obtained from a case of chronic bronchitis I isolated a monilia which ferments mannitol.

Brief description of the monilia.—The fungus has the botanical characters of a monilia. It is gram-positive and not acid-fast. It does not liquefy gelatin or serum. The microscopical examination of glucose agar cultures reveals the presence of a large number of free yeastlike bodies and also of a certain amount of mycelium.

The most interesting feature of the fungus is that it ferments, with production of gas, mannitol. In addition it ferments, with production of gas, glucose, galactose, maltose, levulose and dextrin. It produces acidity in arabinose and xylose. For this new Monilia I suggest the name *Monilia mannitofermentans.*

4391

A New Strain of the Metadysentery Bacilli.

ALDO CASTELLANI.

From the Department of Tropical Medicine, Tulane University.

Some years ago I introduced the following classification of the dysentery bacilli: 1. Lactose not fermented, mannitol not fermented, *Bacillus dysenteriae* Shiga-Kruse. 2. Lactose not fermented, mannitol fermented (no gas), *Bacillus paradysenteriae* Collins, with its principal varieties: variety *Flexneri,* variety *Hissi-Russelli.* 3. Lactose fermented (no gas), mannitol fermented (no gas) or not fermented, Metadysentery group of bacilli. The Metadysentery group may be subdivided as I have shown in a previous publication[1] into 2 subgroups: *Bacillus ceylonensis* A subgroup; *Bacillus ceylonensis* B subgroup.

The Metadysentery bacilli of the *B. ceylonensis* A type produce acid in lactose very slowly, indol is not produced or only in very small amount, milk is clotted very slowly. The metadysentery organisms of the *Bacillus ceylonensis* B type produce acid in lactose rapidly and clot milk fairly quickly; indol is produced.

Recently from a case of acute dysenteric colitis, I have isolated a strain of metadysentery bacillus which is culturally and bio-chemically completely identical with *Bacillus ceylonensis* A, but it differs from organism was agglutinated by the patient's blood, but was not

[1] Castellani and Chalmers, *Annales de l'Institut Pasteur,* 1920; Castellani, *Am. J. Trop. Med.,* 1927, vii.

agglutinated by any dysentery, paradysentery, or metadysentery serum except in a dilution of 1 to 20: it does not absorb the agglutinins of any of the dysentery, paradysentery and metadysentery sera tried. For purposes of reference I propose calling it *B. ceylonensis* A, strain S, the name of the patient from whom it was recovered beginning with S.

4392

Correlation of Urinary Findings and Renal Pathology in Experimental Streptococcal Nephritis.

CHARLES W. DUVAL.

From the Department of Pathology, Tulane University, School of Medicine.

The relation of the urinary to the kidney changes in experimental nephritis is of particular interest since in man, with few exceptions, we have been unable to do more than conjecture the cause of the different stages of nephritis, and to assume that in certain infections the concomitant acute nephritis lays the foundation for chronic diffuse renal disease months and years afterwards. Likewise, in human nephritis it is very difficult to compare any particular derangement of kidney function with the structural renal changes incident thereto.

This paper reports upon the sequence of the structural renal changes in correlation with the abnormal urinary findings in dogs in whom nephritis has been induced with the toxic product of *Streptococcus scarlatinae*. The results are especially noteworthy inasmuch as the kidney changes were produced with a nephritic agent that commonly causes nephritis in man, and a closer analogy could be drawn with the human disease than is possible where improbable excitants of human nephritis, like uranium nitrate, have been employed. The experiment has also afforded the opportunity to study the relation and sequence of the renal changes, and to trace the progress of their anatomical development.

Since nephritis frequently occurs spontaneously in the dog, we have used only young animals whose urine over a period of 10 days to 2 weeks was free from albumen, casts and other abnormalities; and whose kidney function, as determined by the phenolsulphenolphthalein test, was within the normal limits. During the period of observation the animals were kept in metabolism cages to facilitate