are made uniform and the acidity is varied, the rate progressively diminishes with increase of acidity (see p. 120). The fact was established by Hedblom and myself over seven years ago. Quite naturally a variation of consistency from that of the food we employed, such as the use of water, for instance, in Morse's experiments, results in the effect of acidity being seen at different concentrations from those we observed—a condition which Morse clearly perceived and explained in his paper. That the rapidity of discharge of water diminishes with increase of acidity and that the rapidity of discharge of potato diminishes with increase of acidity are not such contradictory statements as your editorial implies.

W. B. CANNON, M.D.,
Harvard Medical School, Boston.

Blastomycosis of the Tongue

To the Editor:—The article on this subject by Dr. Gordon B. New (THE JOURNAL, Jan. 20, 1917, p. 186) to me is unconvincing.

Both Figure 3 and Figure 4 are not characteristic of the microscopic features of any known form of blastomycosis. They have more resemblance to lymphosarcoma or the Hodgkin group of tumors than to blastomycosis. Furthermore, I am not convinced that the mere presence of blastomycetes (if these are blastomycetes) can excite a lymphoid hyperplasia.

Figure 5, pure culture: blastomycetes, to my mind is a picture of a culture of common yeast fungi. In cultures of blastomycetes, one always finds mycelium.

The fact that the lesion healed under potassium iodid and radium is by no means proof that it is blastomycosis.

Perhaps Dr. New has better proof than he has published in this article. If so, it should be published, as those who are familiar with blastomycosis, in my opinion, will refuse to accept his conclusions.

RICHARD S. WEISS, M.D., St. Louis.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

SIMPLIFIED TECHNIC FOR LEUKOCYTE COUNT

To the Editor:—In THE JOURNAL, Feb. 9, 1910, p. 662, is a brief extract from *Hospitalstidende*, Dec. 1, 1909, p. 1553, under the title "Improved Technic for the Blood Count." It states that "the blood is transferred to a vial containing a bead and a fluid to dilute the blood, dissolve the red corpuscles and fix the whites." Nothing is mentioned about the amount of the blood and amount of fluid in the vial or test tube. Kindly give me an exact extract of the original article covering the points in question.

V. W. PLETCH, M.D., Sonora, Calif.

ANSWER.—One large drop of blood (25 c.mm.) is drawn into a pipet and deposited in a vial or test tube already containing a small glass ball or bead and 19 drops of a fluid which dissolves the reds, fixes the whites and prevents shriveling as they dry. The test tube, plugged with a rubber stopper, can then be set aside until it is convenient to make the leukocyte count. As many test tubes can be used as desired, and the count can be made several times from each test tube, the average from a number of counts insuring greater accuracy. A capillary pipet marked for 25 c.mm. and for 10 c.mm. is used for the blood, and a larger pipet for the mixing fluid, marked off for the exact amount required, namely, nineteen times 25 c.mm.: $19 \times 25 = 475$ c.mm. A stand to hold a portable set of the test tubes is also convenient, as a number can be accumulated from the same or different cases and kept for a few days until a convenient moment arrives for the microscopic work, or the set can be sent to a laboratory. The mixing fluid found best adapted for the purpose consists of 45 c.c. of decinormal hydrochloric acid; 45 c.c. of a 0.9 per cent. solution of sodium chlorid, and 10 c.c. liquor formaldehydi. The count is made by taking up 10 c.mm. of the fluid in the test tube and spreading it over a circle,

exactly 2 cm. in diameter, marked on an object glass. The specimen is then stained with a mixture of equal parts of a 1 per cent. aqueous solution of methylene blue and of a 0.2 per cent. solution of sodium hydroxid. The stain is left in contact for one minute and then rinsed off, leaving the object glass in water for from two to five minutes, then embedding in cedar oil. The number of leukocytes in 100 microscopic fields, multiplied by 50, gives the number of leukocytes per cubic millimeter. This formula is based on the ratio between the diameter of the microscopic field (0.4 mm.) and the area of the circle (100 sq.mm.). The article is illustrated, and directions are given for facilitating the count by means of dividing off the circle on the object glass into quarters, etc. The blood specimens can be used later for the differential count. Ellermann and Erlandsen worked with 100 microscopic fields for each specimen, and state that with a little practice the whole procedure takes amazingly little time. With 200 microscopic fields, they found that the error averaged only 3.4 per cent.

TREATMENT OF PSORIASIS

To the Editor:—Has there been anything new and effective developed in the treatment of psoriasis? Can you advise me if the vaccine treatment is producing any favorable results?

F. H. MOORE, M.D., Herkimer, N. Y.

ANSWER.—Various new methods have been proposed and tried more or less in the last few years, but none of them has proved of great value. In general, chrysarobin ointment still remains the most effective remedy for cleaning up psoriasis. The custom today is to use it in rather dilute strengths—from 2 to 5 per cent. chrysarobin in some ointment base. The lesions can often be cleaned up with Roentgen rays, but the method is not to be recommended unless used with great caution. As a rule, the eruption recurs after Roentgen-ray treatment, as after all other methods of treatment. Another recent method of treatment is exposure to highly actinic rays of light. Sometimes ordinary sunburning will clear up psoriasis, and exposure to ultraviolet light may do the same thing; but as a rule this method of treatment is disappointing. Autoserotherapy is the latest method suggested, but it has not yet been proved of value. The same can be said of the treatment of psoriasis with vaccines.

VIBERT'S SOLUTION FOR STAINING BLOOD CELLS

To the Editor:—Please give me the composition of Vibert's solution for the preservation of blood cells in their removal from blood stains. Mention is made of it in the *India Journal of Medical Research* (3, 214), in an article by W. D. Sutherland on "Examination of Blood Stains in Medico-Legal Cases."

HEBER C. JAMIESON, M.D., Edmonton South, Canada.

ANSWER.—Francis S. Smith ("Forensic Examination of Blood Stains in the Tropics," *Bristol Med.-Chir. Jour.*, July, 1916, p. 84) gives the composition of Vibert's solution as a 0.5 per cent. mercuric chlorid solution in 2 per cent. sodium chlorid. He says:

MICROSCOPIC EXAMINATION.—A small quantity of scrapings from the stained area in the case of earth, knives and bamboos, or a portion of the fabric in the case of clothes, is taken and allowed to soak in a drop of Vibert's solution (0.5 per cent. HgCl_2 solution in 2 per cent. NaCl), or in a drop of glycerin solution (one part in seven of water). It is then covered with a cover glass, and after standing for half an hour is tested and examined under low power, high power and oil immersion lenses. Mammalian blood cells, and the oval, granular nuclei of nonmammalian corpuscles can be detected.

Typhoid Immunization.—The October number of the *Bulletin of the New York State Department of Health* is the "Typhoid Number." It is said that in view of the excellent results obtained from prophylactic immunization, it would be wise to immunize all the remaining members of a family in which a case of typhoid fever has occurred. A study of typhoid fever in certain sections of the state reveals that about one third of the patients received the infection by contact with an acute case, either in the same family or in the home of a neighbor. In view of this it would seem wise, except in well regulated hospitals or homes where there is an adequate water carriage system for the removal of excreta, to isolate the patient as rigidly as for a case of scarlet fever.