

Treatment of Storage Cells.

IN the "Notes" of NATURE for July 28 (p. 118) reference is made to an article on the renewal of sulphated storage cells by Mr. J. O. Hamilton. Readers of NATURE may be interested in a method of treatment I have employed for a number of years, which has given most satisfactory results.

A strong (30-40 per cent.) solution of crude, commercial sodium hydroxide solution is prepared in a large iron pot and is heated to boiling. The accumulator plates, previously washed thoroughly for several days in running water, are dipped into the boiling soda solution and allowed to remain for a period of from five to fifteen minutes, depending on the extent to which "sulphating" has taken place. They are then removed and washed for several days in fresh water, after which they are placed in the jars with fresh sulphuric acid solution and thoroughly charged.

This treatment can be applied to any cells which have not undergone structural disintegration, and when properly carried out restores the cell to its full normal capacity. I have used it with complete success for treating a set of six large portable accumulators which had stood uncharged for nearly five years, during which period almost all the water had evaporated from the electrolyte, and the greater part of the sulphuric acid had combined with the plates. It is also a very effective remedy when applied to cells which show local action and continuously evolve gas from the plates after charging, with a corresponding more or less rapid loss of charge on standing. In treating such cells a more dilute solution (20 per cent.) of sodium hydroxide can be used.

I have never found a cell too completely "sulphated" to be restored by this treatment.

BERTRAM B. BOLTWOOD.

Munich, Germany, August 7.

The Sheffield Meeting of the British Association.

MAY I ask the favour of your columns to bring to the notice of intending visitors to the meeting of the British Association in Sheffield the fact that, at the reception to be given to the association by the Duke of Norfolk, the Chancellor of Sheffield University, on Tuesday evening, September 6, exhibits are being arranged of new experiments, apparatus, specimens, &c., of scientific interest? The committee of the University formed to make arrangements for the exhibition will be glad to hear from any members of the association or others who have any exhibits which they can show on this occasion. The committee will welcome cooperation, and will give every facility for demonstrations.

S. R. MILNER.

(Secretary to the Committee.)

The University, Sheffield, August 8.

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YELLOW JACK AND THE WEST INDIES.¹

THIS is a popularly written book, giving an account of the health of the West Indies of to-day, as compared with one hundred years ago. The motto on the title-page is "Wear a smile on your face, and a flower in your buttonhole," and, in accordance with this, the note of the book throughout is cheerful and optimistic.

The book is the outcome of a visit paid by the author, at the request of the Colonial Office, to Barbados in March, 1909, to report on an outbreak of yellow fever which threatened the colony at that time. After spending a month in Barbados, a flying visit was paid to Grenada, St. Vincent, St. Lucia, Trinidad, and British Guiana, in order to study and compare the health conditions of these colonies with



FIG. 1.—Belleville, Barbados. From "Health Progress and Administration in the West Indies."

those of Barbados. Further, in a series of appendices, the health progress of Martinique, Guadeloupe, Cuba, Porto Rico, Jamaica, the Bahamas, and British Honduras is summarised.

The diseases mostly dealt with are yellow fever, malaria, filaria, plague, and ankylostoma. The medical organisation of the different islands to improve sanitary conditions, to destroy mosquitoes, to prevent the introduction of disease, and to stamp out existing diseases, is discussed at length. A large part of the book is given up to the various health ordinances and sanitary by-laws issued by the various Governments. From this it will be seen that the scope of the book is wide. It is illustrated by many fine reproductions of photographs of places and scenery in the West Indies; also by plans of the towns visited, giving the distribution of mosquitoes and the diseases due to them. There is an excellent coloured map of the region in question.

¹ "Health Progress and Administration in the West Indies." By Sir Robert W. Boyce, F.R.S. Pp. xv+328. (London: John Murray, 1910.) Price 10s. 6d. net.