bles, but the parasites have not, in our hands, endured this manipulation.

If haste is required, and the time elapsing before arrival at the laboratory is known, the formalin may be added at the source. One may argue that delay may be dangerous, but if it be considered that search for hours is frequently futile, this objection will not appear to have much weight.

If the blood is to come from a distance, it is well to fix in advance on a twenty-four to thirty-eight hour basis; in other words, adding two drops of a 1:10 official formaldehyde to every 10 c. c. of mixture of blood and citrated salt solution.

The accompanying photo micrograph shows the picture obtained by this method. A little practice is required to get such results. In some fields of this same slide there were easily four times as many parasites, but there the film was too thick for photographing.

*Since this paper was read one appeared in the *Am. J. Tropical Dis. and Prev. Med.*, Vol. III, No. 6, by C. C. Bass, from which it appears that careless pitting off of leucocytes might remove the gametes and large schizonts.

*Krauss: What Every Doctor Should Know About Malaria. *South. Med. Jour.*, Vol. 1, Nos. 1 and 3.

The authors desire to return thanks to Dr. Haskell, Dr. Rucks and the internists of the City Hospital staff for valuable assistance, and to Dr. Haase and Miss McGinnes for photomicrographs.

AUTHORS' ABSTRACTS.

Tropical Diseases and Public Health.

Sparganum Mansonii. First Reported American Case. Found in a Breast Tumor at Operation. By John T. Moore, Houston, Texas. *Transactions of the American Society of Tropical Medicine*, 1914, pp. 236-247.

The author presents the history of a case infected with *Sparganum Mansonii* (identified by Ransom, of United States Department of Agriculture). The special points were the patient's exclusive residence in the United States, his use of shallow well water and fruit and occasionally raw vegetables.

Twenty-seven years previously, a non-inflammatory tender mass appeared on the margin of the ribs on the left side. This disappeared after one year. Six months before operation the mass was noted just beneath the left breast—causing

continuous dull pain and sometimes sharp pains.

Operation revealed the mass as a *Sparganum Mansonii* imbedded in the fibers of the major pectoral muscle. The parasite was alive, and had a contractile and expansile movement. Was white and tapelike, 21.5 cm. long, and unsegmented. The literature is reviewed and reveals the case as the twenty-fifth on record, and the only case reported in the United States.

Malaria in the Philippine General Hospital, Manila, P. I., During the Fiscal Year 1913. By David G. Willets, U.S.P.H.S., Manila, P. I. *Philippine Journal of Science*, September, 1914, pp. 441-452.

A diagnosis of malaria was rendered in 5.17 per cent of 6,732 cases discharged during the year; in 10.6, 2.09 and 0.3 per cent of medical, obstetrical and surgical cases respectively.

Organisms were found in 85.1 per cent of 341 cases examined microscopically and in 86.7 per cent of fifteen cases which showed malarial lesions at autopsy. In the two cases which were negative *ante mortem*, chronic lesions were found and death was not due to malaria.

Of 296 cases positive microscopically, 54.4 per cent were infected with tertian, 50.6 per cent with aestivo-autumnal, 1.0 per cent with quartan, 7.4 per cent with tertian and aestivo-autumnal, and 1.4 per cent with unidentified parasites.

A leucopenia was present in 47.3 per cent, a normal count in 42.7 per cent, and a leucocytosis in 10.0 per cent of 131 cases positive clinically and microscopically. Some of the normal and abnormally high counts were probably due to the degree of infection present coupled with the stage at which specimens were secured and some of them probably to complications in the intestinal and genito-urinary tracts.

Typhoid fever being excluded, the malarial splenic index was 69.5 per cent among the first 1,000 thoroughly examined medical cases admitted during the year, and 85.7 per cent in 264 cases with enlarged spleens examined microscopically. Malarial organisms were not satisfactorily excluded in a number of instances.

Sterilization of Drinking Water by Calcium Hypochlorite in Field. By W. J. Lyster, U. S. Army. Military Surgeon, March, 1915.

The appliance consists of a canvas bag of specially woven flax, 20 inches in diameter and 28 inches in length, sewn to a flat galvanized iron ring, hinged so it folds at one diameter. Spliced at four equi-distant points on ring are two crossed pieces of hemp rope, enabling bag to be suspended. When filled with water it weighs about 330 pounds. Five nickel spring faucets are placed at bottom of bag. Empty bag weighs from seven to seven and a half pounds and folds conveniently for carriage, strapped to saddle or to new infantry pack when other transportation is wanting.

After bag is suspended and filled with water, it is sterilized by a small amount of hypochlorite of calcium. This is carried in measured doses sealed in glass tubes. A package of sixty tubes weighs ten ounces and measures 7 1/2 x 3 1/2 x 4 1/4 inches. Packed in corrugated paper, it will stand rough usage.