understands it, entirely on the petrographic character of the rock, as it contains no fossils, and on its relation to the Carboniferous deposits in the hills north of the mine. Mr. Dumble has studied this sandstone, if it really be such, with considerable care, and finds it to occupy a position much lower in the geological scale than had been previously thought—that it is, in fact, below the Texan Group of Comstock—that is, at the very base of the sedimentary series. He does not believe that it is a part of an immense mass or boss of igneous material.

Mr. A. C. McLaughlin, for several years past connected with the Geological Survey of Maryland, gave an account of the work as conducted by that organization in the western part of the State.

Professor T. U. Taylor, of the Department of Engineering, read and commented upon a communication received from Professor W. H. Echols, of the University of Virginia, on the 'Measure of Earthwork,' in which the prismatic formulæ were employed.

Dr. S. E. Mezes followed with a paper on 'Monogamous Marriage,' in which he gave an account of this institution and of the rules and customs by which it has been maintained. That this institution is adapted to the highest civilization was shown in the fact that by it, and it alone, could be made a home, and that the home-training of children produced the highest and best results socially. The paper was both thoughtful and candid and received the hearty approval of all who heard it.

F. W. S.

University of Texas.

DISCUSSION AND CORRESPONDENCE.

MARGINAL TABS FOR LOGARITHM TABLES.

To the Editor of Science: Will you permit me, through the columns of Science, to bring to the attention of users of my 'Computation Rules and Logarithms,' a set of 'Marginal Tabs' for use in that book. The tabs are arranged for the five-place tables of logarithms of numbers and of the trigonometrical functions. They not only materially lessen the time required to find any logarithm or antilog in the use of the tables to five places, but they render the table even more speedy than the ordinary four-place table for obtaining the logarithms or antilogs to four places, while also much lessening fatigue and liability to mistake, no interpolation being required. The printed tabs, with directions for their application and use, form a leaflet which will be mailed by the author on receipt of twenty-five cents. Copies of the *errata* of the first (very thick paper) impression of the Tables, but which have been corrected in later impressions, will be mailed to holders of that edition on receipt of a stamped and addressed envelope.

S. W. Holman.

18 Elm Street, Brookline, Mass.,
February 24, 1900.

NOTES ON PHYSICS.

In the London *Electrician* is a report of some recent experiments of Professor S. Lussana on the variation of resistance under high pressures, up to 1000 atmospheres. He found the resistance to decrease with increase of pressure, and obtained the following coefficients per atmosphere.

Lead	194×10^{-7}		
Iron	38	Argentana	9.7×10^{-7}
Silver	32	Nickelina	7.4
Copper	31	Constantea	7.9
Platinum	24	Manganin	5.6
Nickel	19	Brass	4.3

The curves of decrease of resistance were slightly concave toward the axis of pressure, showing a tendency toward a minimum.

The resistance did not return to its normal immediately on removal of the pressure. In the case of platinum which had been under a pressure of 500 atmospheres for one hour, the resistance, on removal of the pressure, increased rapidly for ten minutes, and then quite slowly, taking about one hour to return to approximately its normal. Held under the same pressure for 24 hours, the curve showing its return with time to normal resistance is very interesting, rising in about 50 minutes to normal, going above, returning again to normal in about $7\frac{1}{2}$ hours, falling below, and again becoming approximately normal in about 14 hours, thus showing a series of waves of decreasing magnitude and increasing length.