In

much has been publiſhed in Shakeſpeare,* Forſter,† Gerard,‡ the Philoſophical Tranſactions, and in numerous diſtinct eſſays; of the latter Parmentier's, is perhaps the moſt intereſting, which gained the prize propoſed by the Academy of Beſançon, in 1777, and

" In order to effect this purpoſe, either to limit to that extent the quantity of fine wheaten bread conſumed by each individual in ſuch families;

" Or, to conſume only mixed bread, of which not more than two thirds ſhall be made of wheat;

" Or, only a proportional quantity of mixed bread, of which not more than two-thirds is made of wheat;

" Or a proportional quantity of bread made of wheat alone, from which no more than five pounds of bran is excluded.

" If it ſhould be neceſſary, in order to effect the purpoſe of this engagement, to prohibit the uſe of wheaten flour in paſtry, and to diminiſh, as much as poſſible, the uſe thereof in other articles than bread."

Here the ſame miſtake reſpecting pies is continued.

* Merry Wives of Windſor, 4to. 1619, ſcene iii. Falſtaff.

† England's happineſs increaſed by a plantation of potatoes, 4to. 1664.

‡ Herbal, Ed. 1636, p. 780.

appeared

appeared in 1780, conſiderably enlarged and improved, under the title of "Récherches ſur les vegetaux nouriſſants qui dans le temps de diſette," &c. This was tranſlated by a reſpectable phyſician in London, and printed for Murray in Fleet-ſtreet, in the year 1783. Parmentier quotes a variety of authors, and gives, from his own experience, many examples to prove, that the potatoe is a wholeſome nutritive root; but if univerſal experience in this country did not ſuperſede all philoſophical deductions, the ſtrong and prolific race of a ſiſter kingdom, whoſe poor are chiefly fed by it, and where giants are almoſt excluſively national, would afford irrefragable proofs of the nutritive quality of this root. We have read of Poliſh dwarfs and Engliſh dwarfs, but I am unacquainted with any importation of them from Ireland.

Parmentier, after chymically analyzing this vegetable, and explaining its different conſtituent parts, deſcribes the proceſs of making ſtarch, ſaleb, and ſago from it, the laſt of which is better known here by ſago-powder. I ſhall, however,

however, only quote from him his proceſs for making bread, and likewiſe leaven when yeaſt cannot be procured.

I. POTATOE BREAD.

" Take any quantity of potatoes, well cruſhed and bruiſed, mix them with the leaven prepared the evening before in the uſual way, with the whole of the flour deſigned for making the dough, ſo that one half may conſiſt of pulp of potatoes and half of flour ; knead the whole with the neceſſary quantity of warm water. When the dough is ſufficiently prepared, put it into the oven, taking care not to heat it ſo much as uſual, nor to ſhut it up ſo ſoon, and to leave it longer in : without this eſſential precaution, the cruſt of the bread would be hard and ſhort, while the inſide would have too much moiſture, and not be ſoaked enough.

" Whenever it is propoſed to mix potatoes with the dough of different grains either to ſave a part, or to improve the bread, theſe roots ſhould be reduced into the form of a glutinous

a glutinous paſte; becauſe, in this ſtate, they give tenacity to the flour of ſmall grain, which are always deficient in this reſpect."*

II. LEAVEN of POTATOES.

"Mix half a pound of pulp of potatoes with an equal quantity of the ſtarch of this root, and four ounces of boiling water; ſet the mixture in a warm place: in forty-eight hours a ſlight vinous ſmell ſhould be exhaled from it; and now a freſh portion of ſtarch, pulp, and water, ſhould be added, and the maſs again expoſed to the ſame temperature for the ſame ſpace of time: this operation ſhould yet be repeated a third time. The paſte thus gradually turned ſour may be conſidered as a firſt leaven.

"In the evening dilute this firſt leaven with warm water, mix equal quantities of ſtarch and pulp, in the proportion of one half of the dough; ſo that for every twenty

* A ſmall addition of ground rice, makes potatoe-bread eat ſhorter, but I do not think any addition requiſite.

pounds

pounds of dough, ten of leaven muſt be prepared. When the mixture is exactly made, put it in a baſket, or leave it in the kneading tub all night, taking care to cover it well, and to keep it warm till morning.

" The tedious and troubleſome preparation of the firſt leaven will be avoided after the firſt baking, becauſe a piece of the dough may be ſet aſide and kept."

