most readers; though in the end there is a satisfaction in knowing that Havilah, for example, appears to owe its opportunity in a mountainous district to the flat floor of an aggraded valley, whose stream was there turned from a previous course down the general slope of the Sierra Nevada into a northward path along the base of a fault-block scarp, and hence is now to be regarded as consequent upon the faulting. Again, it is often the case that a reader must follow through the inductive presentation of a more or less intricate problem—if he does not turn at once to the end of the article in the hope of seeing there a summary which tells him concisely what the writer is driving at—and thus finds himself in the necessity of carrying many items in mind before he knows the conclusion on which they bear. Indeed an inductive presentation, appropriate enough for beginners who have little acquaintance with generalities, may give too much importance to the author's personal experience when employed in articles that are designed for mature readers, already informed as to generalities.

As an alternative by which both of these difficulties may be in large measure avoided, it is worth while to consider a method which has some likeness to one that we all know in geometry, where the theorem is stated at the beginning, in order that all the items of the demonstration may be at once appreciated in their bearing on the end thus placed in view. When applied to physiographic descriptions, this method would require the presentation of the explanatory conclusion at the outset. The conclusion would there be stated, independently of local names, in terms of a systematic general nomenclature, from which the reader could easily build up a mental picture of the larger features of the district concerned; for the systematic nomenclature, already familiar from previous study, would easily bring known forms to mind. Details could then be added at their appropriate positions in the larger masses; and as the description thus proceeded, more and more warrant would be found for the conclusion that had been stated in the first place. Villages and roads, hardly known outside of their immediate districts, would be located as occasion offered with respect to the larger masses and their details, instead of *vice versa*. Even if an outline map is added to indicate route and local names, a separate figure, giving in a general way the graphic equivalent of the general conclusions, is of much service; for the route followed by the observer is a relatively subjective detail, and the local names too often only distract from the main description. It is chiefly through the general features that the distant reader can reach the smaller items.

This method might work injury where the conclusion remains in doubt; for the presentation of a doubtful conclusion at the beginning of an article would probably give it too high rank. The method might be inconvenient in cases where most readers of an article were on the ground, and therefore already familiar with local names. But in such a case as the one treated in the article reviewed above, the conclusion is surely safe enough to deserve presentation in systematic terminology in an opening statement; and the local readers are probably only a small minority of the many far-away students who will profit from Lawson's excellent work. W. M. D.

REPORT OF THE GEOLOGICAL EXPEDITION OF HON. CHARLES H. MORRILL. SEASON OF 1906

THE MORRILL geological expedition of the University of Nebraska for the season of 1906 continued the work of the previous season by developing the bone quarry on University Hill, at Agate, Sioux County, Nebraska. This quarry is situated on the eastern extremity of Mr. James Cook's ranch, which is an extensive one, and probably the best known in the state. In addition to the uplands it contains some ten square miles along the valley of the Niobrara. The high bluffs adjacent to and beyond this model ranch are fossiliferous, while at Carnegie Hill and University Hill there are literal bone beds. The discovery of these beds was made some twenty years ago by Mr. James Cook. They were first visited by the Morrill geological expedition of 1892, when a considerable number of bones were collected, several of which have

been figured in the 'University Studies,' January, 1897, plate 1, Figs. 5, 6, 7.

Pursuant to invitations from Mr. Cook, the Morrill geological expedition of 1905 spent that summer developing the bone quarry on University Hill. During the summers of 1905 and 1906 the members of the exploring party enjoyed all the privileges and hospitalities of this famous ranch. The members of the party for 1906 were: Harold J. Cook, Eck F. Schramm, Edwin Davis and Paul Butler, students in the University of Nebraska. As in former expeditions the writer was in charge.

By the judicious use of dynamite large amounts of overlying rock were removed and a broad surface of the bone-bearing layer exposed. A large number of bones, jaws and skulls were secured, all being for the most part in a fine state of preservation.

The prize specimens of the season were two large slabs cut from the bone-bearing layer and shipped bodily. They are literally packed with bones and jaws, which will be worked out but not removed from their original position. When done they will be placed on exhibition intact, to illustrate fossil bone beds. The bones of *Moropus* and *Diceratherium* are so abundant in this quarry that they far outnumber all else. Of the rare *Moropus* the Morrill collections now have enough material for a complete restoration. There was found to be considerable variation in the size of *Moropus* bones, some being of elephantine size. Of *Diceratherium* a great number of bones and jaws, but no good skulls were secured.

In August the writer, accompanied by Mr. Harold Cook, spent ten days exploring and collecting relics in and around the 'Spanish Diggings' west of the Rawhide range in Wyoming, where among other things over a thousand stone implements were procured. A few weeks later the writer again visited this spot in company with Dr. M. H. Everett and Edwin Davis at the invitation of Mr. Thomas Black of Willow, Wyo., who not only entertained the expedition in a most hospitable manner but provided teams and conveyance. A wide area was explored and many specimens and implements added to the previous lot. Later a third trip was made to this region by Dr. Everett, who secured additional specimens and data of value. A mild fall, free from the hindrances of rain and snow, has made the continuance of field work possible to the present date. Several days were spent by the writer, accompanied by Dr. George E. Condra, Edwin Davis and Paul Butler, excavating the mound recently discovered by Mr. Robert F. Gilder of Omaha, many human remains of a primitive order being secured. Among miscellaneous acquisitions of the year may be mentioned the skeletons of four modern elephants, camels, bear, etc., secured early in the season by Mr. Henry Eakin.

The Morrill collections will be moved into their new fire-proof quarters the latter part of December, and more than one hundred tons of material now boxed and stored in the basements of various buildings and the steam tunnels on the campus will be placed on exhibition. The benefactions of Hon. Charles H. Morrill make these expeditions possible, and it is planned to greatly increase their extent and scope each year.

Erwin H. Barbour
The University of Nebraska,
December 6, 1906

THE NATIONAL GEOGRAPHIC SOCIETY

Addresses have been arranged as follows:

January 18.—'Camping Expeditions in the Canadian Rockies,' by Mr. Howard Du Bois.

January 25—'Bolivia—a Country without a Debt,' by the Bolivian Minister, Señor F. Calderon. Illustrated.

February 1—'The Rising Pacific Empire,' by Hon. George C. Perkins, U. S. Senator from California.

February 8—'The Guianas,' by Prof. Angelo Heilprin, of Yale University. Illustrated.

February 15—'Ten Years of Polar Work; or, What We Know and What We Want to Know,' by Mr. Herbert L. Bridgman, Secretary of the Peary Arctic Club. Illustrated.

February 19—'Two Thousand Miles in the Saddle through Colombia and Ecuador,' by Hon. John Barrett, U. S. Minister to Colombia. Illustrated.

March 1—'Santo Domingo and Haiti,' by Rear Admiral Chester, U. S. Navy. Illustrated.