to the original writer, though the geographical conditions must have been somewhat changed in his time.

I rejoice that a scholar like Dr. Haupt has advocated a view which will almost for the first time bring this very ancient and very accurate geographical description before the notice of modern biblical scholars in a manner which will be intelligible from their point of view.

I may add that a popular view of the geological argument on the subject will be found in my work, 'Modern Science in Bible Lands,' published in 1888,\* where will also be found a sketch-map of the region, illustrating the bearing of the geological and geographical researches of Loftus and others on this much vexed and much misunderstood question.

J. WILLIAM DAWSON. MONTREAL, May 7, 1895.

## COLOR-ASSOCIATIONS WITH NUMERALS, ETC. (THIRD NOTE).

TO THE EDITOR OF SCIENCE: In SCIENCE, old series, Vol. vi., No. 137, p. 242, I printed the results of some experiments upon the association of colors with letters of the alphabet, with numerals, etc., in the case of one of my daughters. In Nature for July 9, 1891, I gave a table exhibiting the results of these experiments in the years 1882, 1883, August, 1885, December, 1887, June, 1889, and June, 1891, a period of about nine years. The table can be readily consulted by anyone interested, so that it need not be reprinted here. In February, 1895, I again questioned my daughter on the subject, and I find that the colors given in her replies of June, 1891, are unchanged except in two cases. The figure 8 was visualized by her as white (August, 1885), cream color (December, 1887), white (June, 1889), cream (June, 1891), and is again seen as white (February, 1895). The figure

\*Harpers, New York.

10 was noted as brown (1885), brown (1887), black ? (1889), black or brown (1891), and black (1895). With these exceptions there are no material changes. My remarks on the table, given in *Nature*, do not seem to call for any additions or subtractions. The present note, taken with the others cited, seems to be of value, as it records the results of experiments made under exceptionally good conditions and now extending over a period of some thirteen years. EDWARD S. HOLDEN.

MOUNT HAMILTON, May, 1895.

## UNIVERSITY OF KANSAS STATE GEOLOGICAL SURVEY.

In conformity with the law under which the University of Kansas is now working, the Board of Regents at a recent meeting formally organized the University Geological Survey of Kansas with Chancellor F. H. Snow, ex-officio Director; Professor S. W. Williston, Paleontologist; Professor Erasmus Haworth, Geologist and Mineralogist, and Professor E. H. S. Bailey, Chemist.

In addition to these, other members of the University Faculty will be engaged upon the work of the Survey, as well as the advanced students of the departments of Geology and Paleontology. An effort will also be made to centralize and unify the energies of different geologists in the State who have been doing valuable work along different lines of geological investigations. Already a considerable start has been made and the coöperation of different geologists of the State has been secured.

The policy of the Survey will be conservative, with the expectation that it will be continued and eventually include all other branches of the natural history of the State. The general stratigraphy of the State will first be elaborated in order that it may be used in the further study of various questions of economic and scientific importance, all of which will be taken up as rapidly as