Of the publications of the laſt year, a very important one is by that accurate chymiſt Dr. Pearſon who was requeſted, by the Board of Agriculture, to inquire into the compoſition, or parts, of which the potatoe root conſiſts; and particularly to aſcertain the proportion and nature of the watery part. He concludes with Parmentier, with recommending it as highly nutritious, and, like him, as capable of making ſago, ſaleb, &c. But, contrary to the declaration of Parmentier,

he

he ſays, " The art of fermenting potatoe-meal into bread, in place of wheat, has not yet been diſcovered." Parmentier, however, aſſerts, in chapter 4th, " That from various and repeated trials, the potatoe, which hitherto (anno 1777) hath not been converted into a well-raiſed bread, without the mixture of at leaſt an equal quantity of ſome flour, may be made to aſſume that form, without any foreign aſſiſtance." I imagine, that neither Dr. Pearſon, nor the Board of Agriculture, had ſeen this valuable performance of Monſ. Parmentier.

That excellent and humane magiſtrate, P. Colquhoun, eſq. has lately publiſhed, " Uſeful Suggeſtions favourable to the Comfort of the labouring People," &c. But although to this eſſay, as well as to others written to ſerve the community, he has not prefixed his name, he has politely permitted me to avail myſelf of his ſuggeſtions; and, under this liberty, I ſhall annex the manner of preparing ſome of the ſoups recommended by him, as affording much

much nouriſhment comparatively at a trifling expenſe.

I. POTATOE SOUP.

Potatoe Soup is made by ſtewing about five pounds of the coarſeſt parts of beef or mutton, or even part of a bullock's head, in ten quarts of water till half done: then pare the ſkin from the potatoes, and put a quantity in the ſtew-pan with the meat, together with ſome onions, pepper, and ſalt. Stir it frequently, and when the potatoes are boiled ſufficiently, it will be found a very excellent diſh. If a few bones of beef are added, it will make the ſoup richer, and a greater quantity will be made.* The meat, when ſeaſoned with the onions and pepper, will eat extremely well along with that part of the potatoes which remain whole, and do not mix with the ſoup; and, in this way, a moſt comfortable meal for a large family is obtained, without uſing any bread at all.—

* This is confirmed by the recent trials made by Dr. Johnſon, and hereafter inſerted.

What

What is called the ſticking of the beef, which is rich and full of gravy, is the beſt meat for this kind of ſoup, becauſe there is no bone in it.

5lb. of this beef generally coſts 2d. a pound, but at preſent it will be 3½d.—ſay - - - - - -	1	6
Bones to enrich the ſoup - -	0	4
24lb. of potatoes may now be bought for the price of a quartern loaf of bread (which weighs 4lb 5½ oz.) and they will ſoon be much cheaper. The coſt will be	1	0
A bunch of onions will coſt, if good and large* - - - - - - -	0	4
Pepper and ſalt - - - - - - -	0	4
Total expenſe of ingredients	3	6

This diſh will afford a ſavory, comfortable, and even a plentiful and wholeſome dinner

* A perſon who ſpeaks from experience aſſured me, that the addition of a red-herring to this ſoup, proved a good ſubſtitute for onions, pepper, and ſalt, and ſaved ſome expenſe.

to a family of ten or twelve perſons, including children, at the expenſe of 3½d. for each. It will fill the ſtomach with what will be found both palatable and nouriſhing; and it will prevent that deſire for large quantities of porter, which always become neceſſary when the ſame ſum is expended in a dinner of baked meat, or of bacon and bread, which is not ſo wholeſome, creates a thirſt, and does not impart half the nouriſhment; and, in point of weight of food, the proportion for the ſame money is conſiderably above four-fold in favour of the potatoe ſoup and meat; a circumſtance well worth attending to by the middling, as well as the lower ranks in life—eſpecially where there is a number of children.

This calculation is made with a view to the preſent high prices of meat and vegetables.—In a ſhort time, potatoes will be at, or under, one farthing a pound, and onions will be much cheaper and better, ſo as to afford a greater quantity, and thereby make the diſh more ſavory. Beef may alſo be

cheaper

cheaper, ſo that in place of 3½d. a family may dine well at 2d. or 2½d. a head.

