

to abandon the warrant of removal, but they shall thereupon pay the expenses incurred by reason of such warrant. *Ib.*

The Statute supplies Forms which may be adopted.

I am, your obedient Servant,  
W. G. LUMLEY, Assistant Secretary.

To the Clerk of the Guardians.

2. LUNATIC PAUPERS—CIRCULAR.

Poor Law Commission Office, Somerset House,  
August 14th, 1845.

SIR,—I am directed by the Poor Law Commissioners to inform you that by the 8 and 9 Vict. c. 126, sec. 47, it is enacted that so much of the Statute of the 5 and 6 Vict. c. 57, as required the clerks to boards of guardians to make out the return of pauper lunatics on the 15th day of August, is repealed.

It will be seen, however, that a return to the same effect as was required by that statute, must be made by the clerks to boards of guardians on the first of January in every year, or as soon after as may be, and copies thereof must be sent on or before the first of February ensuing, to the Commissioners in Lunacy, and to the Poor Law Commissioners.

I am, &c.,

W. G. LUMLEY, Assistant Secretary.

To the Clerk to the Guardians.

3. LUNATIC PAUPERS—CIRCULAR.

Poor Law Commission Office, Somerset House,  
August 25th, 1845.

SIR,—I am directed by the Poor Law Commissioners to call your attention, as a medical officer of the Union, to the provision in the recent Statute relating to pauper lunatics, 8 and 9 Vict. c. 126, sec. 55; which is as follows:—

“Be it Enacted, that every Pauper Lunatic, chargeable to any Parish, who shall not be in an Asylum, or a Registered Hospital, or a house duly licensed for the reception of Pauper Lunatics, shall be visited once in every Three months by the Medical Officer of the Parish or Union to which such Lunatic shall belong; and a List

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of all such Lunatics shall be sent once in every Three Months by such Medical Officer to the Clerk of the Peace of the County or Borough to which such Lunatic shall belong, or in which he shall be resident, to be by him laid before the Justices acting for such County at their next General or Quarter Sessions, or before the Justices of such Borough, and to the Visitors of the Asylum for the County in which such Parish or Union shall be situate, and to the Commissioners in Lunacy, according to the Form in Schedule (F), to this Act annexed:

“And the said List shall state whether any such Lunatic is or is not, in the opinion of such Medical Officer, fit to be at large, and is properly taken care of:

“And such List of such Lunatics shall be prepared and signed by the Medical Officer required to make the same.

“Provided, nevertheless, That after an Asylum shall be established for any County or Borough under the Provisions of this Act, no Pauper, who shall have lately become lunatic (whether such Pauper shall or shall not have been previously confined in an Asylum,) shall be received, lodged, or detained in any House or Place, other than a County or Borough Lunatic Asylum, or a Public Hospital, or a House duly licensed for the Reception of Pauper Lunatics, for a longer period than shall be requisite for obtaining an Order for the Removal of such Lunatic to such Asylum:

“And if any Medical Officer shall return any such Pauper in any such List as fit to be at large, or shall knowingly sign any such List, untruly setting forth any of the Particulars required by this Act, he shall, for every such Offence, forfeit any sum not less than Ten, and not exceeding Fifty Pounds.”

I am, &c.,

W. G. LUMLEY, Assistant Secretary.

To the Medical Officer.

LONDON:

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AN

OFFICIAL  CIRCULAR

OF PUBLIC DOCUMENTS AND INFORMATION:

DIRECTED BY THE POOR LAW COMMISSIONERS TO BE PRINTED, CHIEFLY FOR THE USE OF THE MEMBERS AND PERMANENT OFFICERS OF BOARDS OF GUARDIANS, UNDER THE POOR LAW AMENDMENT ACT.

No. 53.

CIRCULAR ISSUED NOVEMBER 10, 1845.

Poor Law Commission Office,  
Somerset House, Nov. 10, 1845.

THE Poor Law Commissioners directed that the following documents and Minutes of Correspondence, be printed and circulated for the information of Guardians and Officers of the several Unions, viz.

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(Signed) By Order of the Board,  
EDWIN CHADWICK, Secretary.

I. POTATOE CROPS IN AMERICA—

AFFECTED BY DISEASE.

In one of the “Executive Documents,” (Document No. 177,) issued by the American Congress in 1844, is found a report on the State of the Potatoe Crops, in the United States, in the preceding year. By this report, it appears that the potatoes, in several of the states, were affected by a disease similar to that which has attacked this important vegetable in this country.

“In Otsego and Schoharie counties,” the report states, “the potatoes are said to have been subject to a dry-rot, attacking some in the hill and some

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in the heap, and fatal to the whole, wherever it made its appearance, causing them to rot and to emit a very offensive stench. Those who undertook to feed them out after the rot commenced, found the injury to the cattle greater than the loss of the vegetables. Although the crop was originally good as usual, there will be a great scarcity of the article. In the eastern section of the state they were, also, much lighter than usual, and somewhat diseased, and rotted after being secured, owing to the unfavourable weather for gathering the crop. The estimate of the deficiency, in some counties, is even as high as fifty per cent., while in others it is about twelve to fifteen per cent. They have black spots, and rot in the hill and on the way to market.

“One who is esteemed high authority on this subject, speaking of the crop, says, that ‘through nearly the entire extent of the state, (and it is said, also, in portions of Connecticut, New Jersey, and Pennsylvania,) it is rendered almost valueless by a disease new to farmers here, which, in most cases, attacked the potatoes before they were dug. Many crops were worthless when dug from the ground; and almost all crops began to decay immediately after drying, and rapidly decayed till they were an extremely offensive putrid mass. The diseased potatoes are said to be poisonous, and to have caused the death of hogs fed upon them. In this section of the state, the disease is not as universal as it is represented to be in other places. I have heard of no injurious effects from feeding them; my hogs have eaten them freely, uncooked, down to the present time, (December, 1843,) without injury.’ Another person, also, who enjoyed great advantages for ascertaining the condition of the crops, remarks, that ‘potatoes suffered greatly from the dry weather of June and

July, and the early crop was a very light one, though good in quality. The latter ones seem to have been injured by the long-protracted rains of August and through the fall, and did not sufficiently ripen, but proved green and watery; and hence, in my opinion, the fatal disease among them. The early snows prevented their being properly gathered in the northern and western parts of the state, and there has been a great loss in consequence. The potatoe crop of New Jersey, likewise, as has been mentioned, suffered from the same cause; they were 'of a very inferior quality,' the deficiency is estimated to 'have been twenty per cent.' By some it is thought that the crop is even 'one-third less than an average one.'

"Pennsylvania in 1842, stood next to New York, in the quantity of potatoes raised; and the crop there was a good one; but the past year there has been a very great falling-off, and the crop is at least thirty per cent. less than that of 1842. The particular accounts correspond well to the general estimate. In no case have we heard of an increased crop, but the language, as applied to different sections, is—'nearly fifty per cent. less, owing to a rot which seized them before the time for taking them out of the ground;' 'fifty per cent. less, owing to a rot produced by a long drought, followed by heavy rains;' 'seventy-five per cent. less; they rotted in the ground when ripe, from a week's excessive heat, day and night, while the ground was constantly wet, from which fermentation ensued, except only in dry soils;' 'an average crop, but a total loss, owing to rot, supposed to be caused by the excessive amount of rain and the extreme hot weather in August; the potatoes rotted in the ground to a great extent, the residue rotted after being gathered.' Another says, 'forty per cent. less, and the quality very inferior—spoiling.' Another, 'thirty-three per cent. less, occasioned by dry weather.' Another still: 'twenty-five per cent. less,' and assigns a similar cause for the deficiency. The disease mentioned above, seems also to have equally injured the crop in Delaware, as according to the information obtained, although there might be in some sections, perhaps, 'a fair average,' and even 'a large one,' yet, when they came to be gathered, they were not more than 'one-half or three-quarters of a crop,' as they 'rotted in the ground,' and so offensive, after being gathered, that it became necessary to remove them from the cellars. \* \* \* \*

