## Medical Matters.

THE INFLUENCE OF BITTERS ON DIGESTION.



For many years, the vegetable bitters have been regarded as valuable aids to digestion, but their exact action has not been clearly understood. An Italian physiologist has recently devoted considerable attention to the matter. He carefully watched the process of digestion in a dog whose stomach had been

exposed by an accident and opened externally, so that the action of drugs could be observed and the effect upon the gastric juice accurately determined. In the first place, it was found that swallowing a quantity of distilled water brought about a flow of gastric juice, varying in quantity according to the amount of water. Gentian, quassia and calumba were then added to the same bulk of distilled water, and introduced into the stomach from the front, but it was found that as regards the flow of gastric juice the result was the same as had been produced by the same bulk of ordinary water. When the mouth and tongue of the dog was moistened with the vegetable bitter, no extra production of gastric juice was found; but when the mouth and tongue were wetted with the bitter infusion, and food was given immediately afterwards, a very considerable flow of gastric juice was always observed. Observations were therefore made to determine whether the flow of juice in this case was greater than that produced by food alone. The dog was therefore given on one day a measured amount of lean horse-flesh, and on the following day the same quantity, the mouth and tongue having been previously moistened with the bitter. The experiment was repeated on several occasions, and it was invariably found that the quantity of gastric juice produced was always greater when the meal had been just preceded by the administration in this way of gentian, quassia, or calumba, and, of the three, calumba always gave the best result. The conclusion, therefore, is that the action of bitters is essentially due to their influence upon the nerves of taste of the mouth, and not to their action upon the gastric mucous membrane. Bitters should, therefore, be given in cases where there is a loss of appetite, always in a fluid form, and always administered just before a meal. It is interesting to remember that the first accurate knowledge of the processes of digestion was gained by similar observations

on a Canadian whose abdomen had been torn open by a gunshot wound.

## AFTER-SANATORIUM TREATMENT.

A German physician has recently published a valuable article which deserves the attention of all who are connected with sanatoriums for the treatment of consumption. It is now well recognised in this country that the results of treatment in a sanatorium, although apparently excellent at the time, are not permanent in their character. In many instances, unfortunately, the apparent cure proves to be delusive, and the patient when he returns to his old insanitary occupation and home-life, relapses, and becomes as seriously ill as he was before. The author in question points out that the sanatorium treatment itself has serious drawbacks which tend to prevent the complete and lasting recovery of the patient; for example, the over-feeding, the excessive limita-tion of exercise, the fear of fresh infection which is constantly impressed upon the patient, and the idleness due to the conditions under which the patient lives in a sanatorium. The writer therefore urges, from considerable experience, that the patient after leaving the sanatorium should be encouraged, as soon as possible, to resume a regular occupation, while, of course, avoiding any calling which predisposes to the contraction of phthisis, such, for example, as those in which there is much necessary inhalation of dust.

## THE TREATMENT OF APPENDICITIS.

In the opinion of the Berlin Medical Society, which recently discussed the treatment of appendicitis, there was a consensus of opinion that it is advisable to operate upon those who have recovered from their first attack without waiting to see if the relapse occurs, and that such operations, performed at a time when the patient is free from disease, furnish more satisfactory results than operations undertaken immediately after the commencement of the. attack. Diagnosis is most difficult in the case children, and for this reason several of speakers expressed the conviction that after their recovery from the first attack it is advisable to operate upon children as soon as possible without waiting the advent of a second attack.

At the request of the society the Imperial Government has agreed to institute a statistical inquiry into the subject of appendicitis, its frequency, and its treatment in Germany. The result should be of value, as the investigation is sure to be systematic and thorough,



