FARMING

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Electricity and Farming.

The present has been fitly described as the electric age. In every civilized country we find large numbers of intelligent men devoting their time and money to the development of electricity as a motive power, and to the discovery of new uses for the same. There are many who think that electricity will eventually drive steam power altogether out of use, as, in fact, it has done already to a certain extent.

Up to the present time farmers have not paid much attention to electricity, as it seemed to be something out of their line, and of little use to them. It has generally been regarded more as a foe than anything else, on account of the substitution of electric for horse power in street cars all over this continent abolishing the demand for horses of the street-car stamp, thus reducing the profits formerly derived from horse-breeding, while enthusiastic inventors claim that they will soon drive the horse out of the market altogether, as they promise us electric horseless carriages for private use in a short while.

In spite of all this, however, electricity promises to be of vast usefulness to agriculturists. In the line of harnessing it for work, a Danish farmer has made a successful experiment of its use for threshing. He has hitherto had an old-fashioned threshing-machine drawn by horses. Three pairs of horses have worked the machine with about 800 turns per minute, the horses being changed four times per diem. The power transmitted in this way was, owing to the nature of the machine, irregular, occasioning considerable loss of time to the workmen employed. By the use of an electric motor to propel the threshing-mill, this disadvantage is removed. The power is transmitted evenly, stoppages are avoided, the threshing is more speedily effected, and the machine itself is spared considerable wear and tear. A stationary steam or oil engine drives the dynamo, and the current is conducted through cables of suitable length to any given point in or outside the barn where the threshing takes place. Even where the threshing mill is placed several hundred yards from the working power, two-thirds of the power can be reckoned on as serviceable for the threshing mill. At the farm where the experiment has been tried the force has been generated by a six horse power oil (petroleum) engine, and in order to protect the electro-motor from dust it is enclosed in a wooden frame.

It is not, however, as a motive power alone that electricity promises to assist the agriculturist. French scientists have been at work experimenting with it as to its influence on growing crops. They have succeeded in hastening the germination of peas, beans, and corn by the use of the electric current. Renouncing batteries and powerful engines, which are too expensive and intricate for farmers to use, they have used a new invention called the geomagnetifere, which consists of an ordinary pole 40 to 50 feet high, on top of which is insulated a row of copper spikes to collect electricity from the atmosphere. An insulated wire transmits the fluid to a network of galvanized iron wires buried 4 to 6 feet under the crops to be experimented on. The electricity seems to act as a powerful fertilizer.

It is claimed that an increase of 30 per cent. in yield is obtained by the use of the geomagnetifere, and that grapes grown over the wires contain a higher percentage of sugar and alcohol, while the perfume of the flowers thus treated was stronger. It is also said that a geomagnetifere 60 feet high will fertilize the ground as much as ten times its worth of manure.

It will thus be seen that electricity promises to be a valuable ally of the farmer in his operations. There is no doubt that he has all along been receiving silent assistance from this agency in regard to his crops. Further investigations are sure to establish this. Even if it is considered as a fertilizer only, electricity promises to be a boon to those who have worn-out farms, and who are anxious to bring them into a better condition.