be transmitted a given distance with a high efficiency, it is more important to know that the same amount of power could be obtained at the objective point for one-fourth the cost of the former.

Lafayette, Ind., Dec. 30, 1896.

Economy in the Design of Electro-Magnets. By W. E. Goldsborough.

Published in the Electrical World, Vol. XXIX, p. 196, Feb. 6, 1897.

An Efficiency Surface for the Pelton Motor. By W. K. Hatt.

Published in the Journal of the Franklin Institute, June, 1897.

On Seiches. By A. W. Duff.

Some Experiments on the Phenomena of the Elevation of the Elastic Limit. By W. K. Hatt.

Viscosity as a Function of Temperature. By A. W. Duff.

[Abstract.]

The author shows the insufficiency of the formulæ proposed by Poisenille. Slotte, Koch, Grätz and others, and finds generalized formulæ.

$$\left.\begin{array}{l} \eta = C \left(\dfrac{t+a}{t+b} \right)^n \\ \eta = C a^{-\tan^{-1} a(3+t)} \end{array}\right\}$$

which are in agreement with all data hitherto obtained, the former applying to water and most substances of slow variation of viscosity, and the latter to glycerine, mercury and most substances of rapid variation of viscosity.