tion without a teacher; but, for most students in such a situation, it is too expensive, while most of the teachers in advanced schools and colleges will prefer the finer plates of some of the foreign comparative anatomies, or the drawings to be found in the books of reference of the larger libraries. To teachers of zoölogy who have not such libraries at their command, or who, on account of ignorance of the language, are unable to use German text-books, the atlas would undoubtedly be a very great assistance.

## NEW METEOROLOGICAL JOURNALS.

Meteorologische zeitschrift. Herausgegeben von der Deutschen meteorologischen gesellschaft. Redigirt von Dr. W. KÖPPEN. Heft i., January. Berlin, Asher, 1884. 8°.

American meteorological journal. Edited by Prof. M. W. Harrington. Vol. i., no. 1, May. Detroit, Burr, 1884. 8°.

METEOROLOGY has received an impulse, both in Germany and America, by the almost simultaneous issue of a monthly meteorological journal in each of these countries. The two journals are intended, however, to cover different grounds, and so it will be necessary to state the position of each separately.

The Meteorologische zeitschrift has for its editor one of the greatest of living meteorologists, and it is intended to be a sort of co-laborer with the Austrian journal of meteorology. Much will be expected of this publication, and the first number leads us to believe that these expectations will be realized. In fact, but for the slight difference in appearance, one might think he was reading a number of its Austrian rival. We find such names as Neumayer, Zenker, Krankenhagen, Sprung, Van Bebber, and Köppen, appearing as contributors to this first number. Its first twenty-eight pages contain original communications, then come nine pages of correspondence and notices, then four pages concerning the founding of the society, followed by four pages of members of the German meteorological society, three pages of bibliography and book-notices, and two pages of plates. Although this January number is issued in April, yet the editor hopes to send out the successive numbers in such rapid succession, that after September they will appear at the proper time.

The American meteorological journal is edited by a professional astronomer, who has recognized the needs of American meteorologists, and is self-denying enough to offer his services for their benefit. From no journal of

this kind can one derive any pecuniary benefit; and it is the duty of meteorologists to help the editor, not only by communications, but also by subscriptions.

The matter of this first number of the journal is principally meteorological, and the topics treated are varied. The principal article is one on barometric waves of short period, and is by a well-known astronomer. In the early stages this journal will need the support of all astronomers and physicists who take an interest in meteorology, because we have not enough working meteorologists in this country to supply material enough to make the undertaking a success. Similar first steps taken in foreign countries have required this same aid.

Heretofore American contributions to our knowledge of meteorology have been scattered through various periodicals; but now they can be published together, and where they will be brought soonest to the notice of those inter-Although the editor will be forced to deal with the popular side of meteorology in order to make the journal readable to enough people to make the circulation large enough to pay the expenses, yet it is hoped that he will aim to make its scope as purely professional as There are so many journals devoted to meteorology now, that one can only read the most important articles in each; and quality is of greater importance than quantity. The contents of this American journal are divided as follows: editorial notes; current notes; original communications; translations, etc., distributed over forty pages.

## THE STUDY OF HEREDITY.

Life-history album, prepared by direction of the collegiate investigation committee of the British medical association. Edited by Francis Galton, F.R.S. London, Macmillan, 1884. 8+172 p., 8 pl. 4°.

Record of family faculties; consisting of tabular forms and directions for entering data, with an explanatory preface. By Francis Galton. London, Macmillan, 1884. 4+68 p. 4°.

WE have become accustomed to look for care and thoroughness in Mr. Galton's work, and it is pleasant to say that the two volumes before us fulfil our expectations. We can but assign to them an uncommon importance; for it is indeed significant, that the novel duty of recording the biological history of ourselves, our parents, and our children, is thus made easy to us by Mr. Galton. It is mainly to his influence that we must trace the conviction of thoughtful and earnest minds that it is really a duty to record the characteristics of every