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# MISCELLANEOUS DOCUMENTS

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Scientific Session.

Held at Newport, R.I., October 14 to 17, 1884.

A scientific session, for the reading of papers only, having been called by the council, as announced at the April session, the Academy convened at the court house, Newport, R.I., on October 14, 1884.

The president, Prof. O.C. Marsh, presided.

The following members were present during the session:

Langley. Powell. Abbot. Cope. Pumpelly. Marsh. Brewer. Dana. Rogers. Brush. Gibbs, W. Morse. Coffin. Packard. Scudder. Hall, A. Walker. Comstock. Hilgard, J.E. Peirce. Hill, Henry B. Cooke. Peters.

The following gentlemen were invited to attend the meetings and to take part in the scientific proceedings: Prof. Edw. B. Tylor, of Oxford, England; Dr. W. Valentiner, director of the observatory at Karlsruhe, Germany; Hon. George Bancroft; Lieut. A.W. Greely, U.S.A. The following papers were read and discussed:

- 1. Cope, E.D.---On the Columella Auris of the Polycosauria. Discussed by the president.
- 2. Packard, A.S.---The Brain of Asellus and the Eyeless Form of Cecidotaea. Discussed by Messrs. Scudder, Packard, and Brewer.
- 3. Gibbs, Wolcott.---On the Theory of Atomic Volumes. Discussed by Mr. Peirce.
- 4. Gibbs, Wolcott----On the Complex Inorganic Acids.
- 5. Rogers, Fairman.---Notice of Muybridge's Experiments on the Motions of Animals by Instantaneous Photography. Discussed by Messrs. Brewer, Cope, Powell, Rogers, and the president.
- 6. Rogers, Fairman.----Notice of Grant's Difference Engine. Discussed by Messrs. J.E. Hilgard, A. Hall, Rogers, Peters, Coffin, and Comstock.
- 7. Dana, E.S.---On the Thinolite of Lake Lahontan. Discussed by the president and Mr. Brewer.
- 8. Pumpelly, R.---On the Mesozoic Coals of the Northwest. Discussed by Mr. Powell.
- 9. Pumpelly, R.---On the Work of the Northern Transcontinental Survey. Discussed by Mr. Powell.
- 10. Brewer, W.H.---The Grasses Mechanically Injurious to Live Stock. Discussed by Messrs. Powell, Brewer, Cope, Peters, and the president.
- 11. Peirce, C.S.---On Gravitation Survey.
- 12. Peirce, C.S., and Jastrow, J.---On Minimum Differences of Sensibility. Discussed by Mr. Powell.
- 13. Peters, C.H.F.---Researches on Ptolemy's Star Catalogue.
- 14. Powell, J.W.---On the Operations of the United States Geological Survey.
- 15. Hall, A.---The Motion of Hyperion.
- Tylor, E.B. (by invitation of the Academy).---Remarks on the Civilization of the Native Peoples of America. Discussed by Messrs. Powell, Cope, J.E. Hilgard, and Brewer.
- 17. Verrill, A.E.—Some Results of the Exploration of the Deep Sea beneath the Gulf Stream by the United States Fish Commission Steamer Albatross, during the past Summer. Read by Mr. Pumpelly.

- 18. Abbot, H.L.---Recent Progress in Explosives. (Read by title.)
- Pumpelly, R.---On an Experimental Composite Photograph of the Members of the Academy. Discussed by Mr. Brewer, the president, and Messrs. Powell, Cope, and Peirce.
- 20. Valentiner, W. (by invitation of the Academy).---Report on Meridian Work at Karlsruhe. Discussed by Mr. Peters.
- 21. Peirce, C.S.---On the Algebra of Logic. Discussed by Messrs. Powell and Peirce.
- 22. Langley, S.P.---On the Temperature of the Lunar Surface.
- 23. Morse, Edward S.---On the Methods of Eastern Archery.

Death of Members.

The President announced the death of the following members: Dr. J.J. Woodward, U.S.A., and Dr. R.E. Rogers.

The following members were appointed to prepare obituary memoirs:

Of Dr. Woodward: Dr. J.S. Billings.

Of Dr. Rogers: Mr. F. Rogers.

Since the October meeting, Prof. Benjamin Silliman has died at New Haven, Conn., January 14, 1885.

Death of Foreign Associates.

During the past year, two foreign associates, J.B. Dumas and Adolphe Wurtz, both of Paris, have died.

The scientific session closed October 17, 1884.

Special Session.

Held at Newport, R.I., October 15, 1884.

A special session the Academy having been called by the council, in accordance with Article III, section 1, of the constitution, the Academy convened in the court-house at Newport, October 15, 1884, the president, Prof. O.C. Marsh, presiding.

The president was authorized to include in his annual report to Congress, in addition to the detail of the regular proceedings of the sessions, the report of the committee on the organization of the National Surveys and Signal Service, the report of the committee on philosophical and scientific apparatus, reports upon any other business submitted to him during the current year, by the Government of the United States, and the report of the committee on publications of the Academy.