

**58 (11 January 1894) 30**

## NOTES

CSP, identification: MSS 1310, 1581. See also: Burks, *Bibliography*; Fisch and Haskell, *Additions to Cohen's Bibliography*.

A work in twelve volumes, each distinct, is contemplated (and partly executed) by Mr. Charles S. Peirce, member of the National Academy of Sciences. Its full title reads: 'The Principles of Philosophy; or, Logic, Physics, and Psychics, considered as a Unity, in the light of the Nineteenth Century.' The first volume, which is ready for the press, will be 'A Review of the Leading Ideas of the Nineteenth Century.' Mr. Peirce also issues a prospectus of a limited edition, now in course of printing, in two colors on hand-made paper, at the De Vinne Press, of 'The Epistle of Pierre Pelerin de Maricourt to Sygur de Foucaucourt, Soldier, On the Lodestone.' The original treatise dates from 1269, and "occupies a unique position in the history of the human mind, being without exception the earliest work of experimental science that has come down to us." The transcript of Peter Peregrinus's text has been made afresh from a contemporary MS. in the Paris Library, and is reproduced in black-letter together with a translation and notes. Subscriptions for either work should be addressed to Mr. Peirce at Milford, Pa.

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The note on Langley's *Internal Work of the Wind* at 58 (22 February 1894) 139 is very likely by Peirce. That note refers to this notice. Hence this piece is probably authored by Peirce. This item is unassigned in Haskell's *Index to The Nation*, vol. 1.

Samuel Pierpont Langley (1834-1906) was a pioneer in aviation, although he is perhaps better known for his solar studies. For several years, Langley served as secretary of the Smithsonian Institution, where he and Peirce often conversed. In 1887, he began a series of studies of air currents for experiments on the lifting force and resistance of plane surfaces set at different angles. The results of this labor were published later as *The Internal Work of the Wind*, and were reviewed by Peirce [58 (22 February 1894) 139]. During the 1890's, Langley built a number of model flying machines to demonstrate mechanical flight, and in 1898, the United States Army appropriated \$50,000 for the construction of such a machine to carry soldiers. A test run was scheduled for 8 December 1903, but, due to the malfunction of some minor part, the flight failed, and Langley was ridiculed by the press. Nine days later, near Kitty Hawk, North Carolina, the Wright brothers achieved the first manned flight. Ironically, in 1914 Glenn Curtis flew Langley's rejected machine over Lake Keuka, New York, in a long flight without trouble.

"The Internal Work of the Wind," or the want of uniformity and consistency in the movement of the wind stream, its gusty and intermittent character, and its consequent utilization by birds in soaring to maintain themselves without exertion of the wings, was the subject of a paper by Prof. S. P. Langley, read at Chicago before the International Conference on Aerial Navigation in August last. It was perhaps as original and important as any delivered in all the series of congresses, and one may now read it in the January issue of *Aeronautics*, the "annex" of the *American Engineer and Railroad Journal* of this city. In connection with it