"It is said that, in the vicinity of Philadelphia,

'where farmers have planted from one or two to ten or fifteen acres, they have lost them almost bodily,' and, in some instances, '1500 or 1200 bushels have decayed after they were dug.' In an agricultural journal of high standing, it is affirmed that the potatoes which are brought from the eastward are occasionally so heated in the vessel, as to become unfit for planting.' As an instance of this, 'some very fine mercer potatoes were obtained on board a vessel from Maine. They were planted, but about one-fourth of them only ever vegetated. Johnston, in his lectures on agricultural chemistry, remarks, in reference to this subject: 'The seeds of all cultivated plants are known at times to fail, and the necessity of an occasional change of seed is recognised in almost every district.' He mentions, that in the Lowlands of Scotland, 'potatoes brought from the Highlands are generally preferred for seed;' and that 'on the banks of the Tyne, Scottish potatoes bring a higher price for seed than those of native growth.' He adds, that 'this superior quality is supposed by some to arise from the less perfect ripening of the upland potatoes;' and alludes, in conformity with this view, to the extensive failures which have taken place during the summer of 1843, and which 'have been ascribed to the unusual degree of ripeness attained by the potatoes during the warm dry autumn of the past year.' 'This,' he says, 'may in part, be a true explanation of the fact, if, as is said, the ripest potatoes always contain the largest proportion of starch; since some very interesting observations of Mr. Shrrat, of Paisley, would seem to indicate that 'whatever increases the per centage of starch, increases also the risk of failure in potatoes that are to be used for seed.'

"Mr. Shrrat gives it as his conclusion, that 'if farmers were careful in raising their own seed-potatoes from land that has lain long in a state of rest, or, where that cannot be had, by bringing new soil to the surface by trenching as much as is necessary,—or by the use of the sub-soil plough, failures of the potatoe crop, from the seed not being good, would become much less frequent.' Professor Johnston, however, doubts 'whether the relative proportions of starch are to be considered as the cause of the relative values of different samples of seed potatoes.' He speaks of the value of saline matter, and says that it is 'beautifully illustrated by the observations of Mr. Fleming, that potatoes dressed with sulphate and nitrate of soda in 1841, and used for seed in 1842, presented a remarkable contrast to the same

variety of potatoe planted alongside of them, but which had not been so dressed in the previous season. These last came away weak, and of a yellowish colour, and, under the same treatment in every respect, did not produce so good a crop by fifteen colls (three tons and three-quarters) an acre.'

"The disease with which, as has been mentioned above, the potatoe crop has been attacked has excited more than usual attention. The cause is generally attributed to the peculiarity of the weather. In one agricultural paper, we find the disease ascribed to a 'premature ripening,' which caused the first set of tubers to sprout for the second crop. In another, it is mentioned thus: 'The cause of the disease, or sudden decay, has not as yet been satisfactorily accounted for. It has generally been attributed to their not ripening perfectly, and having been harvested prematurely. Our opinion, however, is, that it was caused by the superabundant moisture of the soil, in which they were allowed to remain too long. In support of this view, we would observe that, in one of our fields, which is low and of a retentive soil, we were compelled to leave a part of it ten or twelve days after the first part were harvested, before we could finish; and many of those last dug were affected, and soon rotted after exposure to the air. The tops of our potatoes, in one field, which were planted early, withered and dried long before we supposed the roots had ripened. They were dug early, and immediately stored in the cellar, with very little exposure to the sun; and no trace of disease, as yet, (December,) has been discovered; while others, in the same neighbourhood, under the same circumstances, but left until a later period before they were dug, have nearly all been destroyed. It does not appear to be confined to any variety; but the pink-eyes and the mercers have suffered most. In some cases, where the diseased potatoes have been fed to hogs and cattle, death ensued.'

"In another agricultural paper, we find the opinion expressed that the potatoe crop is almost a total failure; and the doubt is stated, if, in the general average of the entire country, the crop will turn out from one-fourth to one-fifth the usual product of former years. The editor says, 'we have heard of several, which, on being dug, did not yield one-fifth the quantity which the ground appropriated to their growth should have produced.' He further remarks, 'of the cause there is no diversity of opinion. All refer to the decay of the roots to the frequent heavy rains;

and we apprehend that of the propriety of this reference, there can be no doubt as, from the superabundant supply of water thus afforded to the vines, the tubers were prematurely forced in ripeness; and the same cause, existing under a greatly reduced temperature of the earth, proceeding from its supersaturated condition, and the atmospheric heat arising from the obscuration of the sun, on reaching the point of ripeness, instead of commencing a *second growth*, (as would have been the case, had there been sufficient sunshine and heat to bring out germination,) the tubers commenced the process of decomposition weeks before the regular time of harvesting them; and, in many instances, were found to be so many masses of rottenness when they were attempted to be dug, throwing out such an intolerable stench, that, in several cases, we have heard, the hands had to desist from digging them. Had these potatoes been dug just at the point of time at which they were ripe, there can be no question that they could have been saved from rotting.' The remedy suggested is later planting than usual; for the late-planted potatoes are said to have fared much better than the early planted. Another writer says, 'It is a fact not generally known, that the cause of the failure of the potatoe crop last summer was not caused by an excess of rainy weather, so much as the manner of ploughing the ground to receive slips. Farmers who ploughed their fields deep, and those particularly who used the subsoil plough, had a full average crop, and were more than compensated by thus deepening and pulverising the substratum; on the contrary, when the reverse was the case, two-thirds of the potatoes were found to be rotten, which was caused by water having no vent settling around them. The subsoil plough obviates this difficulty, and also, in event of a drought, allows the moisture to ascend, by which the plants are nourished, and an abundant crop realised.' An eminent agriculturalist also gives it as his opinion that the disease 'is a fungus belonging to the vegetable growth, as rust and smut in wheat and corn, and mould and mildew.' He recommends that 'all diseased potatoes be carefully taken out, and thrown away; and that, finally, pulverised lime, either slaked or unslaked, be sprinkled among the healthy potatoes, just enough to whiten their surfaces lightly.' No experiments to this effect, of course, have yet been tried.

"Another, also of high authority on agricultural subjects, writes: 'Potatoes on old ploughed highlands and alluvial grounds are liable to rust:

in 1843 rust was more common and prevalent than usual. High pasture lands, without manure, yield the best potatoes; these do not fail to work well. Potatoes struck with rust before they are ripe, are invariably watery and unpalatable. This was the case with four-fifths of the potatoes at the lower end of the state. On high grounds, broken from the sod, the potatoes are always good. I this year raised 1000 bushels nearly on five acres of alluvial sward land, where they were not injured by rust, and produced 200 bushels to the acre. These were planted in the sward, on a direct line, between every third furrow. The manure was all spread upon the sward, which was cut and turned over to the depth of from eight to ten inches; the manure was all out of sight. The roots of the potatoes derived all their necessary aid from the manure, the whole strength of which, for future crops, was retained in the ground. The potatoe vines continued green until fully ripe. Will some curious observer describe the disease of rust, and prescribe the best remedy? Four acres of the above were stirred with the subsoil plough, eight inches below the turning over of the surface plough, making sixteen inches in depth.

"A gentleman, to whom we are indebted for much valuable information, mentions that he heard, two or three years ago, from one of the foreign ministers in this country, that a similar disease had attacked the potatoes in his country, but, as yet, we have been unable to find any notice of the same in any European publication. We find the following description of the appearance and progress of the disease in an agricultural journal: 'The pink-eyes are almost universally affected. The disease first manifests itself by a black spot on the surface of the potatoe, which rapidly spreads, till the whole root becomes soft and worthless. Many farmers have lost their entire crops; the disease, in many cases, destroying the roots while in the ground; and in others, the potatoes, after having been carefully stowed away in the cellar, apparently free from disease, and sound, in a few weeks were thrown away, utterly lost.'

"Again, another person says: 'The potatoes, when dug, appeared to look as fine as usual; but when put in heaps in the field, and covered as usual, they become a rotten mass. In a dry cellar they hold their usual appearance tolerably well, except somewhat darkened, and a little shrivelled; but on breaking them open, it was found that their surface, about a quarter of an

inch in thickness, was of a dark brown, and some of them entirely through were of the same colour.' On feeding his hogs with them, he soon found that 'they began to cough, pant, and appear as if worried in a hot day; in about a week after they were taken, they refused to eat; and finally, after a few days, died—no doubt from their having been fed on these diseased potatoes.'

