inal or unaltered form, while secondary enlargement of sand grains is a diagenetic process and so belongs to the subject of metamorphism.

Primarily the question is one of the admissibility of the non-clastic or endogenetic granular deposits to the group of sands, even in a popular sense. We would hardly speak of a bed composed of *Stromatopora* heads as a boulder bed, although when subject to wear on the margin of a reef the original purely organic (biogenic) mass passes into a hydrorudyte. In like manner the purely biogenic or hydrogenic granular or powdery accumulations (bioliths and hydroliths) may be transformed into clastics by one or another of the exogenetic agencies. Thus a purely biogenic (phytogenic) or a chemical (hydrogenic) oolite may become an æolian or anemoclastic rock and the same is often true of foraminiferal or molluscan shell accumulations, as in the cases cited by Sherzer.

It would be advantageous if we could restrict the use of the term arenyte to sands of clastic origin, *i. e.*, destructional sands in which the texture is *arenaceous,* and use some such term as *granulite* for constructional sand rocks in which the texture is *granulitic.* Such sands of organic (biogenic) origin form *biogranulites;* of concentrational (hydrogenic) origin (chemically formed oolites), *hydrogranulites* or, as in the case of granular snow of atmospheric (atmogenic) origin, *atmogranulites. Pyrogranulites* may be taken as another type, illustrated by lapilli, which can not be considered as truly clastic as in the case of volcanic sand. Coarser-than-sand masses of endogenetic origin might be classed as *spherites,*[4] and finer as *pulverites.* We may thus speak of *biospherites* and *biopulverites, hydrospherites,* and *hydropulverites, pyrospherites* (volcanic bombs), etc., and should thus have our deposits of clastic and non-clastic materials classified by texture. Thus a *Stromatopora* bed or one made up of *Girvanella* would be a *biocalcispherite,* an organic oolite or a sand of small shells would be a *biocalcigranulite,* while common chalk would be classified primarily as a *biocalcipulverite.* A biocalcigranulite may be subject to wind action and so become a hydroclastic biocalcigranulite. It would ultimately pass into an anemocalcarenyte. It might be objected that such terms are too complex and difficult, but only a slight examination will show that they consist of logical combinations of a few easily comprehended terms. When understood, it will be conceded that such terms make for precision not only in expression, but also in thinking.

While I thus would urge the improvement of the terminology, I fully agree with Sherzer as to the principles on which his classification is based. I would merely again emphasize the importance of making a primary division into clastic (exogenetic) and non-clastic (endogenetic) sands and I would suggest the addition to the former of the division of bioclastic (chiefly the artificial sands) and to the latter the atmogenic snow and hail, and the pyrogenic sand or lapilli.

A. W. GRABAU
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[4] There is no danger of confounding this with the mineral sphærite.

SOCIETIES AND ACADEMIES

THE ANTHROPOLOGICAL SOCIETY OF WASHINGTON

THE 454th regular and annual meeting of the society was held in the hall of the Public Library, April 18, 1911, 8 P.M., with the president, Dr. Fewkes, in the chair. The following were elected officers for the ensuing year:

President—Mr. F. W. Hodge.
Vice-president—Dr. J. R. Swanton.
Secretary—Dr. T. Michelson.
Treasurer—Mr. J. N. B. Hewitt.
Additional Members of the Board of Managers—Messrs. G. C. Maynard, G. R. Stetson, E. T. Williams, W. H. Babcock and Dr. E. L. Morgan.

It was voted to hold bi-weekly meetings at 4:45 P.M. on Tuesdays in the new National Museum instead of once a month at 8 P.M. as formerly; evening meetings to be held as the board of the society shall desire.

There was a joint meeting of the Washington Anthropological Society and the Medical Society of the District of Columbia at the New Masonic Temple on May 3, 1911, at 8 P.M. with Dr. Barton, president of the Medical Society, in the chair.