II. BARLEY BROTH.

This diſh, when well made, is, of all others the moſt ſavory, rich, palatable, and nutritious that can be conceived. It admits almoſt of a mixture of every kind of vegetable that can be procured throughout the year, and it cannot be ſaid to be ever out of ſeaſon. The vegetables are parſley, common greens, cabbages, turnips, carrots, peaſe, beans, collards, and brocoli, according to the ſeaſon, conſtantly attending to one rule however, that whatever other herbs are uſed, onions or leeks, and parſley if it can be had, muſt form a part of the ingredients, and the ſoup may be made thick or thin, according to the taſte of the perſon who uſes it. The clod and ſticking of the bullock makes the beſt barley broth, and it may alſo be enriched much by the addition of beef or mutton marrow-bones. Mutton itſelf is frequently uſed in this kind of

ſoup, but it does not make it ſo rich or ſo good as beef, which may be uſed in larger or ſmaller quantities, according to circumſtances. A tea-cupful of barley is ſufficient for a large family. What is called pearl-barley is not ſo good as a larger ſort, which does not coſt half ſo much money, and may be purchaſed at about 3d. a pound, or leſs.

The general rule for making this ſoup is as follows:

Take four quarts of water, four pounds of beef with bones, four ounces of barley, and ſo in proportion for a larger or ſmaller quantity. Stew the whole together for two hours; then put in ſuch pot-herbs and greens as may be ſuitable to the ſeaſon, cut ſmall, with a proper quantity of ſalt, and let the whole boil until quite tender. If neceſſary, ſkim the fat off that it may not be greaſy. There may be more or leſs carrots, turnips, greens or peaſe, according to the taſte of the parties; but onions

or

or leeks, according to the ſeaſon, muſt not be omited, as they give the ſoup an excellent flavour.

This ſoup is generally eaten without bread, and with the addition of a few potatoes, to be eaten afterwards with the boiled meat, makes an excellent meal, extremely good and wholeſome, eſpecially where there are a number of children.

The preſent ſcarcity has not only excited the moſt generous ſubſcriptions for the relief of the poor, among all the higher ranks of the community, but likewiſe propoſals for affording them cheap and nutritious food in all times of diſtreſs. The following receipts which have been printed, and ſince diſtributed in ſeveral diſtricts of the city, I have preſumed to inſert here.

A CHEAP FOOD,

Without bread or beer, and with very little meat; and as healthy as can be obtained

from wheat or barley, however prepared, and cheaper, even when corn is at the loweſt price.

Receipt I.

Take half a pound of beef, mutton, or pork; cut it into ſmall pieces; half a pint of peas, three ſliced turnips, and three potatoes cut very ſmall; an onion or two, or a few leeks; put to them three quarts and one pint of water. Let the whole boil gently on a ſlow fire about two hours and a half, then thicken it with a quarter of a pound of ground rice, and half a quarter of a pound of oatmeal (or a quarter of a pound of oatmeal and no rice). Boil it for a quarter of an hour after the thickening is put in, ſtirring it all the time; then ſeaſon it with ſalt, pepper, or pounded ginger, to the taſte.

If turnips or potatoes are not to be had, carrots, parſnips, or Jeruſalem artichokes, or any garden-ſtuff, will do. This well boiled is not unpleaſant, and is very nouriſhing. As

a pint

a pint only will be waſted in the boiling, it will be a meal for three or four perſons, without bread or drink; and it will not coſt above four-pence.

Receipt II.

Take two pounds of beef, mutton, or pork out of the tub (or of hung-beef refreſhed in water), cut into very ſmall bits, and put it into a pot with ſix quarts of water, letting it boil on a ſlow fire near three hours (or ſtew it till it is tender). Then put to it a quarter of a pound of carrots or parſnips, with half a pound of turnips, all ſliced ſmall, and ſometimes inſtead of theſe, a few potatoes ſliced (or Jeruſalem artichokes), then ſome greens may be added, according to diſcretion, ſuch as cabbage, celery, ſpinage, parſley, likewiſe two ounces of onions or leeks (which may be omitted if diſliked), the whole thickened with about a pint of oatmeal (or a quart, if intended to be very thick); theſe muſt be well boiled together, and ſeaſoned with pepper, or pounded ginger, and ſalt. It is a

wholeſome and well reliſhed food, and will ſupport, for a day, a family of ſix, without bread or drink.

Any kind of meal, or French barley waſhed, or garden broad beans, will make a good ſhift. Pounded rice, or ſplit peas, will thicken better and cheaper than oatmeal, as leſs rice will ſerve.

Receipt III.