"Another gentleman, in writing on the same subject, says: 'This disease has spread through the whole of this crop with an amazing rapidity, from one potatoe to another, until the whole are more or less affected. I have frequently seen a small, dark, mortified kind of a spot, the size of a finger-nail, on the potatoe, whence issued bubbles of matter; soon the potatoe would be entirely soft, filled with yellowish matter, slimy, and somewhat resembling the rot of an egg. The touch of other potatoes would spread the disease through the whole of them.'

"Frozen potatoes are usually supposed to be unfit for use; but if they have not been permitted to thaw, and if they are at once, while frozen, thrown into a kettle of boiling water, the frost being in them, they are said to be equally as palatable and nutritious as those which have not been frozen.

"The following table, showing the analysis of different sorts of potatoes, is quoted from Accum (a bushel of potatoes weighs about sixty-four pounds.)

SORT.	Fibrine.	Starch.	Vegetable Albumen.	Gum.	Acids & Salts.	Water.	By whom Analysed.
Red Potatoes ..	7.0	15.0	1.4	1.1	5.1	75.0	Einhoff
Red Potatoes germinated ....	6.8	15.2	1.3	3.7		73.0	Ditto
Potatoe Sprouts	2.8	0.4	0.4	3.3		93.0	Ditto
Kidney Potatoes	8.8	9.1	0.8			81.3	Ditto
Large red Potatoes .....	6.0	12.9	0.7			78.0	Ditto
Sweet Potatoes..	8.2	15.1	0.8			74.3	Ditto
Potatoe of Peru	5.2	15.0	1.9	1.9		76.0	Lamped
Potatoe of England .....	6.8	12.9	1.1	1.7		77.5	Ditto
Onion Potatoe..	8.4	18.7	0.9	1.7		70.3	Ditto
Voigtland.....	7.1	15.4	1.2	2.0		74.3	Ditto
Cultivated in the environs of Paris .....	6.79	13.3	0.92	3.3	1.4	73.12	Henry

"It is well known that there is a difference in the parts of the potatoe, as used for seed. An

experiment on this point, is mentioned in some of the agricultural journals, in which the seed potatoes were cut in four equal parts, and the butt end, seed end, and two centre pieces, were separately planted. The result was, from the butt end were raised forty pounds, from the seed end sixty-two pounds, and from the centre pieces together one hundred and sixty pounds—showing the superiority of the centre pieces by fifty-eight pounds in the quantity planted; probably owing to the greater nutriment afforded. Whole potatoes are better than the eyes only for seed.

"The following experiment for raising potatoes in the winter, without great care or cost, in the open air, is mentioned in the Berlin Polytechnic Archives as having been tried with success at Frankfort-on-the-Maine.

"On the 26th of July, and 1st of August of the former year, two fields were planted with potatoes from three-fourths to one foot deep, and one and a half to two feet from each other; which, after they were hoed and hilled, blossomed in the end of October. When the cold weather began, the stalk was cut off half a foot above the earth, and then it was placed in one place, with leaves and manure, and covered in another with some straw; and, lastly, some earth was thrown over it. In both places the potatoes were gathered on the 10th of March; they had a perfectly fine appearance, and were of good taste."

2. POTATOE CROP IN ENGLAND.—EXTRACTION OF FARINA FROM DISEASED POTATOES.—DIRECTIONS ISSUED BY THE HADLEIGH FARMERS' CLUB.\*

Oct. 10, 1845.

1. Thoroughly wash the potatoes. It is unnecessary to peel them, unless a very superior article is required.

2. Rasp them to a fine pulp with a common bread grater; such as may be procured for 5½d., or may be made by punching a piece of tin with a nail. The more finely the pulp has been rasped, the more flour will be obtained.

3. Place some of the pulp (say about a quarter of a pailful at a time) into a pail. Fill the pail with water and stir up the whole well, in order to work the flour out of the pulp. The water will soon become thick from the quantity of flour it will hold in suspension.

4. Pour the contents of the pail (before it

\* See, however, the report of the 29th Oct., at page 169.

has had time to settle) upon a horse-hair or other sieve placed over a large tub. The water will readily pass through the sieve with most of the flour in suspension, whilst the pulp remains behind, and may be emptied from the sieve into another pail, to undergo a second or a third washing, after all the pulp has been similarly treated. This plan is better than putting the pulp first on the sieve and then pouring water upon it. As some small portion of the pulp often finds its way through the sieve, it may be removed at once by allowing the water to fall upon a loose coarse cloth stretched over the tub; but in this case the water must be continually stirred whilst it is filtering through the cloth, otherwise the flour is apt to clot and fill up the passages.

5. The flour will rapidly subside in the tub, and in less than ten minutes there will be a compact layer formed at the bottom. But as the finest particles remain suspended in the water much longer than the rest during this first part of the process, it is advisable to let the whole stand for three or four hours, when the water may be poured off.

6. The flour thus procured should be washed at least once or twice more, by filling the tub with fresh water, stirring it up well, and then allowing it to settle again, which it will now do very rapidly; and as soon as the water above is clear, it may be poured off.

7. The flour, on being removed from the tub, may be spread out in thin layers to dry, upon cloths, which may be changed and dried before the fire once or twice a-day. But the flour itself must not be exposed to any great heat, and even the temperature of boiling water will change it, whilst it is wet, into a mass of dough. As the process of drying is tedious, and this method of spreading out the flour troublesome, it will generally be advisable to adopt a method which has been found to be perfectly efficacious, and which gives very little trouble or inconvenience. The flour may be collected from the tub into bags of linen or calico, and these hung up in a warm or airy situation. The water then drains from the flour, which gradually dries without injury. The bags may be taken down in two or three days, and pressed and shaken, in order to break the lumps into which the flour may have collected, and then hung up again. Temporary bags may readily be made out of table-cloths, sheets, or pillow-cases.

8. When the flour is thoroughly dry, it may



be kept in a dry place for any number of years fit for use, in bags, jars, or casks.

Upon the whole, it will be found that this method is more to be recommended than the plan of not passing the water through a sieve; but where no great nicety is required, or no sieve at hand, the pulp may be thrown into a large tub filled with water, and the whole stirred up and allowed to settle. In two or three minutes most of the pulp will have fallen to the bottom, whilst the heavier flour—from its being composed of so much finer particles—is still held in suspension in the water. By degrees, however, the flour, owing to its greater specific gravity, finds its way past the pulp, and at length settles below it. The water and pulp may then be poured off together, and the flour will be found in a compact mass at the bottom of the tub. These effects are readily to be seen, and may be better appreciated by a little experiment in which glass tumblers may be substituted for pail and tub. If the potatoe flour be mixed with wheat flour in any proportion, it will make wholesome bread: but as it is not so well calculated for making bread as for some other purposes, it is advisable not to add more than from a sixth to a third of the flour of the potatoes in this mixture. It serves better for puddings, &c. Its best use as food, is under the forms to which arrow-root may be applied; and it is well understood that a very high percentage of what is sold in the shops under the name of arrow-root, is nothing more than this very flour of potatoes. It is also passed off in London under about a dozen different names, as an important and nutritious article of diet.

To prepare a cup as arrow-root, take about a tablespoonful of the flour, add a little cold water to it, and stir it up to the consistency of cream. Now pour on it water absolutely boiling, (for if cooler it will not answer,) and keep stirring it till the cup is nearly full, when it will suddenly pass to a transparent paste-like jelly. This jelly is nearly tasteless, but may be rendered very palatable in several ways. By adding salt and a very little piece of butter, it proves to be a grateful dish to the poor. With sugar and nutmeg, it is extremely pleasant to most palates, and more especially so if a little white wine is added to it. Some children of the labourers prefer it with salt and butter to having it prepared with sugar and nutmeg; also with sugar and milk it seems to be highly approved by them. A good basonful of this jelly may be prepared in less than ten

minutes from a single raw potatoe. It takes not two minutes to wash and grate it; not a minute to stir the pulp in water and pass it over the sieve. If the strained water be then left to stand for six or seven minutes in a bason and then poured out again, a firm layer of the flour will already have settled at the bottom, and if this be stirred up whilst boiling water is poured upon it, the bason is presently filled with a mass of most excellent jelly. It would be better to re-wash the flour and allow it to settle again, as it has not been thoroughly cleaned of the crude juice of the potatoe, which might sometimes impart a flavour to the jelly; but if the experiment be tried in the way suggested, it proves very attractive and inviting to further inquiry, with persons who might not otherwise feel disposed to attend to the process.