Drs. Hrdlička and Lamb each read a paper and exhibited specimens illustrating the diseases of pre-Columbian inhabitants of the western hemisphere. Dr. Hrdlička's paper was based on his explorations in Peru. The speaker pointed out that among the skeletal material there was not a single instance of rachitis. There was one case which may have been tuberculosis, but the evidence was not absolutely conclusive and the age of the grave (at Chicama) was unknown. Two burials were encountered in which the bones were undeniably syphilitic, but both these graves were among the more recent and likely post-Columbian. Thirty other long bones had more or less marked inflammatory alterations which might have been syphilitic, but the diagnosis could not be made with certainty. An examination of the many thousands of long bones determined that a very large majority of them had no lesions whatever. Only two of the 3,400 skulls brought away, presented a case of ulceration or a lesion that could be attributed with confidence to syphilis. In the Chicama cemeteries and to a lesser extent in those of Pachamac, there was marked rarity in the fractures of bones. The setting was generally defective. The wounds of the skull, especially at Pachamac, were very numerous. There was but one positive case of trephining, at Pachamac; but there were several skulls in which it is impossible to say whether they are examples of partially healed wounds from clubs or scars from trephining.

Dr. Lamb's paper was based on the collections of the Army Medical Museum. The specimens numbered nearly 250 and with few exceptions were abnormal, showing some anomaly, disease or injury. They come from the United States, Alaska and Peru. Anomalies such as the olecranon perforation, pilasteric femur, platyknemic tibia and deep channelling of the concave surfaces of the bones of the forearm and leg, were abundant, suggesting always a primitive people or a people of low type. There are many fractures, usually well healed but with deformity; among them two showing false joints. Many of the specimens had inflammation of the bone, hyperostosis, exostosis, osteomyelitis, osteitis deformans; and a few dislocations. Some showed bone syphilis, but none tuberculosis.

Both papers were discussed at length. Among the speakers were Drs. Lamb, Kober, La Gard, Carr, Shands, Michelson.

T. Michelson,
Secretary

The Society of Research Workers in Experimental Biology and Medicine, Washington, D. C.

The last meeting of this society for the season was held on May 27, 1911, at the University Club.

On this occasion Dr. William Salant, chief of the Division of Pharmacology, Bureau of Chemistry, U. S. Department of Agriculture, read a paper, "On the Action of Drugs under Pathological Conditions." Particular emphasis was placed on the fact that the present-day method of determining the action of drugs upon normal animals does not always show how the drug under examination will act under pathological conditions.

This meeting closed the third year of the existence of this society, which is comprised of members of the various scientific laboratories in Washington, D. C. (U. S. Public Health and Marine Hospital Service, the Bureaus of Chemistry, Plant Industry, Soils and Animal Industry of the U. S. Department of Agriculture, the Geophysical Laboratory of the Carnegie Institution and the U. S. Naval Medical School), and which has no regular officers except the chairman, who is chosen for each season. Dr. Heinrich Hasselbring, of the Bureau of Plant Industry, U. S. Department of Agriculture, has been elected as chairman, vice Salant, for the coming year.

Lewis W. Fetzer

The American Chemical Society New York Section

The ninth regular meeting of the session of 1910–11 was held in Rumford Hall on June 9. Professor Chas. Baskerville in the chair.

The following papers were presented:

"Determination of Copper: a Modification of the Iodine Method," E. C. Kendall.

"Report of the Sub-committee on Glycerine Analysis," A. C. Langmuir.

"Consistency of Paint by the Stormer Viscosimeter," Allen Rogers.

"Fish Oil as a Paint Vehicle," Maximilian Toch.

"Studies on the Reduction of Ferric and Ceric Salts" (read by title), Morris Loeb and S. R. Morey.

"An Equilibrium in the Cobaltamines," A. B. Lamb and J. W. Marden.

"Chemistry of Anæsthetics. IV., Chloroform," Chas. Baskerville and W. A. Hamor.

C. M. Joyce,
Secretary