Take four pounds of beef (onions, if agreeable, three quarters of a pound) turnips two pounds, rice one pound and a half, parſley, thyme, and ſavory, of each a large handful, pepper and ſalt in a fit proportion, water ſeventeen quarts. Let the beef be cut into ſlices, and after it has boiled for ſome time, let it be minced ſmall. The turnips (and onions infuſed) and ſweet herbs may be minced before they are put into the pot. Let the whole boil together gently about three hours, on a ſlow fire.

Scarce

Scarce two quarts will be waſted in the boiling, and the reſt will ſerve about eighteen perſons for one meal, without bread or drink.

Where fire is ſcarce, the ſeveral particulars in theſe three receipts being put into a large pot, may be ſtewed together all night in an oven; and the next day may be boiled for a quarter of an hour, with an addition of ſome oatmeal, potatoes, or Jeruſalem artichokes or turnips.

Or take a ſhank of beef, ſix quarts of water, a pint of ſplit peas (or a quart of blue peas) one leek, four or five ſliced turnips; bake them all in a large earthen pot.

To make POTATOE BREAD.

Put potatoes in a net into a ſkillet with cold water. Hang it at a diſtance over the fire, ſo that they may not boil, until they become ſoft; then ſkin and maſh them, and mix them with their weight of flour, of yeaſt and ſalt a ſufficient quantity, and a little

little warm water. Knead it up as other dough. Lay it a little while before the fire to riſe, then bake it in a very hot oven.* Flour of rice, or barley-meal, may be uſed inſtead of wheat flour. A few caraways or anniſeeds may be added occaſionally.

To make BEER.

To eight quarts of boiling water put a pound of treacle, a quarter of an ounce of ginger, and two bay leaves. Let theſe boil for a quarter of an hour, then cool and work it with yeaſt in the ſame manner as other beer.

Or thus.

Take one buſhel of malt, with as much water and hops as if two buſhels of malt were allowed; put ſeven pounds of the coarſeſt brown ſugar into the wort while boiling.

This is very pleaſant, is as ſtrong, and will keep as long without being ſour or flat, as if two buſhels of malt had been put in.

* M. Parmentier recommends that the oven ſhould be leſs heated than uſual. See appendix, page 44, and the receipts, page 20.

To

To make YEAST.

Thicken two quarts of water with four ounces of fine flour; boil it for half an hour; then ſweeten it with three ounces of brown ſugar, not the browneſt. When almoſt cold, pour it upon four ſpoonfuls of yeaſt into an earthern jar, deep enough for the yeaſt to riſe: ſhake it well together, and place it for a day near a fire; then pour off the thin liquor at top; ſhake the remainder, and cloſe it up for uſe.

It is proper to ſtrain it through a ſieve. To preſerve it, ſet it in a cool cellar, or hang it ſome depth in a well. Keep always ſome of this, enough to make the next quantity that is wanted. As it is not quite ſo ſtrong as yeaſt from ale uſually is, put ſomewhat more than four ſpoonfuls of this, for making new yeaſt.

In a uſeful little pamphlet entitled, "Hints for the Relief of the Poor," juſt publiſhed, there are ſeveral receipts for making cheap ſoups or pottages. The inſertion of which in this place, may be uſeful to ſuch as read theſe Hints with a view to ſerve the community.

The firſt and ſecond receipts are communicated by lieutenant colonel Paynter, dated Portſmouth, October 19, 1795. The ſubſequent ones are by Dr. James Johnſton, of the Royal Hoſpital, Haſlar; dated Portſea, October 19th and 24th, 1795, addreſſed to admiral Waldegrave: and Dr. Johnſton's teſtimony in favour of their ſalubrity and great nutritious quality, is a ſufficient recommendation. Theſe appear to have been ſuggeſted by the humane Admiral, for Dr. Johnſton's trial and opinion.

FIRST

FIRST TRIAL.

TO MAKE A GOOD AND CHEAP POTTAGE.

Take three pounds of the ſtickings of beef, or part of the ſhin, or any of the coarſe or cheap parts: put theſe into eleven quarts of water; after boiling two hours, add one pound of Scotch barley, and let it boil four hours more; during this time ſix pounds of potatoes are to be added, half a pound of onions or leeks, and of parſley, thyme, or ſavory, a due proportion. Seaſon the whole with pepper and ſalt. Any additional vegetables may be added, and half a pound of bacon cut into ſmall bits, if you wiſh to make it more ſavory; this will produce full three gallons of pottage, which will require no bread.

In London, or large towns, bones may be procured from the butchers, which will anſwer the purpoſe as well, and come much cheaper.

