$$A_n = \gamma^{\lambda-2},\quad B_n = \alpha\gamma^{\lambda-3},\quad C_n = \alpha^2\gamma^{\lambda-4},\quad \cdots,\quad K_n = \alpha^{\lambda-2},$$
$$(-1)^{n-1} Q_n = \alpha^\lambda - R\gamma^\lambda,\ (-1)^n P_n = \alpha^{\lambda-1}\beta - R\gamma^{\lambda-1}\delta,$$

where α/γ and β/δ are the nth and $(n-1)$th convergents in the expansion of $R^{1/\lambda}$. Other remarkable relations between the coefficients are indicated.

2. From two logical classes can be developed a system of sixteen elements which is closed under the operations of logical addition, multiplication, and negation and forms a group under a certain other operation. Professor Whitney discusses this system and shows that it has a high degree of symmetry and that its internal structure is the same as that of a regular tetrahedron.

3. In the paper of Professor Lewis there is set up a revised system of implications in the algebra of logic which will exclude such doubtful theorems as "A false proposition implies any proposition" and "A true proposition is implied by any proposition." This system indicates that definitions in mathematics are relations of reciprocal implication, and that such relations can sometimes be deduced instead of assumed.

T. M. PUTNAM,
Secretary of theSection.

THE FIFTH INTERNATIONAL CONGRESS OF MATHEMATICIANS. SECTIONS II–IV.

SECTION II. GEOMETRY.

IN geometry, four sectional meetings were held, the chairmen being H. F. Baker, F. Severi, J. Drach and F. Morley. A. L. Dixon and E. Bompiani were elected permanent secretaries for all the sessions. The following papers were presented before this Section.

(1) BROUWER, L. E. J., Amsterdam: "Sur la notion de classe de transformations d'une multiplicité."

(2) MORLEY, F., Baltimore: "On the extension of a theorem due to W. Stahl."

(3) EISENHART, L. P., Princeton: "Continuous deformation of surfaces applicable to quadrics."