

QUOTATIONS

THE NEW BRITISH PATENTS ACT

THIS act, the Patents and Designs Act, became operative on August 28. Its principal clause runs as follows: "At any time, not less than one year after the passing of this act, any person may apply to the Comptroller for the revocation of the patent, on the ground that the patented article or process is manufactured or carried on exclusively or mainly outside of the United Kingdom." In future, foreign manufacturers, if they wish their patents to remain valid in Great Britain, will have to make the goods they sell within the United Kingdom. Otherwise their patents may be copied or infringed at will. Germany and the United States are particularly hit by the new enactment, and they are meeting the altered conditions by (1) building factories of their own in England; (2) acquiring premises already built for the purpose of carrying on their business; (3) arranging with British manufacturers to lay down plant and cooperate in the production of the special articles which are the subject of the patent. Already some thirty foreign firms—many of them conducting operations on a large scale—have begun, or are about to begin operations in this country, most of them choosing the north of England as the scene of their operations. It is said that as a rule the foreign manufacturer is providing a factory many times larger than is really necessary for the construction of his patented article, his explanation being that he can not run works in England on patents alone, and he intends therefore to manufacture in this country goods that have hitherto been imported ready-made. So far as can be seen at present the act must profit British labor. It is said in some quarters that these manufactures, at any rate the German ones, will be worked by foreign staffs, but this is not the case at present with Messrs. Meister, Lucius and Brünning (Limited), of Germany, a company with a capital of £11,000,000, which has just erected a new chemical factory at Ellesmere Port. Here all the workers employed are

English, with the exception of a few German overseers. The working of the act will be watched with keen and anxious attention, for British manufacturers are beginning to realize that foreign competition is about to invade their own particular territory, and that there will be a fair but strenuous fight on British soil for British custom. That is not a prospect that can be viewed altogether without anxiety when the perfection of German organization is remembered. The German things to be manufactured in England will be mostly aniline dyes, pottery, plants for gas making, rifles, plated goods, electrical contrivances, furnaces, sanitary appliances; the American, typewriters, safety razors, phonograph records, shoes, telephones and wire roofing.—*Journal of the Society of Arts.*

SCIENTIFIC BOOKS

The Physiology of the Stomata. By FRANCIS ERNEST LLOYD. Pp. 1-142; f. 40, pl. 14. Carnegie Institution of Washington, Publication, No. 82.

The purpose of this study has been twofold: first, to determine to what extent the stomata are able to regulate transpiration; secondly, to ascertain the physiological cause of stomatal movement. The investigation was carried on almost exclusively with two desert plants, *Fouquieria splendens* and *Verbena ciliata*. Both of these plants were found to have leaves of the usual tropophytic character and without any of the obvious adaptive characters related to desert conditions. The rate of transpiration was determined by reading the volume of water absorbed from burettes to which cuttings of the plants were attached. By weighing any error due to the absorption of water by the tissues of the shoot or its loss by wilting was corrected. To determine the area of the stomatal openings at various times of day and so to correlate the movements of the guard-cells with the fluctuations of transpiration, portions of the epidermis were removed and fixed in absolute alcohol. It was found that this treatment had no appreciable effect upon the guard-cells and