In the earliest stages in which they can be distinguished from body cells they all lie in two little round groups under the blastodermic rim in the posterior part of the embryo, and just at the junction of the three germ layers as well as in the endoderm itself.

During the growth of the embryo these clusters move inward from each side towards the median line. (Embryo of 3 mm.)

The cells then become separated from each other and are scattered in the unsplit mesoderm, though none are yet to be found in the segmented portion of the middle germ layer.

When the mesoderm splits, nearly all succeed in getting on the median or splanchnic side of the body cavity which is then formed.

From this time up to the period of sexual differentiation (embryo of 28 mm.) these cells migrate relatively to the other tissues so that they progressively lie just beneath, at the side of and then dorsalward to the intestinal tract. They then make their way through the mesentery in which most of the cells are found (embryos of about 11 mm.), and finally reach their destination in the epithelium of the genital gland.

During no part of this process are germcells ever derived from mesoderm cells, nor do they ever go into the formation of any part of the body.

They retain their yolk and other characteristics of the cells of the early blastoderm stage and it is the body-cells, not the germ-cells, that are differentiated.

Thus the hypothesis of Naussbaum that 'sex cells do not come from any cells that have given up their embryonic character or gone into building any part of the body, nor do sexual cells ever go into body formation,' finds a confirmation in facts.

Histological Changes in the Regeneration following Normal Fission of Planaria maculata: W. C. Curtis. (Read by title only.)

Variation in the Hepatic Ducts of the Cat: R. H. Johnson. (Read by title only.)

An Electric Lamp for Microscope Illumintion: Maynard M. Metcalf. (By title.) Will be published in full in Science.

> M. M. Metcalf, Secretary.

AMERICAN PHILOSOPHICAL ASSOCIATION.

The American Philosophical Association held its first meeting at Columbia University, New York, on Monday and Tuesday, March 31 and April 1, 1902. The Association may be regarded as a daughter of the American Psychological Association, to which fully three fourths of its nearly one hundred charter members also belong. For several years past the Psychological Association has provided for the reading of papers in general philosophy at its meetings by philosophical sections. This arrangement generously met a practical demand, but the relation was anomalous. The desire for more adequate recognition of the philosophical interests was met by the organization of the new Association at a conference held last November in New Professor J. E. Creighton (Cornell), editor of the Philosophical Review, was chosen president, Professor A. T. Ormond (Princeton), vice-president, Professor H. N. Gardiner (Smith), secretarytreasurer, and these, together with Professors Armstrong (Wesleyan), Duncan (Yale), Everett (Brown) and Hibben (Princeton), were constituted an executive committee to invite others to membership, to draw up a constitution and to arrange for the first meeting. The constitution adopted at the recent meeting defines the

object of the Association as 'the promotion of the interests of philosophy in all its branches, and more particularly the encouragement of original work among its members.' The relation of the Association to the previously established Western Philosophical Association was referred to the executive committee to report at the next meeting. The next meeting will be held in Convocation Week in Washington in affiliation with the other societies, part of the time, probably, in joint session with the Psychological Association. cers for the ensuing year are president, Professor A. T. Ormond (Princeton), vice-president, Professor, A. Meiklejohn (Brown), secretary-treasurer, Professor H. N. Gardiner (Smith), and the other members of the executive committee, Professors A. C. Armstrong (Wesleyan), J. G. Hibben (Princeton), W. Caldwell (Northwestern) and D. Irons (Bryn Mawr). following is the list of papers read at the recent meeting:

Monday, March 31.

- 'Poetry and Philosophy': Dr. RALPH BARTON PERRY.
- 'Recent Criticism of the Philosophy of T. H. Green': Professor WILLIAM CALDWELL.
- 'The Æsthetic Element in Human Nature': Professor E. Hershey Sneath.

2 P.M.

- 'Address of Welcome': President NICHOLAS MURRAY BUTLER.
- 'The Functional Theory of the Distinction between the Psychical and Physical': Professor H. HEATH BAWDEN.
- 'The Atomic Self': Professor George Stuart Fullerton.

8 р.м.

Address of the President. Subject, 'The Purposes of a Philosophical Association': Professor James Edwin Creighton.

Discussion on the Address: President Francis L. Patton.

Tuesday, April 1.

10 а.м.

'The Concept of the Negative': Dr. W. H. Sheldon.

- 'Being, Not-Being and Becoming: a Study in the Logic of Early Greek Philosophy': Professor ALFRED H. LLOYD.
- 'Aristotle's Theory of Reason': Professor WILLIAM A. HAMMOND.
 - 'On Final Causes': Dr. EDGAR A. SINGER, JR.
- 'On the Study of Individuality': Professor J. A. LEIGHTON.

2 р.м.

- 'The Consciousness of Obligation': Professor E. B. McGilvary.
- 'Kant and Teleological Ethics': Professor Frank Thilly.
- 'Epistemology and Ethical Method': Dr. Albert Lefevre.
- 'The Epistemological Argument for Theism': Professor Edward H. Griffin.
- 'The Philosophy of Religion: Its Aim and Scope': Dr. F. C. French. (Read by title.)

A pleasant feature of the meeting was the reception given to the members, about forty of whom were in attendance, by President and Mrs. Butler in the Avery Library on Monday evening. The thanks of the Association are also due to President Butler and the officers of the University for the admirable accommodations in Earl Hall.

H. N. GARDINER,
Secretary.

SCIENTIFIC BOOKS.

Inorganic Evolution as Studied by Spectrum Analysis. By Sir Norman Lockyer, K.C.B., etc. London, Macmillan and Co. 1900. Pp. vi+198; 44 figs.

The author states in his preface that this 'volume contains an account of my most recent inquiries into the chemistry of the stars, and of some of the questions which have grown out of these inquiries.' Dissociation is the main topic of the book, and the author makes the 'endeavor to show how, in the studies concerning dissociation, we have really been collecting facts concerning the evolution of the chemical elements,' and he points out 'especially that the first steps in this evolution may possibly be best studied by, and most clearly