

LELAND STANFORD JUNIOR UNIVERSITY :

To the Friends of Stanford University :

The undersigned, members of the University Council [professors and associate professors] of the Leland Stanford Junior University, in view of the numerous publications following upon the resignation of Professor Ross, which reflect on the University and its founder, and on our connection with it, deem it wise to issue the following statement.

In doing this we do not impeach the good faith of those who have interested themselves in this matter because of the question of university policy involved, but we wish to affirm our confidence in the University, its founder and its president.

We have examined all records, letters and copies of letters in the possession of the University bearing upon this case, and are agreed :

1. That in the dismissal of Professor Ross, no question of academic freedom was involved.

2. That in the dismissal of Professor Ross, President Jordan was justified.

J. C. BRANNER, *Professor of Geology.*

O. P. JENKINS, *Professor of Physiology and Histology.*

MELVILLE B. ANDERSON, *Professor of English Literature.*

J. M. STILLMAN, *Professor of Chemistry.*

FERNANDO SANFORD, *Professor of Physics.*

CHAS. D. MARX, *Professor of Civil Engineering.*

CHARLES H. GILBERT, *Professor of Zoology.*

DOUGLAS HOUGHTON CAMPBELL, *Professor of Botany.*

EWALD FLÜGEL, *Professor of English Philology.*

CHAS. B. WING, *Professor of Structural Engineering.*

FRANK ANGELL, *Professor of Psychology.*

W. R. DUDLEY, *Professor of Botany.*

A. T. MURRAY, *Professor of Greek.*

JULIUS GOEBEL, *Professor of Germanic Literature and Philology.*

NATHAN ABBOTT, *Professor of Law.*

JOHN E. MATZKE, *Professor of Romanic Languages.*

GEORGE M. RICHARDSON, *Professor of Organic Chemistry.*

JAMES O. GRIFFIN, *Professor of German.*

WALTER MILLER, *Professor of Classical Philology.*

RUFUS L. GREEN, *Professor of Mathematics.*

O. L. ELLIOTT, *Registrar.*

VERNON L. KELLOGG, *Professor of Entomology.*

LIONEL R. LENOX, *Professor of Analytical Chemistry.*

A. G. NEWCOMER, *Associate Professor of English.*

ARTHUR B. CLARK, *Associate Professor of Drawing and Painting.*

F. M. MCFARLAND, *Associate Professor of Histology.*

CLEM. A. COPELAND, *Associate Professor of Electrical Engineering.*

G. C. PRICE, *Associate Professor of Zoology.*

J. C. L. FISH, *Associate Professor of Civil Engineering.*

H. C. NASH, *Librarian.*

ELLWOOD P. CUBBERLEY, *Associate Professor of Education.*

GUIDO H. MARX, *Associate Professor of Mechanical Engineering.*

GEORGE A. CLARK, *Secretary to the University.*

JAMES P. HALL, *Associate Professor of Law.*

OLIVER M. JOHNSTON, *Associate Professor of Romanic Languages.*

GEORGE J. PEIRCE, *Associate Professor of Botany.*

HERMAN D. STEARNS, *Associate Professor of Physics.*

STANFORD UNIVERSITY, CAL.,

March 18, 1901.

CURRENT NOTES ON PHYSIOGRAPHY.

TOPOGRAPHIC ATLAS OF THE UNITED STATES.

THE second folio of this atlas, prepared like the first by Gannett, includes some striking topographic types. The Dismal swamp (Norfolk sheet, Va.) is given as an example of a coast swamp; discharge of its waters is prevented by the abundant vegetation on the flat uplands of a low coastal plain whose surface has been somewhat dissected and whose shore line has been extended inland by a slight submergence which has drowned many valleys. A number of the branching bays are headed by valley swamps of a different type from those of the plain. The lower Missouri is given as an

example of graded river (Marshall sheet, Mo.); that is, "its course has been eroded to almost as low a stage as possible, and its slope has become very slight, so that its cutting power is trifling." Reference to the balanced relation of load and carrying power might have here been made to advantage. There is perhaps some objection to citing the Missouri as an example of a normally graded river, as it is probable that the present Missouri has established its flood plain by aggrading rather than by degrading the valley floor. The Platte river (Lexington sheet, Neb.) is instanced as an 'overloaded' stream, of which class it is certainly a very striking example; but it is to be regretted that, as the term 'graded' was adopted for the Missouri, 'aggraded' or 'aggrading' was not employed for the Platte.

The linear Appalachian ridges are beautifully shown where the Susquehanna cuts across them (Harrisburg sheet, Pa.), types of their class for the world. The text of this example is somewhat less satisfactory than that of the others: tributaries are said to cut down their beds more rapidly than the main river; the sinuities of the side streams are ascribed to the retarded erosion of the Susquehanna across the hard rocks, instead of to the pause in uplift, during which the inter-ridge lowlands were etched out; indeed, no explicit mention is made of these lowlands as local weak-rock peneplains, although the extraordinary enclosed meanders of Conedoguinet creek are referred to a time when the Susquehanna was 'held at one level for a considerable period'; 'subsequently, by some means, the river succeeded in lowering its bed' and its tributary followed suit. 'By some means' might be well replaced by 'after an uplift.' The diagram giving a section of some of the ridges does not properly represent the dip of their strata, and the Medina formation is labelled Potsdam. Finer examples than the alluvial fans ('cones') of southern California and the huge basin of Crater lake in Oregon could not be selected for the closing numbers of this folio, which contains ten sheets in all.