Among several facts which have been named in favour of the process recommended for extracting and saving the wholesome flour contained in bad potatoes, the following may be selected.

Mr. J. Rand, the vice-president of the club, has employed women to grate about thirty sacks of bad potatoes, (grown on his own farm,) at a cost of two shillings the sack. He has ascertained that from one sack he obtained seventeen pounds of flour.

Mr. A. Smith, clerk of Layham, has extracted thirty pounds of flour from about five bushels of bad potatoes, part of the produce of his allotment, and has refused sixpence the pound, which was offered him for his sample.

Mr. W. Baker, carpenter at Hitcham, has long been in the habit of procuring arrow-root from the shops at one shilling and four-pence per pound for an invalid wife, who uses a good deal of it; but he now finds that he can prepare for himself, from his bad potatoes, an article equal to what he has been accustomed to buy.

At the Cosford Union House, about forty sacks of potatoes, grown on the premises, proved too bad for use; these are undergoing the process, and a large quantity of the flour has already been procured from them.

Since a bushel of sound potatoes, in the early part of the season, may be made to produce from eleven to twelve pounds of this flour of a most superior quality, quite equal to what is sold very frequently as arrow-root, &c., from one shilling and sixpence to two shillings and sixpence the pound; and since the prime cost of a bushel of potatoes may be estimated, in most seasons (to the growers themselves) at sixpence to a shilling,

it should seem, that whilst the potatoe flour may command a marketable value which would remunerate the labour bestowed in its manufacture, it may often be prepared by the growers themselves, for home use, at a prime cost of a half-penny or penny per pound.

### 3. POTATOE CROP IN IRELAND.—CONVERTING POTATOES INTO FARINA.—LETTER TO THE POOR LAW COMMISSIONERS.

Waterford Poor Law Board Room,  
Oct. 17, 1845.

GENTLEMEN,—I returned here last night, after having travelled through a part of the counties of Tipperary and Limerick; where, from personal observation as well as information, I have ascertained that the apprehensions relating to the prevailing disease in the potatoe are of a very serious character; and it appears to me, that if immediate steps be not taken to avert the consequences of a general decay of the potatoe, it would necessarily follow that serious distress and poverty would be the result. I, from past experience, dread the effects of the disease in the pit, more than, as at present, in the ground. For some years past, I have turned my attention to the very important consideration of securing a portion of our potatoe crop, so as to be available for consumption for any number of years, in the shape of farina, and erected machinery at a neighbouring mill for the purpose, where I was very successful in producing flour or potatoe farina of excellent quality. However, such were the mistaken ideas of some, and the prejudices of others, that I failed in my endeavours to persuade every farmer or cottier to take some ten, twenty, or thirty barrels of their potatoes to be converted into farina. The case is now altered. The time has arrived to awaken *all* to its importance; and with this view, a special meeting of our board will meet on Monday next, to take this matter into its consideration. I therefore most respectfully submit, that it would be advisable that all boards throughout the land, should do the same. It may be useful to be generally known, the mode of converting the potatoe into farina. It is very simple. For example: Take thirty barrels of potatoes; let them be thoroughly washed; they then fall into a hopper, (similar to that used for grinding apples for cider,) the pulp is received into a wire turning cylinder of about ten feet long, sixteen inches diameter, over the length of

which, is a tin pipe perforated with holes, through which flows a constant supply of pure water. By this process, the farina is extracted from the pulp, and passes with the water through a pipe that leads to the vats in another apartment, while the pulp passes to the waste-room. The farina becomes deposited at the bottom of each vat or tub, from which the clear water is drawn off by plug-holes. The farina is then taken by clean spades from the bottom, in the heavy mass, and immediately placed in boxes or (for better dispatch) placed on sheets of calico spread on a kiln to dry. When dry, it is taken to the loft and spread open to the air. It becomes beautifully white and fit for packing in sacks, and will keep for years. Thirty barrels will make one ton of farina; but they must be sound to do so. For consumption, one-third part of oatmeal or wheaten flour should be added, when it will make excellent and substantial *griddle-cake* bread. I have ventured to offer the foregoing observations, believing they may be of some use; and I would strongly recommend generally, as I intend to do, at our next meeting, that all persons of influence throughout the country should, without loss of time, secure the small mills of the country, with the view of carrying out this object at the least possible expense to the poor.

I have, &c.,

SIMON NEWPORT, Poor Law Guardian.  
To the Poor Law Commissioners, Dublin.

REPORTS OF THE COMMISSIONERS APPOINTED BY HER MAJESTY'S GOVERNMENT TO EXAMINE INTO THE STATE OF THE POTATOE CROP IN IRELAND.

Board Room, Royal Dublin Society,  
24th October, 1845.

MY LORD,

We, the undersigned Commissioners appointed by Her Majesty's Government to report to your Excellency on the state of disease in the potatoe crop, and on the means of its prevention, have the honour to inform your Excellency that we are pursuing our inquiries with unremitting attention.

We are fully sensible of the important and difficult nature of the inquiry, and therefore are unwilling to offer, at the present moment, any final recommendations, as we are still receiving evidence, and awaiting the results of various experiments now in progress. But at the same

time, we ought to state to your Excellency, that we have reason to hope that the progress of the disease may be retarded by the application of simple means, which we trust may appear worthy of adoption, until we are enabled to offer further recommendations.

In the present communication, we avoid entering into any account of the origin or nature of the disease; but we would particularly direct attention to the ascertained facts, that moisture hastens its progress, and that it is capable of being communicated to healthy potatoes when they are in contact with such as are already tainted. A knowledge of these facts, determined as they have been by experiment, and agreeing with the scientific information obtained as to the causes and nature of the disease, lead us to propose the adoption of the following plan for diminishing the evils arising from the destructive malady:—

In the event of a continuance of dry weather, and in soils tolerably dry, we recommend that the potatoes should be allowed, for the present, to remain in the land; but if wet weather intervene, or if the soil be naturally wet, we consider that they should be removed from the ground without delay.

When the potatoes are dug out of the ground, we are decidedly of opinion that they should not be pitted in the usual way, as the circumstances under which potatoes are placed in ordinary pits, are precisely those which tend to hasten their decay.

We recommend that potatoes when dug should be spread over the field, and not collected into heaps, and if the weather continue dry and free from frost, that they should be allowed to lie upon the field for a period of time not exceeding three days.

The potatoes, after being thus dried and improved in their power of resisting disease by the means proposed, should then be sorted by carefully separating those which show any tendency to decay. Those potatoes which appear to be sound, should then be placed about two inches apart in a layer, and over each layer of potatoes should be placed a layer of turf ashes, or dry turf-mould, or dry sand, or burned clay, to the depth of a few inches. Thus will be formed a bed of potatoes, each potatoe being completely separated from the other by a dry absorptive material; upon this bed, another layer of potatoes should be spread in like manner, and be also covered with the dry materials employed; as

many as four layers may thus be placed one above the other, and when the heap is completed, it should be covered with dry clay, straw, heath, or any other material adapted to protect it from rain.

In the event of the weather becoming wet, these recommendations are not applicable. In that case, we would advise the potatoes to be packed in small heaps, with either straw or heath interposed, and well covered; in such a situation they should become as well dried as seems practicable under the circumstances. When out-buildings exist, it would be advisable that this mode of temporary packing should be carried on in those places. If there be no out-houses, the heaps may be left in the open field. We, however, particularly recommend that potatoes should not be removed into inhabited rooms.

With regard to the treatment of potatoes already attacked with the disease, we have to state that in this early stage of our investigation, we do not feel justified in proposing to your Excellency any mode of positive treatment,—this subject we reserve for a future report; but we may remark that exposure to light and dryness, in all cases retards the progress of alterations, such as the disease in question, and we therefore suggest that all such potatoes should, as far as possible, be so treated.

We do not mean to represent that these recommendations, if carried into effect, will prevent the occurrence of disease in potatoes; but we feel assured that the decay will extend less extensively under these circumstances, than if the potatoes when taken from the ground, be at once pitted in the usual manner. Neither do we offer these suggestions to your Excellency as a final means of securing the crop, but merely as a method of retarding the progress of an enemy whose history and habits are as yet but imperfectly known, whilst we endeavour to ascertain the means of more completely counteracting its injurious effects, if any such can be discovered.

