mathematical computation. The present volume surpasses all the others in detail as in size. It is preceded by a very interesting chapter on the principal facts relating to the earth's magnetism, in which a complete but succinct history of the discovery of all the phenomena observable in the lodestone and magnetized needle, the invention of the compass and its improvement, and the reproduction of the earlier and some of the later isogonic charts from Hansteen for 1600 and 1800, Halley for 1700, and the British Admiralty for 1858 and 1905. The book is filled with descriptions of the magnetic stations by States and tables of observations, and well illustrated by half-tones of the former and of the instruments of the past and present. F.

Franklin Institute.

[Proceedings of the stated meeting, held Wednesday, June 15, 1904.]

HALL OF THE FRANKLIN INSTITUTE,

PHILADELPHIA, June 15, 1904.

PRESIDENT JOHN BIRKINBINE in the chair.

Present, 145 members and visitors.

Additions to membership since last report, 13.

Rear-Admiral Geo. W. Melville, U. S. N., was introduced by the President and read the paper of the evening on "The Naval Strength of the United States."

The President expressed the thanks of the meeting to the speaker.

Mr. Julian Florian, of New York, gave a brief description of "The Cellulotype," an improved apparatus and process for the production—automatically—of positive photographs. The inventors are Messrs. Julius Gregory and Julian Florian. The speaker illustrated the subject of his remarks by a number of practical demonstrations with the machine.

Adjourned.

WM. H. WAHL,

Secretary.

Committee on Science and the Arts.

(Abstract of the proceedings of the stated meeting, held Wednesday, June 1, 1904.)

PROF. LEWIS M. HAUP in the chair.

The following reports were adopted:

(No. 2320) *Tent Fastening.* James J. Rinn, Philadelphia.

ABSTRACT: The invention consists in the use of rigid strips fitted with a simple form of catch to hold them securely together for the purpose of fastening entrances to tents. The device was shown in model for use both on the ordinary round (or bell) tent and on the wall or A tent.

The invention is secured by letters-patent of the United States Nos. 528,391, 2, 3, and 4, under date of October 30, 1894, granted to applicant.