

ratio of the areas of the figures, and (2) of the ratio of the straight lines similarly drawn to the axes of rotation from the respective centres of gravity." This certainly does not seem to lack clearness any more than does Guldin's "quantitas rotunda in viam rotationis ducta producit Potestatem Rotundam uno grado altiore Potestate sive Quantitate Rotata."

The essence of Guldin's Theorem appears in the works of Pappus. These were published in 1588, 1589 and 1602, a generation or so before Guldin published (1641) his *Centrobaryca*, in which his version appeared (Lib. II, cap. VIII, 3). They were well known to scholars of that time as constituting the most important geometric work of the late Greek period. That a man like Guldin should have failed to know this important statement in such a well-known work is quite inconceivable.

As a bit of *obiter dicta* Professor Miller expresses his doubt about Bürgi's being a genius. Perhaps he was not; but in that case the critic would, of course, hold the same opinion as to Napier. Opinions differ.

Speaking of Professor Miller's reviews in general, the present writer does not believe that his method and purpose of book reviewing are worthy. He feels that a reviewer should set forth clearly and succinctly a statement of the purpose of a book, of the way in which this purpose has been developed, of the scholarship shown by the writer, of the style in which the work is written and of the kind of help that is given and the kind of readers who will find it of value. On the other hand, he should point out evidences of poor scholarship, of poor arrangement of material and of poor style, provided these are significant. The late Dr. Eneström did this admirably with respect to historical errors, and his criticisms, based upon the actual sources and expressed without any evidence of self-aggrandizement, have been of the greatest value. Unfortunately he left no successor.

A work with such a large number of items as the one from which Professor Miller quotes is certain to have numerous statements in the first edition that require modification. In the case of this work the changes will be made in the second impression. They will not, however, include any modification in the statement referred to by him.

DAVID EUGENE SMITH

CRYSTALLINE TETRAMETHYL MANNOSE

In this laboratory a study of the action of dilute alkali on tetramethyl sugars is being made, with a view to determining the probable mechanism of the Lobry de Bruyn interconversion of simple sugars under the action of dilute alkali. In the course of this investigation it was found necessary to prepare a large amount of tetramethyl mannose, heretofore

known only as a syrup. This was made by methylation of alpha methyl mannoside with dimethyl sulphate and sodium hydroxide and subsequent hydrolysis with hydrochloric acid. Purification by distillation in large quantity was found unsatisfactory and extraction with low-boiling petroleum ether was tried. This resulted in the formation of crystalline tetramethyl mannose. The sugar comes out of petroleum ether in transparent massive crystals, apparently of the monoclinic system. The downward mutarotation in water from a specific rotation of $+7.4^\circ$ to $+2.4^\circ$ indicates that the crystals are of the alpha form.

Oxidation with bromine gave a syrupy tetramethyl mannonolactone whose specific rotation in water changed from $+136.4^\circ$ (init.) to $+62.8^\circ$ (final).

Preliminary study of the action of dilute alkali on crystalline tetramethyl mannose indicates a partial conversion into tetramethyl glucose. Further investigation of this reaction and of the crystallography of the compound is now in progress.

W. LEE LEWIS,

RICHARD D. GREENE

NORTHWESTERN UNIVERSITY,
EVANSTON, ILL.,
JUNE 6, 1926.

ZOOLOGICAL NOMENCLATURE

THE secretary of the International Commission on Zoological Nomenclature has the honor to invite attention of the zoological profession to the fact that application has been made to the commission to suspend the rules in the case of *Sarcoptes* Latr., 1804, tsd. (Latr., 1810) *passerinus*, and to place *Sarcoptes*, 1804, in the Official List of Generic Names with *S. scabiei* as type.

The argument states that the application of the rules to this "transfer" case will result in greater confusion than uniformity, involving generic, sub-family and family names, and designation of diseases in human and comparative medicine. The suspension requested will result in validating internationally accepted (though erroneous) nomenclature in consistent use for more than a century in zoology, and in human and comparative medicine.

The secretary is familiar with the premises and in his report to the commission will state that he considers this a typical case in which suspension is justified. He will, however, delay announcement of final vote until about October 1, 1927, in order to give ample opportunity to interested persons to express their views for or against the suspension.

C. W. STILES

Secretary to Commission

HYGIENIC LABORATORY,
WASHINGTON, D. C.
AUGUST 3, 1926