All which we submit to your Excellency's consideration, and remain,

Your Excellency's obedient and faithful servants,  
ROBERT KANE,  
JOHN LINDLEY,  
LYON PLAYFAIR.

To His Excellency Baron Heytesbury,  
Lord Lieutenant of Ireland,  
&c. &c. &c.

*Board Room, Royal Dublin Society,*

*29th October, 1845.*

MY LORD—Having submitted to your Excellency, in a former report, some preliminary instructions intended to prevent improper treatment of the potatoe crop still remaining unaffected, we now have the honour to lay before your Excellency our views regarding some processes of treatment for the potatoe, which appear to us to be of practical value and importance.

We are deeply sensible of the incompleteness of form which this mode of presenting our results to your Excellency, necessarily assumes; but the exigencies of the case are such, that we consider it our highest duty to bring at once under the notice of Her Majesty's Government such principles or modes of practice as, upon due consideration, we feel ourselves authorised to recommend.

We have been engaged in the investigation of various plans for preserving diseased potatoes, as proposed by other persons, or suggested by ourselves, and we have been collecting precise information as to the experience of others in their endeavours to arrest the progress of the disease. From all the results that we have obtained, we feel justified in submitting to your Excellency the following observations:—

Plans of treatment have been proposed by persons possessing more or less of chemical knowledge, in which, by some, acids are to be employed; in others, alkaline liquors; and in a third class, gases such as chlorine. These processes we dismiss from further consideration, as, even did they, in the laboratory, answer the intended purpose, they are totally inapplicable to the circumstances of the produce of an entire country, and to a population such as that for whose welfare your Excellency is so deeply anxious. Other methods, apparently more practical, consist in the treatment of the potatoes with chloride of lime (bleaching powder) and salt, either separate or in mixture. The result of our own experiments, and the evidence we have received concerning trials made by persons in whom we have full confidence, authorise us at once to recommend the rejection of those materials. We have found the decomposition of the potatoe to be decidedly accelerated by their application. With respect to lime, the results of our own experiments are not yet decisive; nor is the experience of others as yet

satisfactory. We therefore reserve this point for further consideration.

Whilst the disease is not yet very far advanced in the potatoe, it is certain, that after being boiled or steamed, it may be employed as food for immediate use, both for man and other animals, without prejudice to health.

When the disease is more advanced, so as to have invaded a large part of the potatoe, and when the tubers have acquired a disagreeable smell, their influence on the system is more questionable. We have put in operation a series of experiments, in order to determine this point, and will, in due time, report the result to your Excellency. As, however, the potatoe, when once affected, quickly runs into total decomposition if left to itself, it is evident that its consumption merely for the purpose of food cannot be sufficiently rapid; and it therefore becomes necessary to consider to what other uses it may be applied.

The extraction of starch from potatoes, and its use as food, having strongly attracted public attention, and conflicting, and, in many cases, inaccurate opinions having been entertained on this subject, we consider it of paramount importance at once to direct your Excellency's attention to the actual state of knowledge regarding this material. It is recognised that the potatoe, in relation either to its weight or bulk, is one of the most inferior articles of food. In its ordinary state of sound constitution, every hundred pounds by weight of potatoes contain, on an average, seventy-four pounds of water; of skin and fibrous matter, eight pounds; and of starch, sixteen pounds; whilst of gluten, the most nutritious of vegetable matters, and which predominates in corn, there is not more than two pounds in the above quantity. It is quite certain that starch, or materials corresponding to it, exist to a certain amount in every variety of useful food; but it is equally certain that in food starch is not the material which serves for the support of the animal frame; and an animal fed merely on starch dies of starvation nearly, if not quite, as soon, as if totally deprived of food. Hence, starch extracted from the potatoe cannot be viewed as a substitute for the potatoe itself; and we consider it of great importance that whilst the attention of the people is directed to the real value of starch and the uses to which it may be advantageously applied, they should not be allowed to rest their hopes of nourishment during the succeeding season upon any store of it alone.

With this preliminary caution, we have to state to your Excellency that probably the best use to which diseased potatoes may be applied, is the extraction of starch. In a commercial point of view, the starch represents a considerable proportion of the value of the potatoe, although it is not present in as large a quantity in the unsound tubers, as in those which are free from disease. The extraction is simple, and consists in processes which we need not here describe, as they are given in the current publications of the day, and indeed are already practised in most parts of the country.

Your Excellency is aware that we are directing our attention to the manner in which starch can be advantageously employed. It can be worked off, and with utility, as food, when mixed with proportions of oatmeal, bean-meal, or peas-meal; and such intermixture forms an excellent and economical article of food. It is also to be remarked, that the pulp remaining after the extraction of the starch from the diseased potatoes, contains a considerable quantity of nutritive material; and as the decomposing substance is, to a very great extent, washed out during the preparation, the pulp may, when dried, be applied with confidence to the nourishment of animals. Further, if the dried starch, extracted from the potatoe, be mixed up with the dry residual pulp, a material will be produced really representing the potatoe, equivalent to it as food, and, if kept dry, capable of being preserved for a considerable length of time: it, of course, must be prepared for use by cooking or baking in the ordinary way.

The manufacture of the pulp and starch, on an extensive scale, in accordance with these suggestions, we venture to consider worthy of your Excellency's attention. It is an operation not suited to the circumstances of isolated cotters, and just now might not be a proper object for mere commercial speculation. But arrangements might possibly be made for carrying out this recommendation, through the agency of the poor law unions, and other government establishments, in which mechanical power and intelligent superintendence could be speedily and economically applied. We feel, however, that even these facilities for the conversion of the tubers may not be sufficient to keep pace with the progressive injury which, it is to be feared, the potatoe crop is sustaining. We, therefore, recommend a mode by which we believe the process of decomposition may be retarded. In our preliminary report, we mentioned to your Excellency the important in-

fluence exercised upon the disease by moisture and dryness. Our subsequent investigations have confirmed this opinion, and we believe where means exist for a more complete drying of the tubers, such a method will prove the most efficacious plan for preserving the potatoe from further decay. This more perfect drying cannot, however, be effected in this climate by mere exposure to air,—it requires artificial heat, applied in some form of kiln; and without entering into mechanical details, we may name some simple contrivances which seem well adapted to the purpose.

The corn kilns extensively distributed through the country may at once be applied to the drying of the potatoes, which will, however, demand a temperature, rendered gradually higher than that required for corn. But as in many cases those kilns are at present fully occupied, we would represent that every lime kiln may be adapted to the purpose, without interfering with its ordinary operations, by erecting over it, at a suitable height above its mouth, a frame-work of hurdles, upon which the potatoes may be spread in a thin layer, fresh potatoes being added as the others become dry and are removed. In localities where the previous means do not exist, or may not be on a sufficiently extensive scale, potatoes might be spread on a frame-work of hurdles, supported on a few props of stone, two or three feet high: one or more turf fires burning slowly under the hurdles, would effect the same object. There need be no fear of the potatoes becoming slightly browned, as they are not injured thereby for future use; and the turf smoke would act favourably on the potatoes rather than otherwise.

In all these modes of drying, the potatoe should be cut into two, or if very large, into three pieces, so as to allow the water to escape.

Potatoes dried in any of the modes above described are certainly capable of being preserved when kept in a dry place, and stored, with the precautions described in our first report, until suitable opportunities arise for using them directly as food, or for converting them into starch or meal, according to the degree in which they were affected by the disease.

It is gratifying to us to find that our own opinion as to the advantages of thoroughly drying the potatoe in the manner we have recommended, and by processes such as those above described, are confirmed by the experience of highly intelligent persons, who have simultaneously directed their attention to the subject.

We shall not hesitate to bring under the notice

of your Excellency, our further conclusions, and,  
We have the honour to be,  
Your Excellency's obedient and faithful servants,

ROBERT KANE,  
JOHN LINDLEY,  
LYON PLAYFAIR.

To His Excellency Baron Heytesbury,  
Lord Lieutenant of Ireland, &c.

Board Room, Royal Dublin Society,  
3rd November, 1845.

