

THE EMPIRE AND THE WORLD ABROAD

Manchester and Lemon Peel.

A very great improvement has taken place in the condition of lemon peel imported into Manchester during the past year from Sicily and Italian ports. The Medical Officer of Health, in his annual report to the Port Sanitary Authority, states that in previous years large quantities have been condemned through the unsoundness brought about by the staving in of the pipes and the escape of the brine in which the peel is preserved during transit. The trade in this material goes on as usual, and the fact that the condemnations have dropped from 146 tons in 1909 to four tons in 1910 is very significant of improved methods. It is now a rare event to come across a pipe leaking in any degree. Great credit is due to the shippers for the manner in which they have solved what was proving a very serious difficulty in respect to these shipments.

Recent Cancer Research at Middlesex Hospital.

Some interesting results have lately been obtained in the Cancer Research Laboratories at the Middlesex Hospital, where for several years investigations have been conducted on unique lines. Cancer research at this institution is chiefly concerned with the remarkable fact that human tissues contain varying quantities of radium-like substances, and that there appears to be some connection between the presence of these and the origin of cancer. It is well known that radium and its congeners give off X-rays, and these rays under certain circumstances are known to lead to the production of cancer. Hence it has been suggested at the "Middlesex" that the secret of cancer is possibly to be found in the occasional overcharge of certain tissues with radium-like matter, for under such circumstances surrounding parts would be subjected to the continuous action of tiny doses of X-rays, which, although minute, might in the course of time, be able to exert their cancer-producing effect. It will be remembered that it

is only when human tissues are exposed for a very long time—say, for many hours a day and months at a time—that they are able to bring about such a result.

Up to the present time a number of important facts have been discovered which appear to confirm this view, and it is not improbable that this remarkable and lengthy investigation will eventually throw light on many of the obscure problems which surround the cancer question. Recently the writer had an opportunity of visiting the Cancer Research Department at this hospital, when the director very kindly explained the nature of the latest investigations there for the benefit of the general reader. To put it briefly, although no startling or sensational deductions have yet been made in the laboratories, a vast number of facts are being steadily accumulated there in regard to this connection between radium and cancer, which, no doubt, will some day be made to fit into their proper places in a new theory of the cause of the disease. One important advance that has lately been made at the "Middlesex" is the discovery of certain tiny granules in normal tissue-cells which are not found in cancer-cells, and it is hoped that this discovery may ultimately lead to a valuable method of settling the question as to whether any growth of doubtful appearance is cancerous or not.

The visitor to these cancer laboratories cannot fail to notice that the director and his assistants are distinctly cramped for room at the present time; so much so, that a wide passage has had to be fitted up as an extra research room. Consequently the staff there are looking forward to the time when they will occupy the new laboratories of the Barnato-Joel Cancer Charity, which it is hoped will be ready in a few months' time. A further point of interest is that a trained physicist is now working at the "Middlesex" for the purpose of checking, from the purely scientific point of view, the observations referred to; this gentleman, it may be noted, is at the same time, a "Beit Research Fellow." In conversation, the director of the Cancer Research De-