

were muscular rigidity particularly in the right iliac region and tenderness greatest at McBurney's point, where a hard mass was beginning to appear. The condition became worse and on the 7th vomiting of the same character as in the preceding case occurred. Operation revealed a foetid retro-cæcal abscess which was drained. Recovery ensued. These cases show that appendicitis may be accompanied by the vomiting of liquid containing blood in such small quantity that on superficial examination it may be unnoticed, particularly if the microscope is not used. Dr. Duvergey ascribes the hæmorrhage to ulceration of the gastric mucous membrane from the interference with its nutrition produced by small emboli brought to it from a focus of infection. Hæmatemesis in appendicitis denotes a more or less profound infection of the body and increases the gravity of the prognosis, but slight hæmatemesis is not of such serious significance as severe hæmatemesis. Seven out of nine cases of the latter reported by Professor Dieulafoy proved fatal. On the other hand, in the first case of slight hæmatemesis related above the course was benign.—*London Lancet*, April 25, 1908.

AN ACTION OF ARSENIC ON THE RED CORPUSCLES.

In the *British Medical Journal*, July 18th, there is an article on this subject by Gunn, of Edinburgh. After criticising the evidence on which some writers have held that the action of arsenic in malaria and pernicious anæmia was directly antagonistic to the poison, and reviewing the work of observers who have shown that its effect on the bone marrow is leucoblastic and that it did not increase the red cells, he shows that there is still a means by which this drug may produce its curative effect in these diseases, and that is by some action on the formed red cells. By a series of experiments he has shown that solutions of arsenic, even in dilutions so high as 1 in 400,000, have an effect in reducing the action on the red cells of hæmolytic agents; the arsenious acid in these experiments was found to be fixed to the red cells and the action took place very quickly. It is estimated that a single maximal dose of arsenious acid of 5 mg. given to a man of 70 kilograms would produce in his blood a dilution of 1 in 1,000,000, and as it is slowly excreted we see that the conditions in the living subject may well reproduce those in the test tubes. Of course this does not prove that this is the method of its activity, but it would seem at least reasonable that it would reduce the permeability of the cell by the plasmodium.

The writer also suggests that the origin of pernicious anæmia may be in some defect in the stroma of the blood cells, it is not in the hemoglobin, that is often in excess, nor in the number of the cells. The cells