No.	:	1	2	3	4	5	6
y	:	8°	9°	10°	10°	10°	11°
x	:	9°	9°	11°	9°	10°	9°

It is required to find the weight g, it being known *a priori* that $a = 1$. Here, from I. there is found $a_1 = \frac{22}{29}$, and from II. $a_2 = \frac{32}{22}$; then from V. there results

$$g = \frac{22 \cdot - 32}{22 - 29} = \frac{10}{7},$$

or the weight of the first series of observations is to that of the second as 7 is to 10.

VIII. If the equation between the variables be of a degree higher than the first, as $z^2 = aw^3 + b$, values of a and b may be deduced by following the above method, regarding z^2 and w^3 as observed values corresponding to y and x. Since, however, the real observed values are z and w I am not prepared to say that the results deduced for the parameters a and b will be strictly the most probable ones according to the principles of the method of least squares.

LEHIGH UNIVERSITY, *October*, 1891.

A NEW ITALIAN MATHEMATICAL JOURNAL.

Rivista di Matematica, diretta da G. PEANO. Torino, Fratelli Bocca, 1891.

ALMOST simultaneously with the *Bulletin of the New York Mathematical Society*, a new journal of a somewhat similar character has been founded in Italy. Like the *Bulletin*, the *Rivista di Matematica* is a monthly of at least sixteen pages 8vo. According to the prospectus "its scope is essentially didactic, its principal object being the improvement of the methods of teaching." The *Rivista* will contain "articles and discussions concerning the fundamental principles of the science and also the history of mathematics." "The review of text-books and all publications having reference to the teaching of mathematics will form an important feature." Questions and inquiries about mathematical subjects sent to the editor will be either answered directly or published in the

journal. Articles intended for the journal may be written in any of the principal languages and will be translated if necessary. Subscriptions (7 francs per annum) are to be sent to the publishers, Fratelli Bocca, Turin.

The editor, Prof. Giuseppe Peano of the University of Turin, is well known through his original investigations in Mathematical Logic and in Grassmann's Geometrical Calculus, as well as through his rigorous and elegant treatment of the Infinitesimal Calculus. His own contributions to the *Rivista* so far (the first number appeared in January, 1891) relate mainly to the fundamental logical principles of the science of mathematics.

Among the longer articles by other contributors we find an interesting paper (pp. 42–66) by Professor Segre, of Turin, addressed to his students, in which he points out some of the distinctive features of modern mathematics and gives wholesome advice to the young mathematician who wishes to engage in original research. The author is evidently inspired by what may be called the modern Göttingen school (Riemann, Clebsch, and in particular Felix Klein), insisting as he does on the organic unity of the whole of mathematics, warning against excessive specialization, and recommending that the young mathematician should make it his object to bring to bear as far as possible all branches of mathematical science on the particular subject of his investigation. It is curious to note that, in the opinion of Prof. Segre, there exists a very pronounced preference for the study of pure geometry, to the injury of analytical studies, among the younger generation of Italian mathematicians. Some remarks in this paper as to mathematical rigor and the use of hyperspace gave rise to an interesting discussion between the author and the editor (pp. 66–69, and pp. 154–159). Other contributors are A. Favaro, G. M. Testi, E. Novarese, C. Burali-Forti, G. Vivanti, etc.

Among the reviews, the very full account given by Gino Loria of R. de Paolis' theory of geometrical groups * is most prominent (pp. 105–120). E. W. Hyde's Directional Calculus finds a competent and appreciative critic in the editor (pp. 17–19).

ALEXANDER ZIWET.

ANN ARBOR, *August* 10, 1891.

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* R. DE PAOLIS, *Teoria dei gruppi geometrici e delle corrispondenze che si possono stabilire tra i loro elementi. Memorie della Societa Italiana delle Scienze detta dei* XL., vol. VII. series III.