NOTES.

A REGULAR meeting of the NEW YORK MATHEMATICAL SOCIETY was held Saturday afternoon, March 4, at half-past three o'clock, the president, Dr. McClintock, in the chair. Mr. Everett Irving Yowel, of the University of Cincinnati, having been duly nominated, and being recommended by the council, was elected a member. Professor W. Woolsey Johnson read a paper entitled "A case of non-euclidean geometry." This paper appears in the present number of the BULLETIN, p. 158.

Professor Johnson also read a note " On the construction of the roots of a quadratic whose coefficients are complex." In this note it was pointed out that, constructing complex quantities in the usual way, if an ellipse be drawn of which the foci are $\pm ca$, and z is a semi-diameter, then $w = \sqrt{(a^2 - z^2)}$ is the conjugate semi-diameter. Conversely if w and z are conjugate semi-diameters of an ellipse, the points $a = \pm \sqrt{(w^2 + z^2)}$ are the foci. Hence, to construct the roots of the quadratic in the form $z^2 - 2pz = q^2$: Lay off p from the origin, and from its extremity $\pm q$. Construct the ellipse of which these are conjugate semi-diameters. The foci of this ellipse represent the roots.

Or, putting the quadratic in the form $z^2 - 2pz + q^2 = 0$: Lay off p from the origin and from its extremity $\pm q$. Construct the ellipse of which these last are semi-diameters and the origin a focus. The extremities of the conjugate diameter represent the roots.

The special case in which the coefficients are real was considered in each construction.

WE have to announce the death of Professor Enrico Betti at Pisa on August 12 last, that of Professor II. Streintz at Graz in the middle of November, and that of F. von Mocnik also at Graz on December 1.

PROFESSOR CLEVELAND ABBE of the U. S. Weather Bureau, Washington, wishes to come into direct communication with American mathematicians who have a personal interest in the problems of aero-dynamics as illustrated in the phenomena of the atmosphere. He would be glad to send to any member of the NEW YORK MATHEMATICAL SOCIETY who may desire it a copy of the *Mechanics of the Atmosphere*, recently published by the Smithsonian Institution. Professor Abbe has also for distribution some copies of Döllen's valuable ephemens for observations in the vertical of Polaris during 1893.

T. S. F.