- 'The Plumages of the American Gold-finch (Spinus tristis)': JONATHAN DWIGHT, JR.
- 'Routes of Bird Migration across the Gulf of Mexico': W. W. Cooke.
- 'On Methods in Museum Bird Exhibits': Frank M. Chapman.
- 'Ornithological Notes from Northern New Hampshire': John N. Clark.
- 'Some Impressions of Texas Birds': Louis Agassiz Fuertes and H. C. Ober-Holser.
- 'The White-winged Crossbill in Captivity': James H. Hill.
- 'The American and European Herring Gulls': J. A. Allen.
  - 'Auduboniana': RUTHVEN DEANE.
- 'The Molts and Plumages of the North American Ducks (Anatida)': JONATHAN DWIGHT, JR.
- 'A Naturalist in Yucatan,' illustrated by lantern slides: E. W. Nelson.
- 'Photography in North Dakota Bird Colonies,' et cetera, illustrated by lantern slides: Herbert K. Job.
- 'A Reconnaissance in Manitoba and the Northwest,' illustrated by lantern slides: Frank M. Chapman.
- 'Are Humming Birds Cypseloid or Caprimulgoid?' Hubert Lyman Clark.
- 'List of Birds of Wequetonsing, Mich.': OTTO WIDMANN.
- 'Notes on the Ornithological Observations of Peter Kalm': Spencer Trotter.
- 'Report of the Committee on the Protection of North American Birds': WITMER STONE.
- 'Results obtained under the Thayer Fund': WILLIAM DUTCHER.
- 'National Bird Protection—Its Opportunities and Limitations': T. S. PALMER.
- 'Gulls of the Maine Coast, and Miscellaneous Notes,' illustrated by lantern slides: Wm. Dutcher and Wm. L. Baily.
- 'Some Results of Bird Protection,' illustrated by lantern slides: Frank M. Chapman.

The next annual meeting will be held in Washington, D. C., commencing November 17, 1902.

JOHN H. SAGE, Secretary.

## JOSEPH HIRSCH.

THE biography of the late Joseph Hirsch, briefly sketched, is as follows:

Born May 22, 1836, of an old and wellknown family, characterized in all its branches by taste, refinement, and ability, and with a strong proclivity toward both art and engineering, he studied at the École Polytechnique and became an engineer of the Ponts et Chaussées, standing at the head of his class in line of promotion from the first. He served in Marseilles, Algiers and Alsacia, and accepted missions in Germany In 1861 he was engaged in and Austria. the construction of the Houillères de la Sarre canal, inventing, meantime, the ingenious syphon arrangement by which its level is automatically maintained. In 1867 he was assigned to special service relative to the work of improvement of the navigation of the Saone, and presently, on his marriage with Mlle. Dreyfus-Dupont, whose distinguished relatives in this country are so well known to all engineers and army and navy men, he secured indefinite leave from the Government and devoted himself to the study and investigations which so liberally offered themselves in connection with the great iron and steel works of his father-in-law. After the close of the Franco-German war, one of these establishments, on then German territory, was sold, and Hirsch erected new and modern works at Pompey, near Fruard. In this construction he introduced every modern appliance and made it a model of its kind.

The children of this fortunate union growing up, it was decided to take up residence in Paris, and for many years, No. 1, rue de Castiglione, was a center of social,

scientific and artistic life. Meantime, his two brothers had become famous, the one as artist, the other as architect, and aided in making the new life beautiful and profitable.

In 1876 Hirsch was appointed to the chair of 'The Steam Engine,' at the École des Ponts et Chaussées, and; until his retirement at the age limit in 1898, he steadily added to the fame of that great institution. After those twenty-two years of service, the Inspector-General reported:

"To great scientific knowledge he added from the first extensive practical information, the fruit of personal experience, which enabled him to conduct his course as a practitioner, as well as a savant, and thus to give it the character most appropriate to the École des Ponts et Chaussées."

At his retirement he distributed a considerable sum, 10,000 fr. for ten years, in prizes for students 'les plus méritants et le moins fortunés.' He 'gave much but with discretion; he took the trouble to give usefully.' Riches, in his view, created an indebtedness to his country and his people which he was always willing and glad to discharge.

Hirsch added to his work at the Ponts et Chaussées that of the department of Mechanics at the Conservatoire des Arts et Métiers (1886), and took great pleasure in directing its evening classes and teaching the crudely educated, as well as the well-prepared, pupils at the government school. In 1879 he was on the 'State Commission of Steam Engines'; in 1880 he had charge of the office of engineer-in-chief of the department of purchase and inspection of materials for the state railways. on the international juries of 1878, 1889 and 1900 in Paris, and in 1878 received the cross of Chevalier de la Legion d'honneur and, in 1900, that of Officier.

M. Hirsch published his course at the Ponts et Chaussées in the 'Encyclopédie des

travaux publics,' and, in its first volume, on the steam engine, had the assistance of M. Debize. His reports upon the machinery exhibited at the International Expositions appeared in the volumes officially issued from the government press.

As M. Dartein says: "Telles sont été les principales occupations et les travaux le plus notoires du savant ingénieur, du professeur accompli, du chercheur original, de l'homme de bien dans la plus haute acception de ce mot, qu'une mort subite vient d'arracher à la tendresse de sa famille et à l'affection de ses amis. \* \* \* Adieu, camarade et ami, ou plutôt au revoir : ta mémoire nous demeurerera chère et ton example nous restera utile."

An acquaintance of many years' duration permits the writer to speak with confidence in confirmation of the testimony given by his professional colleagues at the meetings of various societies after his death. In his home and in his private capacity he illustrated the noblest attributes of the gentleman and the scholar; serious yet always kindly and affectionate, giving and eliciting respect and affection, sweet reasonableness accompanying correct judgment and clear views of right and wrong, familiar yet dignified, provident yet liberal, as husband, father, friend, he was invariably and completely admirable. Professionally he was Practically experienced, technica leader. ally learned, cultured and efficient, he was a reliable adviser and director in his whole wide field of special work. He was admired, respected and honored by every client, as by every colleague.

His record, official, professional and private, stands a permanent memorial to the man.

R. H. Thurston.

## SCIENTIFIC BOOKS.

Les Variations de Longueur des Glaciers dans les Régions Arctique et Boriales. By CHARLES RABOT. Archives des Sci. Phys. et Nat. Geneva, 1897, 1899 and 1900.