N. B. In

N. B. In ſummer, turnips and carrots may ſupply the place of barley, but it muſt be made thick. Meat of the above deſcription coſts 3d. per pound. Your pot muſt boil over a ſlow fire.

The whole coſt three ſhillings and four-pence, and ſatisfied twenty men, without bread, the nature of the food not requiring any. Colonel Paynter adds, that the men in the barracks liked it very much, and that the officers alſo had it in their meſs, and found it excellent.

SECOND TRIAL.

ANOTHER VERY CHEAP AND GOOD DISH.

After boiling one pound of Scotch barley, let it ſtand to cool in an earthen pan, all the water being carefully drained from it; boil one

one pound of bacon in two quarts of water; a few minutes before you take it off the fire, put in your barley and it will fall to pieces immediately, and very ſoon nearly ſuck up all the juices of the bacon; you will then only have to pour off the remaining water; a few onions or leeks ſhould be boiled with the bacon, and pot-herbs, if you have them. Seaſon with pepper and ſalt.

Note, When you make a very thick meſs with potatoes, and mean to eat the broth, it is better, if you can, to parboil and peel them before you put them into your broth-kettle.

The common price of Scotch barley varies from 17s. to 1l. 1s. per hundred weight. The retail price is in general about 3d. per pound.

One pound of Scotch barley boiled four hours, and put into a pan to cool, becomes a ſort of jelly, which will inſtantly fall to pieces on being put into boiling water.

When

When it is in its congealed ſtate, it will weigh four pounds. This is a moſt excellent nouriſhing food either to make pottage, or, mixed with ſugar, for young children.

THIRD TRIAL.

	s.	d.
Gravy beef 1lb. - - -	0	3½
Scotch barley, one-third of a pound	0	1
Potatoes 2lb. - - -	0	1
Onions, one-third of a pound -	0	0½
Pepper and ſalt - - -	0	0½
Bacon 3 oz. - - -	0	2½
Produce four quarts	0	9

Dr. Johnſton conceives, that this quantity would make a dinner and ſupper for three working men, without bread or any drink whatever, more ſalutary and nutritive than the

the uſual food of the laborious claſs of the community, which, in general, conſiſts of fat bacon and cabbage; with this they eat bread, and muſt have beer to drink: and if a labouring man is ſuppoſed to eat a pound of bacon, at 9d per pound, for his dinner and ſupper, that article alone is equal to what might ſupport three, independent of bread and beer.

FOURTH TRIAL.

	s.	d.
Sheep's head - - - -	0	5
Barley, ½ lb. - - - -	0	1½
Potatoes, 3 lb. - - -	0	1½
Onions, ½ lb. - - - -	0	0½
Pepper and ſalt - - -	0	0½
Cabbage, turnips, and carrots -	0	1
Water, eleven pints - -	0	0
Produce ſix quarts	0	10

This was ſuperior to the other, in richneſs of flavour and taſte, owing to the bones in the head, which were broken to pieces previouſly to their being put into the ſtew-pan: This meſs would make a moſt comfortable dinner for four men.

FIFTH TRIAL.

	s.	d.
Bacon, ½ lb. - - -	0	4½
Barley, ½ lb. - - -	0	1½
Onions, pepper, and ſalt -	0	1
Produce 2 lb. 8 oz.	0	7

This coſt 7d. and would dine three men without bread; but it appears that ſomething to drink would be neceſſary with it.

SIXTH TRIAL.

Made with neck beef, ſimilar to the firſt experiment.

SEVENTH

SEVENTH TRIAL.

	s.	d.
Ox cheek - - - -	0	10
Barley 1 lb. - - -	0	3
Potatoes 6 lb. - - -	0	3
Pepper and ſalt - - -	0	1
Onions 1 lb. - - -	0	1
Cabbage, turnips, and carrots	0	2
Water, 22 pints - - -	0	0
Produce three gallons	1	8

This being made without bacon coſt 20d. and produced three gallons of moſt excellent pottage ſufficient for eight men, of the moſt laborious employment, for dinner and ſupper. This yielded rich and better pottage than any of the others; and ox-cheek ſeems to have the preference to any of the coarſe pieces of beef.

The above receipts were made in a very cloſe ſtew-pan, that emitted ſcarcely any evaporation, which is a material circumſtance.

