

When slices of the altered structure were examined through a microscope, many of the cells containing the farina or starch were thickened, enlarged, and emptied apparently of their contents, the appearance differing in many respects from the natural formation of the healthy tuber. Here and there could be seen small transparent globules, some of them apparently becoming more opaque, and a few surrounded with opaque reddish-coloured fibres might be considered to belong to some species of minute fungus, perhaps the torula, a species of which is found in the products of fermented liquors. This disease, whether produced by parasitic fungi or by change of structure induced by atmospheric vicissitudes, rapidly destroys the potato affected with it, rendering it at once innutritious and unwholesome, the farina of the pulp being converted into sugar and the diseased fungoid-looking substance.

Having, as far as opportunity and leisure permitted, attempted to describe the disease, I will now suggest the remedy: chloride of lime or chlorinated lime is a well known disinfecting and anti-purescent agent; it will prevent insects and parasitic fungi attacking seeds and plants: this remedy is a safe one, and free from poisonous effects, not being injurious to vegetable growth when properly diluted and judiciously applied. Therefore to this active agent would I advise all those who wish either to prevent the ravages of the disease, or to check it before thoroughly developed in the plant, to have immediate recourse. The mode of applying it may be as follows—mix 1 oz. of the powder of chloride lime with a gallon of water, and well sprinkle the solution over the rows of the potato crops. I would also recommend the same solution to be sprinkled over the recently dug potatoes, but they must afterwards be dried before laying them up in store. A very small portion of the powdered chloride lime might be mixed with the saup or gravel laid over the floor of the potato bury or cellar.—I beg leave to remain your obedient servant,

THOS. HICKES, M.R.C.S.

Gloucester, Sep. 11, 1845.

P.S.—Since writing the above, I have seen in this day's *Times* a letter from W. Herapath, Esq., the celebrated professor of chemistry at Bristol, whose views in a great measure coincide with mine: he wisely advises the potato crop to be immediately gathered, the diseased tubers grated and prepared by washing in water, and the farina of the pulp or potato starch, which is nearly as nutritious as arrow-root, may then be preserved for future use.

INVESTIGATION OF THE POTATO DISEASE.

We are glad to learn that a special subscription is at present being raised among the agriculturists of Scotland, for the purpose of defraying the expenses of an investigation of the potato disease or murrain, which is at present spreading so alarmingly throughout the three kingdoms. The proposed inquiry is to be chemical, botanical entomological, and practical—the latter embracing inquiries as to the extent, appearance, and general characters of the disease in the different districts—the nature and condition of the soils in which it has appeared, the mode of treating and manuring the crops, &c. It is proposed to entrust the investigation to Sir William Jardine, Bart., of Applegarth, for the entomological branch; Dr. Greville, of Edinburgh for the botanical; and to Professor Johnston, and Mr. Fleming, of Barochan, for the chemical and practical part of the inquiry, with such other assistance as they may think proper to obtain. The sum re-

quired for this investigation is, we understand, five hundred pounds—a sum which, considering the vast importance of the subject, there will, we should hope, be little difficulty in collecting. The results will be published as they are obtained, and in a cheap form, so as to be accessible to all. The Highland Society has also offered a premium for analysis of diseased potatoes, the results to be sent in to them at the close of 1846.—*Edinburgh Witness.*

IRELAND.—GOVERNMENT COMMISSION.—Prof. Lindley and Playfair, together with Professor Kane, of this city, will sit at the board-room of the Dublin Society House, Kildare Street, on Monday next, as a commission from government, to inquire into the extent and nature of the disease, to institute a series of experiments on the subject, and to report to the government.

DISTRESS IN BELGIUM.—BRUSSELS, Oct. 13.—We have had our attention called to a fact much to be regretted, which has occurred several times in that part of Flanders where work is given to the weavers. In consequence of the high price of potatoes, the distress of some of these weavers has become so great that they have sold the materials which were confided to them. If this should continue, the manufacturers will desist giving out work, rather than expose themselves to such risks, and the good will suffer for the bad. The failure of the potato crop is on the point of giving occasion to lawsuits in the district of Brussels, in consequence of disputes between the farmers and the individuals who generally agree with them for the lease of the land prepared for the cultivation of potatoes. It is usual to pay for such land at the rate of one franc per rood, and then those who have taken the land plant it at their own risk. The farmer who thus lets his fields prefers a small rent to the chances of a good or bad crop. In the present state of things most of those who have planted potatoes on the above condition have refused to pay the rent agreed to, and abandon the produce, which in some places is not worth the trouble of gathering. They pretend that it is quite enough that they have lost their time, their seed plants, and their crops, without being obliged to pay the rent; and besides that, it is equitable that the loss should be shared by the contracting parties. It remains to be seen whether the courts of justice will recognise this mode of reasoning. The magistrates of Courtrai have placed a military post at every gate of the town, to hinder the plunderers, who every day rob the fields in the environs, from going out of the town with sacks, rakes, &c., with orders to ascertain the origin of the potatoes, carrots, turnips, &c., which beggars bring into the town. This prudent measure will give confidence to the farmer and inhabitants of the country, which has been much shaken by these audacious robberies and incessant depredations. The Antwerp steamer, from London, brought yesterday 133 sacks of potatoes; and the Monarch, from Hull, 699 sacks.—*Brussels paper.*

From Ireland the letters confirm to the fullest extent the previous statement regarding the potato rot; in many districts which were supposed to have escaped, the disorder is reported to have shown itself; in addition to which, a further cause of uneasiness had arisen, owing to the manner in which the potatoes, apparently sound when dug, had afterwards gone off; this circumstance having given rise to a doubt whether the seemingly healthy portion of the crop would keep through the winter.

A Berlin letter of the 13th instant says:—"By means of a microscope, the cause of the malady prevalent in the potato has been discovered to be insects of an exceedingly small species. They create cavities in the tubercle, and soon produce putrefaction. Lithographic drawings have been made of the diseased parts of the vegetable, and of the insects alluded to, and copies have been sent to the principal agriculturists."

According to Mr. Wakley, all that is requisite to cure the most inveterate stammerer is that he should inhale or draw in his breath strongly before attempting to speak.