STATE AID FOR AGRICULTURE. 1

M R. T. S. DYMOND, who has charge of the agricultural education in the county of Essex, has published a valuable little pamphlet on the State aid given to agriculture in Denmark and Hungary, two countries with which he is personally familiar. countries can show great gains to the farming industry during the past ten or twenty years, mainly the result of improved education and organisation, but they present an interesting contrast in the way the work has been done. In Denmark the initiative has come from the individual; the State has simply stepped in and assisted whatever institutions for education and research had been started by the people themselves. It is true the Government has founded and liberally endowed the Royal Agricultural and Veterinary College at Copenhagen, and also maintains the higher research stations, but to the cooperative societies and other commercial developments, which have done so much for Danish agriculture, it gives little or no direct help.

In Hungary the conditions are very different; the whole organisation has been created from above; not only has the State founded an extraordinarily complete department for education and research, but it has not hesitated to enter boldly into business and provide financial assistance to the farmers in distressed districts. It develops horse and cattle breeding by the help of great State farms, it has created a flourishing fruit industry, founded credit banks and cooperative societies, and generally adopted the "paternal" standpoint of fostering the farming interests wherever its assistance could be effective. Despite the great success of its efforts, Mr. Dymond considers that there are not wanting signs of State aid having gone too far in Hungary and having become State interference, resulting in a certain measure of discouragement to the

enterprise of individuals. Turning to our own country in the light of these examples, Mr. Dymond would limit the assistance of the State to education and research; the whole genius of the English farmer is opposed to State aid in his business matters. As Mr. Dymond points out, many parts of the country already possess considerable, if but slightly appreciated, facilities for agricultural education; farmers can get their sons educated at very low rates, their manures analysed, their seeds tested, they can obtain expert advice of all kinds as cheaply as in any foreign country. Only if you cross the county boundary none of these good things may be available, and an immense waste is going on through the want of system and the localisation in particular counties of the work that is being done.

Mr. Dymond argues for more central direction, and urges that the Board of Agriculture, which financially assists so much of the work, should assume a certain measure of control and bring the whole country into

Appositely enough, on the heels of Mr. Dymond's pamphlet comes the annual report of the Board of Agriculture on the distribution of grants for education and research in 1902-03. From this we learn that the Board gives substantial financial aid, 800l. a year with an extra 2001. for the maintenance of a farm, to seven colleges of university standing in England and Wales, and also grants smaller sums to eight other schools or colleges, the total expenditure amounting to 8,000l. per annum. This, however, represents only a portion of the whole expenditure on these institutions; so far as can be made out from the report, the

1 "Continental State-aid for Agriculture." By T. S. Dymond. (Chelms-"Annual Report on the Distribution of Grants for Agriculture and Research in the Year 1902-3." (London: The Board of Agriculture and Fisheries, 1903.)

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county councils concerned contributed 29,127l., which does not in all cases include capital expenditure and outlay on the farm. The total expenditure of all the county councils in England and Wales on agricultural education amounted to 87,732l. in 1901-02, and if we consider the distribution of this money, the manner in which comparatively minor matters, like poultry and bee-keeping and manual processes, bulk in the account, a very strong case is made out for more central control, for at present the Board of Agriculture only inspects the expenditure of one-third of the whole sum.

The weak side of the Board's outlay is seen in the "special grants for experiment and research." total allotted is 864l. 6s. 1d.; is this magnificent sum to be taken as an index of the official opinion of the importance of English agriculture or of the value of research? The distribution, too, is curious; 225l. is for repetitions of Dr. Somerville's interesting "manure and mutton" experiment, 84l. 6s. 1d. is for trials of maize growing, 50l. for experiments on wheat; the Somerset County Experimental Farm, with astonishing proviso that care shall be taken to keep records in future, gets 100l., as does the "Aberdeen Agricultural Research Association." Rothamsted, which we were told in the *Times* last year is being starved for want of funds, gets just nothing at all. There seems a want of proportion somewhere.

ROBERT ETHERIDGE, F.R.S.

N the death of Robert Etheridge geological science has lost a distinguished worker who was actively engaged for upwards of fifty years.

Born in Herefordshire on December 3, 1819, he settled in early years in Bristol, and was for some time employed in a business house.

His scientific career commenced in 1850, when he was appointed curator to the Museum of the Philosophical Society in that city. This post he held for seven years, during which period he made himself thoroughly acquainted with the local geology, extending his observations into the region beyond Gloucester and Cheltenham, and becoming an active member of the Cotteswold Naturalists' Field Club. Through the influence of Sir Roderick Murchison (who had in 1834 published an "Outline of the Geology of the Neighbourhood of Cheltenham ") he was in 1857 appointed one of the palæontologists to the Geological Survey, working at first under J. W. Salter, and assisting Huxley at the Royal School of Mines by giving

demonstrations in palæontology.

In 1859 he published his first work, entitled "Geology: its Relation and Bearing upon Mining," being the substance of three lectures which he had

delivered before the Bristol Mining School.

During the earlier portion of his service on the Geological Survey, he was occupied chiefly in arrang-ing and naming the Invertebrata of the Secondary and newer strata, and after Salter had retired the Palæozoic fossils also came directly under his charge. Later on, when Jukes questioned the age and relations of the Devonian formation, Etheridge received instructions to re-investigate its palæontology and stratigraphical divisions, and the results of this arduous and important task were published in 1867 in a memorable paper "On the Physical Structure of West Somerset and North Devon, and on the Palæontological Value of the Devonian Fossils.'

The list of his published papers is not a long one, but he contributed articles on the Rhætic beds of Aust, Westbury-on-Severn, Watchet and Penarth, and on the dolomitic conglomerate of the Bristol area. His work on the Geological Survey was mainly in the lists of fossils which he prepared for numerous memoirs