MY LORD—We have had the honour to lay before your Excellency, reports on the diseases in the potatoe crop, which have been distributed extensively throughout the country. Representations, however, have been made to us, that the recommendations being in the form of reports, are not likely to be of that use which the more simple form of instructions might enable them to be. We have, therefore, thought it advisable to prepare the accompanying directions, in the hope that the methods recommended may be easily understood and promptly carried into execution.

We shall immediately lay before your Excellency our views upon the course which should be pursued with regard to seed for a future year.

We have the honour to be,  
Your faithful and obedient servants,

ROBERT KANE,  
JOHN LINDLEY,  
LYON PLAYFAIR.

To His Excellency Baron Heytesbury,  
Lord Lieutenant of Ireland, &c.

TO THE FARMERS AND TO THE PEASANTRY OF  
IRELAND.

The dreadful disease that has attacked your potatoes is one, the effects of which you can only stop by strict attention to the advice of those interested in your welfare. Many plans have been proposed, and, after examining them all, we recommend the following as the best.

All competent persons are of opinion, that the first things to bear in mind are the following directions:—

1. Dig your potatoes in dry weather, if you can, and if you cannot, get them dry somehow as fast as you can.

2. Keep them DRY and cool.

3. Keep the bad potatoes separate from the good.

4. Do not pit your potatoes as you have been accustomed to do in former years.

5. Recollect that if they get damp, nothing can make them keep; and do not consider them dry unless the mould which sticks to them is like dust.

6. Do not take them into your houses unless you want them for immediate use.

#### *Digging and Drying.*

As you dig the potatoes, leave them in the sun all day; and, if you can, throw them upon straw, turning them over two or three times. At night you may gather them together and cover them with straw, so as to keep off frost. Next day take off the straw, spread them out, and give them the sun again. Do this for three days running, if the weather permit. If you put straw enough upon them at night they will not suffer.

If the weather be unfavourable, and you have a dry loft, or out-house large enough to hold them, you may spread them thinly on the floor, allowing a free circulation of air so as to dry them there.

They must be got DRY.

#### *Sorting the Potatoes.*

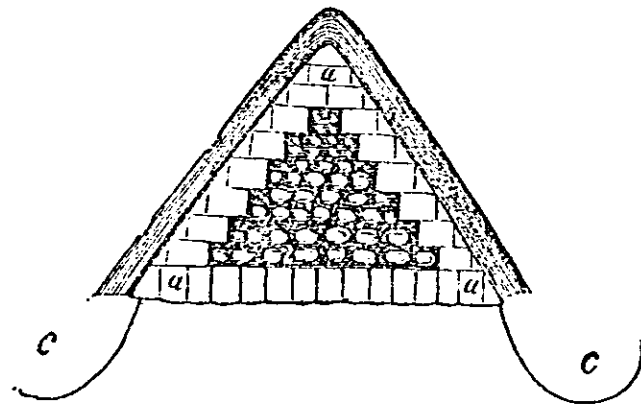
As soon as they are dry, you must sort them. Pick them one by one, and put in one heap the very bad ones, in another, those which are not so bad, and in a third, those that are sound. Treat the bad potatoes as shall afterwards be directed, and store the sound ones according to the directions given in the next paragraph. You will know the very bad potatoes by their unpleasant smell, and the second set by their skin looking brown, or dull, and not bright, as it generally does; a very little practice will teach you how to distinguish them easily from each other.

#### *Storing.*

When the potatoes are quite dry, and well sorted, proceed to store them thus:—Mark out on the ground a space six feet wide, and as long as you please. Dig a shallow trench two feet wide all round, and throw the mould upon the space; then level it, and cover it with a floor of turf-sods, set on their edges. On this sift or spread, very thinly, the dry mixtures, or any of the dry materials described below, and which you may call the *packing stuff*. Also, get some



dry slacked lime, and dust all the potatoes with it as well as you can. Then put one row of turf-sods, laid flat, on the top of the floor, all round the sides, so as to form a broad edge, and within this, spread the dry potatoes, mixed well with the packing stuff, so as not to touch one another. When you have covered the floor in this manner, up to the top of the sods, lay another row of sods all round the first, so that half of each sod may rest on the bed of potatoes, and the other half on the first layer of sods; this will make another edge one sod deep, which must be filled up with dry potatoes and dry packing stuff, as before. Then lay another edge of sods in the same way, fill it again, and so go on till the heap is made. When the building of this pit is finished, it may be covered with sods at the top, and will be ready for thatching. If rightly made, it will look like the roof of a cottage cut into steps, as shown in this sketch,



in which *aa* are sods, and *cc* the ditch all round the heap; potatoes and packing stuff, are the white and black space in the middle.

If you do not understand this, ask your landlord or your clergyman to explain its meaning, and we are sure that they will give you every assistance; also recollect that the recommendation applies only to sound potatoes, after being well dried.

You will lose nothing by applying these materials in storing, for the turf can be burnt as you use up the potatoes; and the mixture of lime with dry sand, dry clay or ashes, which you are afterwards directed to employ, will form a good manure after having saved the potatoes. The only difference is, that you must get what you want now instead of waiting till another time.

After you have completed the heap, thatch it

so as to throw off the waters into the ditch, and keep out the frost.

In districts where there may not be spare turf sufficient to form the pits in the above way, make them as follows:—Mark out the spot, and make the trench as before. Lay on the ground a floor of stones, about as large as apples, and over them as much heath, brushwood, or twigs, as will just cover the stones. On this floor form the heaps of potatoes, and packing stuff, just as described, for the turf-pit. Cover the sides of the potatoes with more of the packing stuff, and thatch in the usual way.

We must again impress upon you that to pit potatoes in your usual way is certain destruction to them.

#### *Packing Stuff.*

This, which is of the greatest consequence, may be prepared in either of the following ways,—some of you may prefer the one, some the other:—

*First way.*—Mix a barrel of freshly burned unslacked lime, with two barrels of sand or earth, as dry as you can possibly get it. The lumps of lime should be broken into pieces as large as marbles, and the mixture should be left twenty-four hours; at the end of that time, turn the heap well over, mixing together the lime and sand (or other dry materials) till no lumps of lime can be found.

*Second way.*—Mix well equal quantities of earth and broken turf, or dry sawdust, put a few sods of lighted turf on the ground, place the mixture on them by degrees till a large heap is made, in a few hours the fire will have spread through the heap, which is then to be covered with earth so as to put out the fire. In fact, this is to be managed just as if you were burning land. This burned mixture forms a very good kind of packing stuff, perhaps as good as the mixture of lime with dry materials.

#### *What to do with bad Potatoes.*

When potatoes are only slightly diseased, that is, when the disease shows itself only under the skin in small dark spots, or at most, spreading into the substance of the potatoe for about a quarter of an inch deep, with a yellow or light brown, or blackish colour, and without any smell, they may be eaten by the family without danger. They should be peeled and the diseased parts pared off before they are boiled; the parts cut off should be kept for making starch. Potatoes thus treated are wholesome

and palatable, but should be used for food as quickly as possible, as it is not quite certain that they will keep long, with the greatest care.

It is a pity to destroy potatoes for starch if they will otherwise keep. Cut out the diseased parts, if it can easily be done, and dust over the cut parts with lime and the potatoe also. Get them dry as soon as you possibly can, and if you have outhouses or sheds, you should keep the potatoes in them also, using the packing materials. In such cases you should allow the air to circulate freely in the sheds, and should frequently examine your potatoes, which should not be laid in layers above two or three feet in height. If you turn them frequently during the first two or three weeks and keep them very dry, in this way they will probably keep. Although sheds or outhouses are to be preferred, if you have them not, and cannot construct them out of cheap materials, you should store the diseased potatoes by themselves just as we have recommended you to store the sound ones.

If, with all your care, the diseased potatoes still get worse, dry them thoroughly in kilns, or on hurdles placed over lime kilns, or on screens or hurdles placed over low turf fires, after having cut the potatoes into two or three slices. It is only very bad potatoes that you should break up into starch.

#### *How to save the value of very bad Potatoes.*

Although nobody knows how to make bad potatoes into good ones, or to prevent many of them from becoming worse, yet it is possible to extract from bad potatoes, or from bad parts of them, a great deal which is good. For this purpose proceed as follows:—Provide yourselves with the following things, a rasp or grater, which may be made of a sheet of tin or even of sheet iron bent round, and punched full of holes, with a nail—a common coarse linen cloth, or hair sieve, hand sieve, or common cloth strainer—and a pail, or tub or two to hold water.

