

body of the lecithin type. Some statements are made of the possible sources of the lecithins in feces.

Dissociable Compounds of Mucoïds and other Proteins: W. J. GIES.

We know practically nothing about the ways in which proteins are held in living protoplasmic structures. The molecules of the protein compounds are relatively so large that as yet our physico-chemical methods of measurement are inadequate to give us correct ideas of molecular size and intramolecular structure, although we know much about the lifeless and, in some respects, comparatively meaningless fragments into which protein molecules may be broken. Our ignorance of the fundamental biochemical relation of proteins to the associated constituents of protoplasm appears to be largely due to our vague knowledge of the chemical statics and dynamics of true cellular proteins, a fact which serves, however, as a constant stimulus to protein investigation. Among the many protein substances, the nucleoproteins and the glucoproteins are very important tissue constituents. The essential part of each of these natural type proteins and the part to which the usual name is applied appears to be a colloidal organic acid. The forms in which the acid radicals occur in cells and tissues have not been definitely made out, although it is natural to presume that the acid radicals are united directly to one or more distinctly basic radicals in each case, and that variations in the characters of such compounds are associated with physiological as well as pathological variations of cellular composition and tissue function. The author has attempted to get to the bottom of this complicated matter by making definite salts of these proteins with the aid of methods that could be relied upon to leave the acid radicals unchanged.

The writer has lately prepared calcium, sodium, potassium and ammonium salts of mucoid by the following process: The slightly alkaline solution of glucoprotein is dialyzed until neutral and then poured into a large excess of 95 per cent. alcohol, which causes the precipitation of the mucoid. This precipitate is purified by resolution, dialysis and reprecipitation. The final product is made anhydrous by treatment with absolute alcohol and ether. The comparatively pure salts thus obtained are light snow-white powders.

The author hopes that, by increasing the knowledge of artificial products, analogies with natural compounds would be not only more easily recognized but also the characters of functions of the compounds in living protoplasm would be more thoroughly understood.

G. R. WHITE,
Press Secretary.

SCIENTIFIC BOOKS.

Leitfaden für den praktisch-chemischen Unterricht der Mediziner. Zusammengestellt von FRANZ HOFMEISTER, Professor der physiologischen Chemie an der Universität Strassburg. II. Aufl. Braunschweig, Viewig u. Sohn. 1906. Pp. 136. Preis Mark 3.50.

This little book admirably describes laboratory courses in qualitative analysis, organic chemistry (so far as it may be of interest to the physician) and in physiological chemistry. The directions given for making tests are brief and precise and at many places reasons are given for the methods advised in making the tests. In this revision it appears that particular attention was given to the course in physiological chemistry so that it might include the results of the latest investigations bearing especially upon the tests for the substances concerned in that branch of science. In short, the book is one which excellently covers the ground in practical chemistry essential to medical students.

JOHN MARSHALL.