

THE VALUE OF ELECTRICITY.

ELECTRIC PLANT CULTURE.

A GERMAN process, the patent of Mr. Mies, of electric culture for plants and electric impetus to seed germination was the subject of an interesting demonstration at the Royal Botanic Gardens, Regent's Park. So effective was the display of seed germination that it was possible for the audience to discern the essential action in some seed of old wheat after it had been subject to the electrical treatment for only fifteen minutes.

The demonstrator took a handful of old wheat, from which in the ordinary way only 30 per cent. of germination could be expected, and showed some pots of wheat seedlings in which 76 per cent. of germination had been obtained by the Mies treatment. He then placed his handful of seed on some moist earth on a copper-plate, placed some more moist earth over the seed, covered it with a zinc plate, and then passed through the wheat first a current of twenty volts, and afterwards, for a shorter period, an alternating current of 20,000 volts.

A quarter of an hour later the current was switched off and the wheat taken out. It was then seen that the germ in the wheat berry had moved and the epidermi of the berry had cracked owing to the action which had been going on within. It is claimed that by this treatment wheat can be brought to maturity three weeks earlier than under normal conditions, and cotton eight days earlier.

It was explained that it is possible by means of the apparatus to invigorate trees or plants and to pump food into them. The result in the case of a tree which had been electrically treated was seen when two young indiarubber trees, one treated and the other untreated, were tapped by the demonstrator. The former gave a much larger quantity of sap than the latter.

Internal as well as external parasitic attacks, it was claimed, can be combated by the Mies process, and it is believed that it will be possible to kill fungi also by internal treatment.

DR. QUINTON'S THEORY.

AFTER establishing the fact that the first occurrence of animal life was in the sea and not on land, Quinton showed that the primordial oceans contained 8 per cent. of dissolved inorganic matter. That is, the fluid medium in which the earliest organisms lived and moved and had their being, which provided nutriment and environment for them, was of this degree of concentration.