Dr. Johnſton remarks, that pottage prepared as above is wholeſome and nutritive, is ſo ſelf-evident, as cannot fail to carry conviction to every unprejudiced mind, and more conducive to health, than the coſtly diſhes of the moſt luxurious tables; but that he does not recommend this diet to be daily uſed without any change, though he concludes that every poor family may uſe it three or four times a week, without being cloyed with a ſameneſs.

EIGHTH TRIAL.

	s.	d.
Shin of beef coſt - -	1	0
Barley, 1 lb. - - -	0	3
Onions, 1 lb. - - -	0	1
Potatoes, 6 lb. - - -	0	3
Cabbage, carrots, and turnips -	0	1½
Salt and pepper - - -	0	1
Water, 11 quarts - - -	0	0
Produce 3 gallons	1	9½

Dinner for ſeven men at 3d each.

NINTH

NINTH TRIAL.

	s.	d.
Quarter of an ox-head -	0	6
Barley, ½ lb. - - -	0	1½
Onions, ½ lb. - - -	0	0½
Potatoes, 3 lb. - - -	0	1½
Cabbage, carrots, and turnips	0	1
Salt and pepper - - -	0	0½
Water, 5½ quarts - -	0	0
Produce, 6 quarts of a rich and high-flavoured pottage	0	11

In the two laſt trials, Dr. Johnſton omitted the bacon, both on account of its being an expenſive ingredient, and from its flavour being in ſome of the others too predominant. On the whole of the trials, which he made with the utmoſt care and attention, he gives it as his opinion, that ox-cheek or ſhin of beef claim the preference, to any coarſe pieces without bones, which he is convinced add much to the richneſs and grateful taſte of the pottage. Compare page 49, note.

As

As the following table may be of uſe in aſcertaining, by experiment, the beſt mode of variouſly combining wheaten-flour with other ſubſtances; and of knowing the loſs of weight ſuſtained by baking, I have inſerted it in this place. (See Hints, page 26, and Note).

Victualling Office, Dec. 8, 1795.

An ACCOUNT, ſhewing the produce of ſeven pounds (being the ſtipulated quantity allowed for two quartern loaves) of ſundry mixtures of Grain, and of Grain and Potatoes, directed to be baked into bread:—Shewing the weight of dough made therefrom, the quantity required for making two quartern loaves, according to the uſual cuſtom of the town Bakers, being 9lb. 10 oz. or 4lb. 13 oz. each;—the weight it turned out over or ſhort thereof and the weight of the bread when taken out of the oven, and when cold. Prepared in purſuance of a Letter from the Hon. DUDLEY RYDER, Chairman of the Corn Committee of the Hon. Houſe of Commons, dated the 28th November laſt.

	DESCRIPTION of BREAD.	FLOUR.	DOUGH.						BREAD.			
		Weight allowed for making two quartern loaves, at 3lb 8 oz. each.	Weight after being properly mixed with yeaſt, ſalt, & water.		Over or ſhort of the weight allowed.				Weight when taken out of the oven.		Weight when cold.	
					Over.		Short.					
		lb.	lb.	oz,	lb.	oz.	lb.	oz.	lb.	oz.	lb.	oz.
No. 1	2-3ds Wheat, 1-3d Indian Corn	7	11	9	1	15	—	—	8	10	8	7
2	2-3ds ditto, 1-3d Barley	7	10	14	1	4	—	—	8	7	8	3½
3	2-3ds ditto, 1-3d Oatmeal	7	10	8	—	14	—	—	8	9	8	4½
4	2-3ds ditto, 1-3d Rye	7	10	15	1	5	—	—	8	9	8	5¼
5	2-3ds ditto, 1-3d Potatoes	7	8	15	—	—	—	11	8	1½	7	12½
6	3-5ths ditto, 1-5th Indian Corn, and 1-5th Potatoes	7	9	12	—	2	—	—	8	11¾	8	7
7	3-5ths ditto, 1-5th Barley, and 1-5th Potatoes	7	9	6	—	—	—	4	9	3½	8	14¾
8	3-5ths ditto, 1-5th Oatmeal, and 1-5th Potatoes	7	9	10	—	—	—	—	8	12	8	7¼
9	3-5ths ditto, 1-5th Rye, and 1-5th Potatoes	7	9	5	—	—	—	4	8	14	8	9¾
10	3-5ths ditto, 1-5th Indian Corn, and 1-5th Barley	7	11	3	1	9	—	—	9	1¼	8	13½
11	3-5ths ditto, and 2-5ths Potatoes	7	8	10	—	—	1	—	7	11	7	9