To make the bad potatoes useful, wash them clean, and then rasp them into one of the tubs of water; the finer they are rasped the more food will you procure from them. Having rasped a good many, take the cloth and place it on another tub, then put the pulp on the cloth, and pour water on it, allowing the water to run through. You have now two things to attend to—the pulp and the starch.

First,—Attend to the pulp, squeeze out as

much water as you can from what remains on the cloth. You should wash it, however, till no smell remains. After you have squeezed it pretty dry, complete the drying on a griddle, over a slack fire, and when it is dry put it aside for use.

Next look to the milky water; it will then become clear, and the milkiness, which is starch, will have settled to the bottom. Pour off the water gently till the starch is tolerably well drained; then add more water, stir the whole well up, and let it settle again. As soon as it is again clear, pour off the water, and when you have got rid of as much as you can, put the wet lumps of starch on a shelf or other place to dry. In a few days it will be fit to pack up.

Good wholesome bread may be made by mixing the starch with the dried pulp, peasmeal, beanmeal, oatmeal, or flour. You must bear in mind, that starch is not food by itself.

There will be, of course, a good deal of trouble in doing all that we have recommended, and perhaps you will not succeed very well at first; but we are confident that all true Irishmen will exert themselves, and never let it be said, that in Ireland the inhabitants wanted courage to meet difficulties against which other nations are successfully struggling.

ROBERT KANE,  
JOHN LANDLEY,  
LYON PLAYFAIR.

## II. LUNATIC PAUPERS.

### 1. CONSTRUCTION OF 8 & 9 VIC. c. 100 AND c. 126.

6th October, 1845.

*Clerk of Strand Union*—Stated, that by the 8 and 9 Vict. cap. 100, s. 48, and by another Act of the same Session, cap. 126, it is provided that no pauper shall be received into any house or hospital for lunatics without a certificate signed by a physician, surgeon, or apothecary, not being the medical officer of the Union. But in the latter statute exception is made in cases of lunatics found wandering, or neglected, or cruelly treated by their relatives or friends. No provision, however, appears to be made under either of the statutes in question for the payment of any medical man (not being a Union officer) who may furnish such certificate, or render the service required by the Acts. The magistrates have, of course, no funds at their disposal out of which they can pay any remuneration for such assist-

ance. The guardians would be willing, under the Commissioners' sanction, to pay such remuneration out of the poor-rates; but a difficulty would in that case arise as to the nomination of a gentleman to furnish such certificate, as, if he were to be employed by the guardians, such employment emanating from them might constitute him a medical officer, and thereby disqualify him for the discharge of the particular duty. In the event, however, of these difficulties being removed, the rate of payment per case will have to be decided on; and it seems desirable that the maximum amount to be given in such cases should be fixed by the Commissioners.

*Ans.*—Although no express provision is made in the Act 8 and 9 Vic. c. 126, for the payment of a fee to the medical man called in by the justice to his assistance, under the 48th section, yet it appears to the Commissioners that such medical man is entitled to demand a reasonable remuneration for his services. The Act requires the justice to call in a medical man to his assistance, but it does not require the medical man to render such assistance gratuitously. A difficulty may sometimes arise in settling the amount of the fee. In the absence of any positive enactment on the subject, the Commissioners think that this point must be arranged in each case between the justice and the medical man. With regard to the parties by whom the fee is to be paid, the Commissioners are disposed to consider that it must be paid by the officers acting on behalf of the parish to which the pauper lunatic, in the particular case, is chargeable; that is to say, in respect of any parish in the Strand Union, by the guardians of that union. The Commissioners rest this opinion on the grounds that the expenses of the examination of a pauper lunatic, and of his removal to an asylum, &c. are, as they conceive, chargeable on the parish from which he is receiving relief at the time; and that the fee to the medical man is one of those expenses. The Commissioners direct your attention to the 57th section of the statute, which provides that when any pauper lunatic shall be confined under the provisions of the Act he shall continue chargeable to the parish from which he was sent, until such parish shall, in due course of law, have established that such lunatic is settled in some other parish, or that it cannot be ascertained in what parish such lunatic is settled. In the latter case the lunatic will become chargeable to the county, according to section 59. If he is settled elsewhere, the parish of his settlement may be required to repay to the parish from

which he was sent to the asylum, "all expenses incurred by or on behalf of such parish, in or about the examination of such lunatic, and his conveyance to the asylum," (sect. 62). If he becomes chargeable to the county, the repayment of these expenses may be obtained from the county treasurer, (sect. 63,) and if his settlement is afterwards discovered, the county treasurer may procure the reimbursement of the charge by the parish in which he is settled, (sect. 64.) Although the statute does not expressly authorise the parish from which the lunatic is sent to the asylum to defray the cost of his examination and removal, the power to do so seems to follow from the duty of taking those proceedings; and at all events the provisions above cited, with regard to the repayment of the expenses, clearly imply that the parish from which the pauper is sent, is to be called upon in the first instance to provide for the charge. On the whole, therefore, the Commissioners think that in the cases in question occurring, under the 8th and 9th Vic. c. 126, the medical man is entitled to a fee of reasonable amount, and that such fee must be paid by the parish to which the lunatic is chargeable when taken before the justice, as one of the expenses of his examination. With regard to the 48th section of the 8th and 9th Vic. c. 100, the Commissioners are disposed to consider that it does not raise or affect any question as to the payment of the medical men to whose certificate it refers; inasmuch as it appears to the Commissioners to be merely of a prohibitory or conditional character, and not to authorise of itself the origination of any proceedings. The Commissioners apprehend that all cases of pauper lunatics are to be dealt with under the 48th section of the 8th and 9th Vic. c. 126: although the Commissioners confess that they feel great difficulty in construing the 51st sect. of that statute in connexion with the 48th sect. of the 8th and 9th Vic. c. 100.

## 2. DITTO.

6th October, 1845.

*Medical Officer of Northallerton Union*—Inquired whether it was his duty, under the Act 8 and 9 Vic. c. 126, sect. 55, to visit all the lunatics which actually belong, and are chargeable to the several parishes in his district as medical officer; that is, those who are not in any registered or licensed hospital; and also, whether

he was entitled to any fee for such examination, or travelling expenses in attending to make the same, as he will in some instances have to go out of his district.

*Ans.*—The terms of the section are, "That every pauper lunatic, chargeable to any parish, who shall not be in an asylum, &c., shall be visited once in every three months by the medical officer of the parish or union to which such lunatic shall belong." The Commissioners think it clear that this provision casts upon you, as medical officer, the duty of visiting every pauper lunatic who "belongs" to any parish within your district. It is provided by the Interpretation clause (sect. 84) that the word "lunatic" shall mean every insane person, and every person being an idiot or lunatic, or of unsound mind. The question then arises, what meaning is to be attached to the word "belong," as used in the sentence above cited. The Commissioners have had occasion to communicate on this subject with the Commissioners in Lunacy, who state their views in the following terms: "The Commissioners in Lunacy apprehend that the word 'belong' will be satisfied by holding, for the purpose of that the medical officer of the union within which the pauper resides, and through the relieving officer of which, as the Commissioners assume, the weekly payments are made, is the proper medical officer to visit the pauper." As the duties imposed by the 55th sect. are cast upon you as medical officer by the statute, which makes no provision for any special payment on that account, the Commissioners think that you are not entitled to any separate fee for the performance of this particular service; but as this additional labour was not contemplated when your appointment took place, it may be a matter for consideration by the guardians, whether they will deem it right to recommend any increase in your remuneration.

## 3. DITTO.

Oct. 10th, 1845.

*Clerk of Thetford Union*—Stated, that a pauper residing in the workhouse and unable to be examined out of it, is about to be removed to a Lunatic Asylum under the 48th section of the 8 and 9 Vic. c. 126. The justice will make the order under the proviso, in which no restriction is made as to the surgeon being a medical officer of the union; but by the 48th section of the 8 and

9 Vic. c. 100, no pauper can be received into a "Licensed House or Hospital" without a certificate from a surgeon, not being the medical officer of the union. The interpretation clause of the 8 & 9 Vic. c. 126, declares that "Asylum" shall mean any house, &c. Inquired whether it was necessary to obtain the certificate of a surgeon not being a medical officer of the union.

