a considerable pressure. The smoke-test can never be taken-when it gives negative results -- as an absolute test for drains. The peppermint-test is inferior to the smoke-test when the latter is property applied, in the speaker's opinion. The next thing of most importance to do is to trace the overflow-pipes of the cistern to see whether these are connected with the drain or not. A connection of any kind between a cistern and the drain is a thing to be condemned. The baths, sinks, basins, etc., come next under examination. The dischargepipe-and overflow, if there be one-of each of these must be traced to discover whether or not it is connected with the drain. The closets must be very carefully examined, although they are not nearly so often the points of ingress of sewer-gas to the house as in any other appliances, such as sinks. They are often, however-especially when of the old pan form-themselves generators of foul gases, and as such objectionable.-Med. News.

THE FATE OF EXTRAVASATED BLOOD: AN EXPERIMENTAL RESEARCH.

The object of the research was primarily to determine the share taken by the liver, the spleen, and the bone marrow, in the disposal of extravasated blood. The method of research was the transfusion of large quantities of blood into the peritoneal cavity, the blood being, in all cases, derived from an animal of the same species. The animals used were the rabbit and dog.

I. Local Fate. 1. The part taken by cells in the local changes going on around extravasated blood is of the greatest importance; the cells being of two kinds-those of leucocyte, and those of connective-tissue origin. 2. The formation of bloodpigment from the red blood-corpuscles is mainly a "cellular" process, being effected through the agency of cells, either by inclosure of the corpuscles bodily within them, or by disintegration of the red corpuscles and then inclosure of their fragments. 3. In the process of so-called "organization" of blood-clot, both varities of cells play an important part; but, while both leucocytes and connective tissue cells are concerned in the disintegration of the red corpuscles, the former in addition, effecting the removal of the debris from the seat of extravasation, the connective-tissue cells alone are concerned in the process of formation of fibrous tissue by which ultimately the clot becomes replaced.

II. Absorption. 4. The absorption of extravasated blood applies not only to the serum of the blood, but also to the great majority of the red corpuscles which remain unentangled amidst coagula or the surrounding tissues. 5. This absorption is extremely rapid, both from the subcutaneous tissues but especially from the larger serous cavities. 6. In the case of the peritoneal cavity, the absorption

of the serum and red blood-corpuscles is effected almost entirely through the lymphatics of the diaphragm. 7. Under such circumstances, the increase in the number of corpuscles within the circulation is observable one hour after injection, and steadily rises till it reaches a maximum about the second or third day, the time varying according to the quantity injected. 8. Extravasation per se does not affect the vitality of the red bloodcorpuscles; if absorbed back into the circulation within a day or two, they continue to live as before. 9. Their longest duration of life under such circumstances (in the rabbit) varies from two to four weeks, this duration applying naturally to only a few of them. 10. The probable life-duration of the red blood-corpuscle in man is about three weeks.

III. Ultimate Fate of the Absorbed Corpuscles. 11. The three great seats of blood-destruction within the body, under pathological as under physiological conditions, are : The liver, the spleen, and the bone marrow. 12. The nature of the process of destruction in the liver, differs essentially from that in the spleen and bone marrow. 13. In the latter the process of blood destruction is mainly a cellular one, comparable in all respects with, although much more rapid and complete than, the the similar processes taking place locally at the seat of extravasation; in the former, the destruction is much more rapid than in the spleen and bone marrow. 14. After increased destruction of blood-corpuscles within the body, the local evidences obtainable are-in the case of the liver, increased richness of its substance in iron and the presence of granules containing free iron within the liver-cells; in the case of the spleen and bone marrow, increase in the amount of pigment containing free iron found within these organs. 15. In health, a definite relation is maintained between the amount of blood-destruction which takes place in the liver on the one hand, and in the spleen and bone marrow on the other. 16. Any disturbance of this relation on the part of the liver is of much greater consequence than on the part of the spleen or bone marrow. 17. The former is, in all probability, the pathological change which lies at the root of progressive pernicious anemia; as the latter is the probable cause of the anemia of leugocythemia. 18. The rapidity with which bloodcorpuscles introduced into the circulation become destroyed is very great, a number equivalent to about 4 or 5 per cent. of the animal's own blood being destroyed daily. 19. The small quantity of blood transfusible into the organism in the case of man is therefore entirely removed from the body in a few days at most, probably not longer than three or four. 20. Transfusion of blood in the human subject, in cases of pernicious anemia, with the object of increasing the number of corpuscles, is devoid of all physiological basis,