

We see by the last mail, that the disease has appeared throughout the British Isles in the new crop of potatoes, so there is no chance of its being only a temporary affair. The hay crop has been so abundant this year that it offers every encouragement to farmers to feed cattle at least to the extent of a full supply for our own markets. Unless a part of the crops are applied to this purpose, the prices in market will be low indeed. If a part of our extra crop of hay, and inferior grain is converted into beef and mutton it may pay the farmer. At all events, it will pay better than selling their raw produce, and incurring the cost of taking to market. The pastures have suffered by the late dry weather, and dairy produce has advanced in price. Butchers' meat has maintained a fair price for the last twelve months. There is something manifestly wrong in our system of husbandry, because the price of meat and dairy produce is much higher in proportion than the food upon which neat cattle and sheep are fed, and this ought not to be so under a well regulated system of farming, particularly when our cattle and sheep have not been diminished by disease. The sooner this disproportion is remedied the better.

The Apple crop is very deficient this year, principally caused by ravages of the caterpillars in spring. There is, however, a large quantity of foreign apples in the market. In conclusion, should the season continue as favorable as it promises to the middle of September there will be ample time to harvest all the crops, as the wheat is generally ready now. The season, on the whole, has been one of the most favorable we have ever seen, and we will now have to look out how we shall be able to dispose of our crops to the most advantage.

Côte St. Paul, August 29, 1846.

HYBRIDIZED WHEAT.

The Hon. R. H. Clive, M. P., laid before the Council a communication with which he had been favoured by Dr. Lindley, in reference to a decisive result obtained by Mr. Maund, of Brooms Grove, Worcestershire (the well-known editor of a periodical work entitled the *Botanic Garden*), by crossing Egyptian corn with an English red wheat, and thus producing a beardless wheat: for "although," as Dr. Lindley observes, "there is not at present any proof of what the *quality* of this cross may be, yet it shows that corn is as open to improvement as any other plant; and that I take to be a highly important fact. All such attempts deserve encouragement; and if the Royal Agricultural Society were to take up this matter in good earnest, and to offer such prizes as will induce intelligent men with the necessary leisure and oppor-

tunity to give it their serious attention, important results might be obtained."

Mr. Clive then introduced Mr. Maund to the President and Council, when that gentleman exhibited the various specimens of wheat connected with his experiments, and detailed the progress of his operations in effecting the cross in question, between different kinds of wheat, for the purpose of producing the artificial fertilization required. Those specimens exhibited the varieties between the Oxford red and the Donna Maria white wheat; as well as those between the Egyptian corn and the Oxford red. In the produce of the latter cross some of the ears had awns, while others were without them. Mr. Maund stated that the new varieties thus obtained in his experiments appeared to possess great luxuriance and promise of fertility. He thought it not unlikely that eventually not only any given external character intermediate between those of the wheats selected for the occasion may be obtained, but that the chemical nature of the grain may be favourably influenced for any given pure pose required.

The President, on the part of the Council, having then expressed to Mr. Maund the thanks which the Council, on the motion of the Duke of Richmond, seconded by Sir Robert Price, had voted to him for his attention in submitting to them his interesting and valuable results, requested that he would prepare for the Journal Committee, in the course of the autumn, a detailed statement of his experiments and their results, including not only a reference to the scientific circumstances of the fact as connected with the laws of vegetable physiology, or the changes produced in the chemical constitution of the plant, but also to the more homely, but not less important result of the practical value of his products as obtained by the miller and the baker.

WATER-ELEVATOR.

Dr. Spurgin, of Guilford-street, Russell-square, presented to the Council a working model of a machine invented for the purpose of raising water out of shallow cavities in land, and applying it in a continuous stream for any required object. Dr. Spurgin, in submitting this invention to the notice of the members, remarks:—"I have long thought it to be very desirable to have a cheap, simple, and efficient machine for raising water *only a few feet*, for the purposes of irrigation: it is to be expected that in those countries where irrigation has been practised from time immemorial, such contrivances would be resorted to as are most suitable; and, accordingly, we find the circular woollen belt among the number. A few weeks back I heard of the plan which the model I have submitted to you is intended to represent, and which is in use in some private gardens at the Cape of Good Hope. I had this model constructed accordingly for the use of the Polytechnic Institution; and, in order to make the plan more generally known, I thought, by submitting it to the inspection of the members of the Royal Agricultural Society, its value for farming and other purpose might be soon ascertained. One of the objections to the revolving belt has been the necessity for its being made to travel around a wheel or cylinder at the bottom as well as at the top; whereas, it is now proved that the lower wheel can be dispensed with altogether. The velocity also requisite to impart sufficient momentum to the water for carrying it over the wheel, and shooting it off from thence into a trough or pipe, is by this plan greatly reduced, whilst the momentum is unnecessary, for the little wheel which rolls and presses upon the ascending side of the belt