DR. L. A. BAUER has been appointed assistant professor of mathematics and mathematical physics at the University of Cincinnati. He will not enter on his new duties before September.

DR. R. W. T. GÜNTHER has been elected fellow of Magdalen College, Oxford, and tutor of natural science.

## DISCUSSION AND CORRESPONDENCE.

### COMPLIMENT OR PLAGIARISM.

WE have no occasion to withdraw any of our previous statements by reason of Professor Halsted's second communication.

We still maintain that "the same order may be found in Newcomb's Elements of Geometry." After proving that *by dividing the arc we divide the angle* and, conversely, *by dividing the angle we divide the arc*, Newcomb gives the following problems, which we compare with Halsted's:

| NEWCOMB. | HALSTED. |
|---|---|
| PROBLEM I. *To divide a given circle into* 2, 4, 8, 16, *etc., equal parts.* | PROBLEM I. *To bisect a perigon.* |
| PROBLEM II. *To divide the circle into* 3, 6, 12, 24, *etc., equal parts.* | PROBLEM II. *To trisect a perigon.* |
| PROBLEM III. *To divide a circle into* 5, 10, 20, *etc., equal parts.* | PROBLEM III. *To cut a perigon into five equal parts.* |
| PROBLEM IV. *To divide a circle into fifteen, etc., equal parts.* | PROBLEM IV. *To cut a perigon into fifteen equal parts.* |

Professor Halsted must think us very childish, indeed, if we assert that the word perigon is found in several geometries when the word is found in only Halsted's books and our own. He will find the word in Smith's Introductory Modern Geometry of Point, Ray and Circle, in Dupuis's Elementary Synthetic Geometry, in the later editions of Newcomb's Elements of Geometry, in Faifofer's Elementi di Geometria. But, perhaps, Professor Halsted will say, "All these books appeared after my Metrical Geometry in 1881, and these authors took the word from me." We have reason to believe that W. B. Smith, Newcomb and Faifofer all did see the word for the first time in Halsted's books.

The question then remains: "Where did Professor Halsted get it? Did he invent it, as he substantially asserts, or did he find it ready made?" This we cannot answer. We can only say we know where he might have found it.

In Sandeman's Pelicotetics, or the Science of Quantity, Cambridge [England], Deighton Bell and Co., 1868, which Professor Halsted might have seen in the Princeton University library, or in the Peabody Institute library at Baltimore, we read (page 304): "A PERIGON is the angle without any overlapping bounded by two straight lines lying in the same straight line upon the same side of their common end.

"A straight line being everywise alike upon all sides everywhere throughout is in any plane through it anglewise alike upon both sides at any point in it, and hence half a perigon or a HEMIPERIGON is the unoverlapping angle bounded by two straight lines lying in the same straight line upon opposite sides of their common end. A right angle is both one-half of a hemiperigon or a HEMISEMIPERIGON and one-fourth of a perigon."

That this same book was in the hands of Instructor Lefevre of the University of Texas, when he wrote his Number and its Algebra is fairly obvious from the following extract:

| PELICOTETICS. | NUMBER AND ITS ALGEBRA. |
|---|---|
| "Driven to the * * * outrageously overtowering extravagance and absurdity of finding and raising high as a principle that a chain of reasoning to be strong and good need not have meaning in every link; that, in other words, the conclusiveness of an argument has nothing to do with the intelligibility of its several steps, or that things may be thoroughly made out true for reasons nowise to be understood." | "Accept the outrageous extravagance that a concatenation of deductions to be valid need not have meaning in every link; that a compulsory conclusion of an argument does not require intelligibility of its several steps; or that results may be thoroughly made out true for reasons nowise understood." |

To us it seems well-nigh incredible that the man who made the important discovery in 1879 "that Princeton possesses * * * the identical volume from which the first translation of Euclid into English was made by Sir Henry Billingsley," and who, in 1896, "for four months * * * was buried in the uttermost parts of Hungary, Russia and Siberia," where he "made many important finds," could have failed to discover such an excellent word as 'perigon' in a book almost daily before his eyes.

BEMAN AND SMITH.

### PROFESSOR JASTROW'S TEST ON DIVERSITY OF OPINION.

A DIVERSITY of answers is possible to Professor Jastrow's case of reasoning without being false in any one of them. Answers may de-