Error in the determination of carbohydrates. 2. The existence of a substance which is free of nitrogen and is of a character not usually ascribed to carbohydrates and resistant to the ordinary reactions for such. While the first alternative is not excluded, the writer is inclined to the latter conclusion and expects to continue the investigation along this line.

## NOTE.

Improvement in Drying Chambers.—In an ordinary copper drying chamber, or air-bath, the bottom is protected by a false bottom, usually of iron, supported at the four corners by the legs of the chamber. When heated by a burner the false bottom expands and cups, and thus breaks the heat connection with the true bottom, making the chamber more difficult to heat. This trouble may be entirely remedied by riveting the two bottoms in the center with one rivet, leaving the four corners to expand or contract, but still supported by the legs of the chamber. The burner should be placed immediately under the rivet. The writer has used chambers thus improved for some time with great satisfaction. Chambers with the improved bottom may be had of Eimer & Amend, New York. J. L. BEESON.

## NEW BOOKS.

THE ENERGY OF LIVING PROTOPLASM. BY OSCAR LOEW. Professor in the Imperial University, Japan. 1896. London: Kegan Paul, Trench, Trübner & Co.

After reviewing briefly the theories of the cause of vital phenomena held from the time of Plato to the present, and after giving a short history of the discovery of the cell, the author takes up the characteristics of protoplasm, and especially those by which this substance exhibits phenomena of sensation. This naturally leads to a discussion of the relations of proteids to protoplasm, and consequently to a sharp distinction between physiologically active and dead or reserve proteid matter. He considers that proteids yield the vital phenomena, and that living proteid matter undergoes a chemical change at the moment of death. After briefly reviewing the older theories respecting the constitution of the proteid molecule he concludes with the following : "It appeared to me that more insight into the chemical nature of the proteids