*Ans.*—If in the case to which you refer, it is intended to send the pauper to the County Asylum, it appears to the Commissioners that the medical certificate required under the proviso to section 48 of 8 and 9 Vic. c. 126, may be signed by a medical officer of the union. In that proviso, there is no restriction excluding the medical officer from certifying; nor is there any such restriction in section 51 of the same statute; and the restriction in section 48 of the 8 and 9 Vic. c. 100, has reference, not to County Asylums but to Registered Hospitals and Licensed Houses exclusively. If, however, there is no county asylum, and the pauper is to be sent to a licensed house or registered hospital, the case would apparently be different, and the Commissioners apprehend that it would be necessary to obtain a certificate from a medical man not a medical officer of the union, in accordance with the provisions of the 48th section of the 8 and 9 Vic. c. 100.

## 4. DITTO.

Oct. 17th, 1845.

*Medical Officer of St. Neots Union*—Inquired in reference to the Act of 8 and 9 Vic. c. 126,—1. Of whom he is to learn the names and residences of the pauper lunatics residing in his district. 2. What is the proper time for making the returns required in section 55 of the Act? 3. Whether the term, "fit to be at large," can be properly applied to any other than harmless idiots? 4. In the case of a pauper becoming insane within the union workhouse, is it sufficient notice, under section 48, to make an entry of insanity in the Form C, or to give notice to the master of the workhouse? 5. Whether he is under section 48, as medical officer of the workhouse, or of a district of the union, prohibited from signing a certificate of the insanity of any pauper, residing either in his own, or in any other district, of the union? 6. Whether, under section 49, he is, although a medical officer, at liberty, if required by a magistrate, to certify the insanity of a wandering lunatic?



*Ans.*—1. The relieving officer, or the guardians, or the overseers will doubtless give you the information as to the pauper lunatics who are residing in your district. 2. No time is specified in the Act for making the return; it must be made within every three months; and, consequently, it would seem most convenient that the return should be made at the end of each three months. 3. The Commissioners are not prepared to give any general instruction as to the meaning of the words "fit to be at large," as it is incumbent upon the medical officer to make a specific report upon each particular case. But they observe, that the Legislature appears to have contemplated that other than *harmless idiots* may be fit to be at large, as the term actually used is *lunatics*, which includes, according to the interpretation clause, *insane persons, and persons of unsound mind*, as well as *idiots*. 4. In regard to the lunatic pauper in the workhouse, it appears that so far as the medical officer is concerned, he must give notice, in writing, under section 48, to the relieving officer of the union, in which the parish to which the pauper is chargeable, is comprised; and this relieving officer must take the requisite proceedings under the statute. It is manifest, therefore, that no entry in the Form C, nor any notice to the master, will be a compliance with this provision. 5. The Commissioners consider that you cannot certify as to the insanity of any lunatic paupers, who are taken before the justices, whether they belong to your own district, or any other district in the union, such paupers not being wandering lunatics. 6. It does not appear that there is any restriction upon your certifying as to the insanity of any wandering lunatic brought before the justices, under the 49th section.

5. DITTO. 8th Sept. 1845.

*Medical Officer of Kingsbridge Union*—Stated, that the recent statute relating to pauper lunatics appears to be at variance with the Commissioners' Circular, dated August 25, 1845. From the Act, he understands that he is, as medical officer, to

report to the relieving officer all persons who are either lunatic, idiotic, or imbecile, whether they be dangerous or not, in order that they may be within three days brought before a magistrate, and be examined by another medical man, not connected with the union, as to their state of mind; thus imposing on him the most disagreeable part of the duty, without providing any emolument.

*Ans.*—The Commissioners, in their letter of the 25th August last, have only sought to put you in possession of one of the clauses of the Act which particularly imposes certain duties upon you. They are aware that there is another clause which requires you to perform another duty, apparently somewhat inconsistent with the one brought under your notice. On a careful consideration of the clauses, it does not appear that they are so inconsistent as to neutralise each other. It is required that the medical officer shall give notice to the overseer of every lunatic person, of whose lunacy he shall have knowledge, so that steps may be taken to procure his removal to an asylum. If the lunatic be so removed, no necessity will exist for the medical officer's visiting; but if, notwithstanding he has given such notice, the lunatic from any cause be not removed, it will be his duty to visit such lunatic, in the manner prescribed in the statute. The Commissioners being aware that there are many pauper lunatics not in any asylum, or licensed house, have deemed it advisable to point out to the medical officers of unions the new duties applicable to them in reference to such lunatics. Upon the provision in the statute, which prohibits the medical officer of the union from giving the requisite certificate of the insanity of the pauper, the Commissioners have only to observe that the Legislature has deemed it right to make this exclusion, and so far as the prohibition extends in the Act, it must be submitted to.

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AN  
OFFICIAL CIRCULAR



OF PUBLIC DOCUMENTS AND INFORMATION:  
DIRECTED BY THE POOR LAW COMMISSIONERS TO BE PRINTED, CHIEFLY FOR THE USE OF THE MEMBERS AND PERMANENT OFFICERS OF BOARDS OF GUARDIANS, UNDER THE POOR LAW AMENDMENT ACT.

No. 54. CIRCULAR ISSUED DECEMBER 1ST, 1845.

THE POOR LAW COMMISSIONERS directed that the following documents be printed and circulated for the information of Guardians and Officers of the several Unions, viz.

I.—POTATOE CROP:  
1.—Reports of the Commissioners appointed by Her Majesty's Government to examine into the state of the Potatoe Crop in Ireland 177  
2.—Circular which accompanied the Official Circular, No. 53 . . . . . 184  
3.—Circular: Modification of Dietaries where Potatoes are prescribed . . . . . 184  
II.—AUDIT DISTRICTS. . . . . 184  
III.—DISORDERLY HOUSES: Prosecution under 25 Geo. 2, c. 36 . . . . . 189  
IV.—LUNATIC PAUPERS: Construction of 8 and 9 Vic. c. 101, s. 27 . . . . . 190  
V.—MEDICAL OFFICER: Conveyance of Medicine to Sick Paupers . . . . . 191  
VI.—POOR LAW UNIONS' GAZETTE. . . . . 191  
VII.—WORKHOUSES:  
1.—General Order prohibiting the employment of Paupers in Workhouses in pounding Bones . . . . . 191  
2.—Circular accompanying the above Order 192  
(Signed) By Order of the Board,  
EDWIN CHADWICK, Secretary.

I.—POTATOE CROP.  
1. REPORTS OF THE COMMISSIONERS APPOINTED BY HER MAJESTY'S GOVERNMENT TO EXAMINE INTO THE STATE OF THE POTATOE CROP IN IRELAND.  
*Board Room, Royal Dublin Society, 7th November, 1845.*  
MY LORD,—Having laid before Your Excellency our views as to the best means of storing  
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the potatoe, and converting to useful purposes such as are too much diseased to offer a probability of being preserved, we now have the honour to bring under your consideration the question of seed for a future year. If, in our former Reports, we have found it difficult to determine what course, under the peculiar circumstances of Ireland, it might be most advisable to pursue, we are still more embarrassed, on the present occasion, in consequence of the conflicting testimony that has been presented to us, and the absence of all decisive evidence as to the cause of the potatoe disease. The want of experience, derived from previous visitations of the same nature, also renders it impossible to affirm in what manner the potatoe may be affected in the course of the next few months.

We have, however, endeavoured to ascertain all that is positively known upon these subjects, by the examination of a great variety of published documents, both foreign and domestic; by personal observation, and by inquiries addressed to persons of practical experience or scientific reputation.

It is a very general opinion, and one entertained by men whose extensive knowledge entitles it to respect, that parasitical fungi, similar in their nature to those which produce mildew and dry-rot, are the real cause of the malady. It is stated that one of these plants belonging to the genus "Botrytis," and similar to that which some years since produced great mischief among the silk-worms of France and Italy, has attacked the potatoe crop. It is described as entering the potatoe plant by the breathing pores of its leaves, and then passing down through the interior of the stem into the tubers, in which its mycelium or spawn fixes itself, traversing the cellular mass,