TERRACES FRONTING THE ROCKY MOUNTAINS.

At various points piedmont to the Front range of the Rocky mountains in Colorado, there are

sloping gravel-covered plains or mesas, into which the streams have cut their valleys. Lee describes some of these (The origin of debris-covered mesas of Boulder, Colorado. *Journ. Geol.*, VIII, 1900, 504-511, 4 figs.) and emphasizes the contemporary date of the graded piedmont surface, beveled across the underlying rocks, and the deposits of coarse waste with which it is covered; both are the product of the lateral shifting of streams, cutting on one side and filling on the other; the waste, 25 to 50 feet in thickness, being chiefly a flood deposit. The present action of the stream at Boulder in its channel and on its flood plain imitates the former action by which the intermediate mesa terrace and the higher mesa were produced. It is suggested that the three grade plains thus indicated "do not seem necessarily to require the assumption of any change in the attitude of the land subsequent to the elevation of the mountains, but are the natural sequences of erosion as influenced by the local distribution and difference in hardness of the formations involved." A gradual down-cutting with an active lateral shifting appears to account for the features described.

THE FORMATION OF DESERTS.

'Das Gesetz der Wüstenbildung in Gegenwart und Vorzeit' (Berlin, 1900, 175 p., 50 views) is a new work by Walther, already known for his studies of desert denudation. The book opens with a comparison of sea floors and desert surfaces; each one becomes smoother by filling with waste from the enclosing highlands, the coarser waste remaining near the margins; but the deposits in one contain few records of life, while those of the other may teem with fossils. Special accounts are given of the process and results of dry weathering, of wind erosion (deflation) and of water action in arid regions. The forms assumed under these processes are well described and illustrated. Rock ledges are left bare, frequently with a pitted surface; they are sometimes found worn down to a small relief and strewn with a scanty covering of waste. The popular impression that deserts are plains is held to be not so far from the truth as is sometimes taught, since so large a part of arid landscapes is degraded

or aggraded to a nearly even surface. The crescentic sand-dune is taken as a normal form on an open surface. The necessity of a former pluvial period to explain the wadies of deserts, as stated by some writers, is doubted; and in spite of the violence of occasional cloud-burst floods, the chief agency in the preparation of desert topography is held to be the wind; a conclusion that seems to have been long familiar to the Bedouin, just as the transportation of erratics by a former extension of glaciers has long been known to Swiss peasants. The importance of identifying ancient desert formations in the geological series is emphasized.

Although peneplanation under arid conditions is not excluded from the Walther discussion, the systematic advance of the processes of arid denudation through an ideal cycle and the description of the forms thus successively developed are not fully presented. Old and young deserts are not clearly separated. In some arid regions, the marginal deposits of the coarse waste rise upon the flanks of the enclosing mountains; in others a piedmont slope of evenly degraded rock, veneered with thin sheets of waste, slopes gently forward from the mountain base. The first is probably a younger form than the second; but no one has yet studied out the full series of still younger and still older forms of an arid landscape.

W. M. DAVIS.

THE AMERICAN GEOGRAPHICAL SOCIETY.

THE American Geographical Society will move into its new building in 81st Street, New York, in the course of the next two or three months. The Society has at present about 1,200 members and, to still further increase its numbers, has sent out a circular, from which we quote the following:

The objects of the American Geographical Society are: The collection, discussion and diffusion of geographical information; the promotion of the exploration of our territory and of the survey and preservation of our harbors; the establishment in the chief maritime city of the Union of a place where will be afforded the means of obtaining accurate information of every part of the globe, and the registration and careful record of discoveries and studies in geography and the related sciences.

The Society was founded in 1852. One of but twelve similar societies at that time, it now exchanges its publications with three hundred scientific associations scattered throughout the world.

The Society has outgrown the house, No. 11 West Twenty-ninth Street, in which it has been lodged for more than twenty years. A handsome fireproof building is now being erected in West Eighty-first Street, opposite Manhattan Square. This will afford perfect security to the library of 30,000 volumes—one of the foremost geographical libraries of the world—the thousands of maps and charts and the collection of atlases of the sixteenth, seventeenth and eighteenth centuries, now in the map rooms, and will also provide ample accommodation for readers and students.

Travelers, men of science, and others properly accredited, are welcomed at the rooms of the Society and freely offered the use of the library and collections.

The Society is now free from debt and possesses a property which has of late been steadily growing in value.

It is desired to add to the number of fellows on the roll in order to strengthen and extend the influence and the usefulness of the Society.

No special qualification for fellowship is required other than interest in the spread of knowledge and the advancement of science. The annual dues are \$10.

RESOLUTION OF THE COMMITTEE OF CENTRAL NATURALISTS.

At a meeting of the committee appointed by the Chicago meeting of naturalists to arrange for the next meeting, held at Chicago, March 28th, the following was voted. The vote has since been submitted to a number of the older members of the American Society of Naturalists living in the Central States and has been approved by them. It may, therefore, be taken to represent the prevailing sense of the naturalists of the Central States.

VOTED: Whereas, the naturalists of the Central States propose to meet annually at some convenient point for intercourse and the reading of papers;

And whereas, no point east of the Alleghenies (to which territory the meetings of the American Society of Naturalists are by its constitution confined) is practicable as such meeting point;

And whereas, the central naturalists would view with approval the formation of a national body which might properly be called the Amer-