Hiss' capsule stain, slightly modified, using a 5 per cent. aqueous solution of methyl violet or 5 per cent. aqueous solution of fuchsin, the latter being preferable. The solution, therefore, necessary for this work is a 5 per cent. aqueous solution of either stain and 20 per cent. solution of copper sulphate. The technic is simple:

1. Smears are fixed by heat.
2. The slide is covered with the dye and heated till it boils.
3. It is washed with 20 per cent. copper sulphate solution till no more of the color runs off.
4. It is dried between filter paper.

MICROSCOPIC APPEARANCE

The pus cells on the field take on the stain richly. The coccus takes on the same stain as does the nucleus of the pus cell. The zone around the gonococcus takes on the stain much lighter in color. If methyl violet stain is used, the surrounding zone is a lavender; if fuchsin is used, the surrounding zone is a pale pink. The space between the coccus and the outer edge of this lighter stained area is as wide, in many cases twice as wide, and in some cases three times as wide, as the coccus. Because of this wide lighter stained area, it makes the coccus appear smaller than we have been accustomed to seeing it with the usual method of staining, which is that of Gram. This is particularly true when the smear is thin; that gives the gonococcus and its capsule wide area to spread. When the smear is thick, the cocci are pushed together and it does not leave room for expansion, so that it gives the coccus the size that we have been accustomed to seeing it because the periphery has a much narrower margin. This is the explanation as to why different fields show the capsule of a different size.

The question might arise that the lighter stained area might belong to the cytoplasm of the pus cell rather than to the gonococcus, since the coccus is in the cytoplasm of the pus cell. That question can be answered by the fact that the gonococci which are in the fields by themselves show that characteristic light zone stain the same as in the pus cell.

Fig. 2.—Intracellular gonococci.

This is demonstrated in the accompanying photomicrographs, it being more marked in Figure 1.

While this method of staining brings out the capsule-like periphery around the gonococcus distinctly, it is perhaps a little too soon to claim that it is the capsule of the gonococcus until more work has been done on it.

This method of staining has been adopted by the State Laboratory of Hygiene, Concord, N. H., and I might suggest that other laboratories try this method.

CALCULUS IN MAXILLARY SINUS

ROBERT B. SWEET, M.D., LONG BEACH, CALIF.

Mrs. S., aged 40, who complained of pain in the right eye, had had a nasal discharge for ten years. She had had all the upper right teeth extracted ten years before I saw her. I found maxillary sinusitis on the right side. A roentgenogram revealed the right maxillary sinus to be dark. I opened the sinus by way of the nose. It was filled with foul-smelling

Foreign body in maxillary sinus.

pus. I gave treatments by way of the nostril for six weeks, at the end of which time pus was still present. Another roentgenogram, reproduced herewith, disclosed a foreign body in the maxillary sinus which, on being removed by the Caldwell operation, proved to be a cuboid calculus, the size of a small die. The patient made a rapid recovery.

A NEW DIAGNOSTIC SIGN IN ACUTE INFLAMMATORY CONDITIONS OF THE ABDOMEN

MOSES SALZER, M.D., CINCINNATI

The accurate diagnosis of acute inflammatory conditions of the abdomen presents such great difficulties at times that the surgeon is at a loss where to make his incision. It is not uncommon for him to be compelled to handle an acutely inflamed appendix through what was originally a gallbladder incision, and the reverse is also just as frequently true.

Any sign, therefore, which will assist in making an accurate diagnosis before the incision is made will be of inestimable value in any operation, but especially so when the patient's condition is not good and the disease has existed for some time. It is in these late cases that the whole abdomen is most likely to be painful and tender on examination, and any additional information will be welcomed by the surgeon.

The presence of the sign about to be described was first called to my attention about four years ago by the following case:

The late Dr. Joseph Ransohoff was called in consultation by two internists who had made a diagnosis of acute appendicitis, with possible abscess. The whole right side was rigid, painful and tender on palpation. The leukocyte count was high, and the patient's condition was not good. Dr. Ransohoff himself was more inclined to a diagnosis of acute gallbladder infection.

I was called on to give the anesthetic, which was to be nitrous oxid-oxygen; and before the patient was completely anesthetized, Dr. Ransohoff bethought himself to make another examination.

He first made pressure over McBurney's point, and there was no response; but immediately on pressing over the gall-