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Editorial and Publishing Offices:

MACMILLAN & CO., LTD.,

ST. MARTIN'S STREET, LONDON, W.C.2.

Editorial communications should be addressed to the Editor.

Advertisements and business letters to the Publishers.

Telephone Number: GERRARD 8830.
Telegraphic Address: PHUSIS, WESTRAND, LONDON.
NO. 2963, VOL. 118]

Economics of the Coal Industry.

R. FRANK HODGES recently addressed the Royal Society of Arts upon the all-important subject of the economics of the coal industry, and his very thoughtful and well-reasoned address may be unreservedly recommended to all interested in the matter, that is to say, at this moment to every thinking man throughout Great Britain. The authoritative statistics which Mr. Hodges produces show more clearly than words the basal reasons for our difficulties, and most of them are summed up in the following quotation:

"The Ruhr hours are 8 hours for each man, and those of Upper Silesia, in Poland, are $8\frac{1}{2}$ hours for each man. Wages costs in Great Britain are per ton 12s. 3d.; in the Ruhr they are 7s. 1od.; and in Poland 3s. 8d. The wages of all persons employed in British mines are 10s. 5d.; in the Ruhr 7s. $4\frac{1}{2}d$.; in Polish Upper Silesia 3s. 6d. per shift.

The latest figure of output per shift in Great Britain was 18.4 cwts.; in Germany 21 cwts.; in Upper Silesia 22.06 cwts."

Mr. Hodges points out the inevitable result of these figures, namely, that in the coal export trade "Great Britain has lost both relatively and absolutely in the coal business of the world." It is not so many years ago since a general strike in Great Britain would have produced something like a panic, not only in this country but also throughout industrial Europe, which at one time was practically dependent upon Great Britain for its coal supplies. To-day. Europe cares nothing whether the British coal mines are working or idle; nay, more, the rest of the world is quite capable of supplying British needs. Mr. Hodges points out cogently that this unpleasant fact is due to our high prices and low output per man. He does not deal with the contributory cause, namely, that British coal miners have by repeated strikes taught the rest of the world how to do without British coal. It is because of these strikes that other nations have been forced to develop their own coal resources as well as other sources of power, notably water power, which have replaced British coal. A notable example in point is Switzerland, which has developed its hydroelectric powers and electrified its railways, mainly because, as a Swiss engineer put it, they are determined to have a source of power that will not go on strike.

The point cannot be too strongly stressed that a definite proportion of the old-time export coal trade of Britain is gone for ever. The only way to secure some share in what is still left is to bring down British prices of coal production to a competitive basis. Mr. Hodges seems to think that some relief may be obtained by a better use of the coal so as, in his words, to "bind

up production of the raw fuel with the production of electricity and gas and by-products." At best, however, this remedy can only be a palliative; however well the coal is utilised when it is produced, nothing will ever avail to counterbalance the cardinal fact that British coal costs too much to produce. Other nations can use coal as effectively as we can, and if they produce it more cheaply than we do, they will still be ahead of us in world competition. In justice to Mr. Hodges, it must be said that he appears to appreciate this fact, and is clear on the point that the only remedy is lower wages or longer hours of work. He has come to the conclusion that, of the alternatives, "a modification of hours . . . is the least of two evils." His proposed remedy is a 45 or 46 hour week; it is highly probable that many of those who have studied the subject carefully will scarcely be inclined to agree with him that this is going quite far enough, or to hold, as he does, that if the working week is increased to 48 hours, other countries in Europe will increase their hours also. This proposition may well be doubted in view of the fact that wages per hour in Britain are practically twice as high as they are even now in the Ruhr.

There will no doubt be a general consensus in favour of Mr. Hodges' suggestion that there should be a fiveyears' agreement in order to get the industry back on to a sound basis. He realises quite clearly that reorganisation of the collieries, where such is required, cannot be done without an influx of fresh capital, and that to get such an influx, terms acceptable to the capitalist must of necessity be offered. Mr. Hodges, like every other intelligent man, sees that British coal miners must accept the inevitable, and that it is useless to fight against natural laws and economic facts. Our only hope of salvation lies in producing coals more cheaply; whether the coal miner prefers to attain this end by working longer hours or by accepting lower wages, is a question which he ought to be allowed to decide for himself. One or other alternative, or a compromise involving something of each, is the inevitable solution, and it is for the coal miner to say which he prefers. If neither is accepted, then we must be prepared to contemplate an end to British coal mining.

The Protection of Wild Life in Australia.

Save Australia: a Plea for the Right Use of our Flora and Fauna. By various Writers. Edited by Sir James Barrett. Pp. viii+231. (Melbourne and London: Macmillan and Co., Ltd., 1925.) 8s. 6d. net.

THE march of civilisation inevitably betokens the retreat of the native plants and animals of a country. For long the retreat passes unnoticed: the

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early settlers, battling with Nature for a foothold, have little inclination to survey any but the most immediate effects of their handiwork, and it is left for their more leisured successors to develop the æsthetic sense which laments the disappearance of the primeval natives of the land. It is on this account the more gratifying to find that a comparatively new country like Australia, with its unique fauna and flora, has tackled the problem of its disappearing animals and plants with an energy which puts to shame the puny efforts made in the 'old country.'

Four main causes are said to account for the disappearance of Australian animals. Two are inevitable, and are practically beyond the modifying power of man. (1) His settlements and cultivation open up the country at the expense of the shelters, the feedingplaces and the breeding-places of many of the wild animals. (2) Epidemic disease may sweep with dire effect through the populations of large areas, as in 1898-99 and 1901-2-3, when koalas, dasyures, certain bandicoots and other forms were almost exterminated in a tract from central Queensland to Victoria. The other two causes are looked upon as equally serious, and they are preventable. (3) The deliberate introduction and setting free of such aliens as the fox, the cat, the rabbit, and many species of European birds has, either by direct destruction or by the consumption of the food-supply and occupation of nesting sites, played havoc with many of the natives. Mr. Le Souef alleges that the fox has cleared off practically all the small ground animals outside the coastal districts in eastern and southern Australia, and the immunity of the inhabitants of the coastal districts is due to the presence of the poison tick, Ixodes holocyclus, which is fatal to foxes and dogs. (4) Deliberate destruction for the fur trade is making heavy inroads upon the native stock. From 1919 to 1921 the exported pelts of a few typical animals were: opossum, 4,265,621; ring-tailed opossum, 1,321,625; koala, 208,677; wallaby, 1,722,588. There is at present no control of, or any check upon, such exports, and slaughter on such a scale can end only in virtual extermination. Some half-dozen marsupials in Western Australia are now on the verge of extinction, though their disappearance cannot readily be attributed to man's interference.

Each of the Australian States has set about protecting its own fauna in the only way in which a fauna can be adequately safeguarded, that is, by the creation of reserves in which the animals are immune from any but controlled interference. The reserves are created by the legislature, but the system of control lacks unity, in so far as it is vested in two or more independent departments of the State, while in many places the