hibited and described several skulls from ancient graves in the Kekchi district of Guatemala, brought by Mr. Dieseldorf. They were deformed to an unusual degree, to an extent, indeed, not equalled elsewhere in America. The method of deformation was like that of the Natchez Indians, the forehead flattened and pushed back and upward. Just this deformity is seen on many of the Mayan art works, and instead of being caricatures such are regarded by Professor Virchow as actual imitations of this custom of malformation.

They were very fragile, indicating a high antiquity, and the objects associated in the tombs whence they were derived showed them to be pre-Columbian in age. It will be remembered that from these tumuli Mr. Dieseldorf obtained some of the most artistic pottery products known in America.

NATIVE AMERICAN STRINGED INSTRUMENTS.

THIS subject is again discussed in a brief article by Professor Otis T. Mason in the *American Anthropologist* for November last. His conclusion is as follows: "After looking over the musical collection of the United States National Museum and such literature as has been collected by the Bureau of American Ethnology I have come to the conclusion that stringed musical instruments were not known to any of the aborigines of the western hemisphere before Columbus."

While the opinion of one so competent as Professor Mason on this subject demands the utmost respect, some of the examples which I quoted in the *American Antiquarian* (January, 1897) are not considered by him, and seem to present a moderate amount of evidence that the musical string was not wholly unknown to the American race by independent discovery.

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NOTES ON INORGANIC CHEMISTRY.

IN a recent *Comptes Rendus* Moissan calls attention to the fact that calcium carbid is a powerful reducing agent, and hence, when in a fused condition at a high temperature, can furnish, by double decomposition, a number of new compounds. When acting on metallic oxids the metal may be obtained in a free state, or if it is capable of uniting with carbon a carbid is formed. By this reaction Moissan has prepared crystallized carbids of aluminum, manganese, chromium, molybdenum, silicon, etc.

ACCORDING to the *Journal de Pharmacie et de Chimie*, Dutremblay and Lugan expect to make a commercial success of the manufacture of oxygen by the manganate method. The process consists of decomposing manganates of the alkalies by steam at 500°, and then regenerating the manganates by heating in a current of dry air. This process was used by Tessié du Motay some thirty years ago, but afterward abandoned, owing to the caking of the charge and evaporation of the soda, there being great danger of explosions. It is hoped these dangers have been now overcome, and that the process will be a success.

A CAREFUL study of the valence of glucinum by Arthur Rosenheim and Paul Woge appears in the *Zeitschrift für Anorganische Chemie*. A considerable number of double oxalates and tartrates of glucinum and alkalies was prepared, and in all glucinum shows analogy with the bivalent and never with the trivalent metals. The same is true in its molybdate and in the double glucinum alkali sulfites. A more exact proof of its bivalence was shown by the determination of the molecular weight of the chlorid by the boiling-point method, pyridin being used as a solvent. The molecular weight corresponded to the formula $GlCl_2$. The conclusion of the authors is that glucinum is bivalent, and is

rightly placed in the second group of the periodic table, thus confirming the generally accepted views of chemists.

J. L. H.

SCIENTIFIC NOTES AND NEWS.

INTERNATIONAL CONGRESS OF ZOOLOGY.

AT the meeting of the International Congress of Zoology at Leyden, in 1895, it was agreed that the Fourth Congress should be held in Great Britain, and that the President should be Sir William Flower, K.C.B., F.R.S. As we have already announced, the Permanent Committee of the Congress accepted an invitation to assemble at Cambridge in August, 1898. Sir W. Flower was compelled to resign on account of ill health and Sir John Lubbock was unanimously selected in his place.

The seat of an ancient University, which counts among its alumni distinguished zoologists from the days of Ray and Willughby to those of Charles Darwin and Francis Balfour, seems to offer a peculiarly fit meeting-place for the Congress on its first visit to the British Islands, and the Reception Committee, including the present representatives of zoological science in Cambridge, offer a cordial welcome to their brethren at home and abroad.

The officers of the Congress are: *President*, Right Hon. Sir John Lubbock, D.C.L., F.R.S.; *Vice-Presidents*, The Vice-Chancellor of the University of Cambridge, Mr. W. T. Blanford, LL.D., F.R.S., Sir W. H. Flower, K.C.B., D.C.L., F.R.S., President of the Linnean Society (Dr. A. Günther), Professor E. Ray Lankester, LL.D., F.R.S., Professor A. Newton, F.R.S., Mr. P. L. Sclater, F.R.S., President of the Entomological Society (Mr. R. Trimen), Sir William Turner, F.R.S., Lord Walsingham, LL.D., F.R.S.; *Treasurers*, Professor S. J. Hickson, F.R.S., Mr. P. L. Sclater; *Secretaries*, Professor F. Jeffrey Bell, M.A., Mr. G. C. Bourne, M.A., Mr. A. Sedgwick, M.A., F.R.S., and a large general committee.

The Executive Committee, appointed by the General Committee at their meeting on November 4th, have now made the necessary preliminary arrangements for the holding of the Congress in August next. The Reception Committee hope to avail themselves largely of the facilities offered by the several colleges of Cambridge for the accommodation and entertainment of their visitors, while there is assurance that the more suitable of the public buildings of the University will also be placed at their disposal for the same purposes.

The International Congress of Physiology is to meet in Cambridge concurrently with that of Zoology, and certain arrangements will be made in common, though there is no intention of uniting the two Congresses, each of which will retain its distinct organization.

The Secretary has issued an appeal for funds that will be necessary to carry out the purposes of the Congress. Some members of the Executive Committee and others have already intimated their intention to make donations, and a list of these will be found below. Cheques should be sent to P. L. Sclater, Esq., F.R.S., or Professor Hickson, F.R.S., the Hon. Treasurers, at 3 Hanover Square, London, W.

DONATIONS ALREADY PROMISED.

	£.	s.	d.
Right Hon. Sir John Lubbock, Bart, M.P...	50	0	0
Hon. Walter Rothschild.....	50	0	0
A. Peckover, Esq.....	50	0	0
Sir William Flower, K.C.B., D.C.L., F.R.S.	25	0	0
The Lord Powerscourt.....	5	0	0
The Lord Walsingham, F.R.S.....	5	0	0
P. L. Sclater, Esq., F.R.S.....	5	0	0
Howard Saunders, Esq.....	3	3	0
R. Trimen, Esq.....	3	3	0

GENERAL.

HON. CARROLL D. WRIGHT, United States Commissioner of Labor, has received a cable dispatch announcing his election as a member of the Institute of France. He has also been elected an honorary member of the Imperial Academy of Science of Russia.

WE learn from the Philadelphia *Medical Journal* that a portrait of the late Dr. Theodore G. Wormley, professor of chemistry and toxicology in the medical department of the University of Pennsylvania, has been subscribed for by the students of the medical, veterinary and dental departments of the University, and by members of the faculty. It is to be formally presented to the Board of Trustees at the next commencement of the University.