8. In the present paper, Professor Gronwall proves the following theorems:
I. When the analytic function $z=f(x)=a_{0}+a_{1} x+\cdots$ $+a_{n} x^{n}+\cdots$ effects the conformal representation of the circle $|x|<1$ on a simple (that is, simply connected and nowhere overlapping) region in the z-plane, the area of this region not exceeding $A$, then, for $|x| \leqq r<1$,

$$
|f(x)| \leqq \sqrt{\frac{A}{\pi} \cdot \log \frac{1}{1-r^{2}}} \text { and }\left|f^{\prime}(x)\right| \leqq \sqrt{\frac{A}{\pi}} \cdot \frac{1}{1-r^{2}}
$$

and these upper boundaries of $|f(x)|$ and $\left|f^{\prime}(x)\right|$ cannot be replaced by any smaller ones. Less accurate limitations have been given by Koebe and Courant.
II. When $z=f(x)=1 / x+a_{1} x+a_{2} x^{2}+\cdots+a_{n} x^{n}+\cdots$ effects the conformal representation of the circle $|x|<1$ on a simple region in the $z$-plane containing the point at infinity, then $|f(x)|<9 / 4 r$ for $|x|=r<1$. A less accurate limitation has been given by Fricke.

F. N. Cole, Secretary.

## THE TWENTY-SIXTH REGULAR MEETING OF THE SAN FRANCISCO SECTION.

The twenty-sixth regular meeting of the San Francisco Section of the Society was held at the University of California on October 24, 1914. Twenty-two persons were present, including the following members of the Society:

Professor R. E. Allardice, Dr. B. A. Bernstein, Professor H. F. Blichfeldt, Professor C. E. Brooks, Dr. Thomas Buck, Professor L. E. Dickson, Professor M. W. Haskell, Professor L. M. Hoskins, Dr. Frank Irwin, Professor D. N. Lehmer, Professor J. H. McDonald, Professor W. A. Manning, Professor H. C. Moreno, Professor C. A. Noble, Professor E. W. Ponzer.

The chairman of the Section, Professor Manning, presided at the opening of the meeting; the chairman-elect, Professor Haskell, then took the chair. The following officers were elected for the ensuing year: chairman, Professor Haskell; secretary, Dr. Buck; programme committee, Professors Manning and Blichfeldt, and Dr. Buck.

