

work on long-period variables begun at the observatory in 1889, when the list numbered seventeen stars, to the present time, when the list contains over three hundred; showing the progress that has been made in the methods of observing them.

The following members of Section A were elected as fellows: R. P. Baker, S. G. Barton, W. E. Brooke, Thos. Buck, Arthur Crathorne, R. T. Crawford, I. M. DeLong, C. E. Dimick, F. J. Dohmen, J. F. Downey, L. P. Eisenhart, J. C. Fields, B. F. Finkel, F. L. Griffin, A. G. Hall, C. N. Haskins, T. M. Holgate, J. I. Hutchinson, D. N. Lehmer, O. M. Leland, Wm. D. MacMillan, W. R. Marriott, C. N. Noble, J. A. Parkhurst, F. W. Reed, F. G. Reynolds, Charlotte A. Scott, A. W. Smith, R. M. Stewart, Joseph Swain. The section elected G. B. Halsted member of the council, E. R. Smith member of the sectional committee and H. W. Tyler member of the general committee. On recommendation of the sectional committee Professor E. H. Moore, Chicago University, was elected chairman of the section.

G. A. MILLER,

Secretary of Section A

UNIVERSITY OF ILLINOIS

SOCIETIES AND ACADEMIES

THE ANTHROPOLOGICAL SOCIETY OF WASHINGTON

THE 438th regular meeting of the society, held December 21, 1909, was devoted to a paper by Dr. I. M. Casanowicz on "The Alexander Legends in the Talmud and Midrash, with reference to Parallels in Greek and Assyrian Literature."

The passages in the rabbinical literature bearing on Alexander the Great may be divided into two sections: (1) those which refer to his relation to the Jews; (2) those which contain episodes of his expeditions and adventures.

The first part includes: (1) Alexander's meeting with the Jewish high priest. At the instigation of the Samaritans Alexander ordered the temple of Jerusalem to be destroyed; but being met by a procession of Jerusalem nobles, headed by the high priest, in whom he recognized the apparition which had walked before him in his victorious campaigns, he revoked the order and delivered the Samaritans into the power of the Jews. (2) The suits brought by several nations against the Jews before Alexander. The Canaanites brought action for the possession of the land of Canaan, as it admittedly was originally their fathers'. They were answered that as Canaan

was the servant of Shem he and his possessions were the property of his master. The Egyptians claimed back the gold and silver of which the Israelites despoiled them at the exodus. They were met by the counter claim of the wages for the service of the Israelites for four hundred and thirty years.

The second part embraces the following episodes: (1) Alexander's dialogue with the sages of the South. He addressed to them ten questions on cosmogonic and moral subjects, as: What was created first? Who is to be called wise? Who strong? Who rich? etc. (2) Alexander's penetrating into the land of the Amazons. They ward off his attack by suggesting to him that there will be little glory for him if he killed them, being women, but that he will make himself eternally ridiculous should he be killed by them. (3) Alexander's visit to Qacia. There he witnesses a suit before the king in which both litigants disclaim the ownership of a treasure. The king advises them to marry their children and give them the find. Alexander said he would have put the litigants to death and confiscated the treasure. The king of Qacia declared that if rain falls and the sun shines in Alexander's country it must be on account of the animals, for the men did not deserve these boons. (4) Alexander's experience at the gates of Paradise. He was there refused admission but given as a token a ball. He weighed against it all his gold and silver, but could not counterbalance it. The rabbis put a little dust upon the ball and the scale in which it was immediately went up. They explained to him that it was the eyeball of a man who was never satisfied. (5) Alexander's ascent into the air. He rose up in the air until the world appeared to him like a bowl and the sea like a chalice. (6) Alexander's descent into the depth of the sea. He caused some of his men to dive into the ocean in glass chests. When returned to the surface they reported to have heard the ocean sing: "The Lord is mighty on high."

Most of these narratives are also found in the Greek compilation of the Alexander legends known by the name of Pseudo-Callisthenes, where they are embellished with many accessory details and otherwise much modified. The episodes of Alexander's adventure at the gates of Paradise or, as in the Greek account, the fountain of life, and his ascent into the air also suggest parallels in the Assyro-Babylonian literature; the first in the Nimrod Epic, the second in the Etana legends. There is a great resemblance between the rab-

biblical and Greek accounts, pointing to a relationship between both. But the points of contact between the Assyro-Babylonian account, on the one hand, and the stories in Pseudo-Callisthenes and the Talmud on the other, are too vague and of a too general character to warrant the assumption of a direct relationship between them.

At the 439th meeting, January 4, 1910, Dr. Aleš Hrdlička, of the National Museum, exhibited a cast of the lower jaw of *Homo heidelbergensis* donated recently to the National Museum by Professor Schoettensack, of Heidelberg University. This jaw, which is preserved at the university and has been described in detail by Professor Schoettensack, was found less than two years ago near the village of Mauer, 10 kilometers southeast of Heidelberg, under nearly 75 feet of loess and ancient river sand. It dates from the Upper Pliocene or the very beginning of the Quaternary period and represents the most ancient being known that can be regarded as man. To illustrate the remarkable characteristics of this jaw Dr. Hrdlička showed a number of mandibula of different anthropoid apes along with those of recent man. The paper was discussed by Messrs. Theodore Gill, G. M. Kober, D. S. Lamb, Daniel Folkmar and others.

The remainder of the evening was devoted to an address by Dr. W J McGee, on "Conservation in the Human Realm." The speaker said that the human realm may best be defined in terms of relation to the other great realms in nature; and these are most conveniently stated in the order of increasing complexity, which may be considered also the order of sequence in cosmic development.

The initial realm is that pertaining to cosmic bodies and their interrelations; the fundamental principle comprises the actions and reactions of gravity, impact, etc., which together have been denoted molarity; the field is largely covered by astronomy, with a part of physics. The second realm pertains to atomic and certain molecular interrelations; its fundamental principle is affinity; and its field coincides fairly with chemistry. The third realm is that of organic activity; its principle is vitality, which directly and indirectly accelerated and multiplied the chemical differentiation of the earth-crust; its field is covered by a large part of biology, with cognate sciences. The fourth realm (which is closely allied to the preceding) pertains to those organisms so complete in themselves as to be self-active;

its principle is motility; and its field is covered by zoology and allied branches of knowledge. The final realm is that in which motile organisms are so completely self-active as to react upon and dominate lower nature; its principle is mentality; and its field is anthropology in all of those aspects resting on a psychic basis. Now the entities proper to the several realms coexist and interact; and in general the entities of each higher realm dominate over all those of the lower realms. This is especially true of mentality, which employs motility and directs vitality to control affinity and molarity, thereby making conquest over lower nature for human welfare. In the power of mentality human strength lies, while danger also lurks; for the power may be, and in the absence of constraint often is, used for the destruction rather than mere subjection of the materials and forces of nature. Viewed broadly, the exercise of control over the realms of lower nature pertains to the human realm no less than do the more passive attributes of mankind.

When this nation was founded but two resources were recognized—the men, with the land they made their home. Half a century later coal mining and the practical manufacture of iron began, and in another half century the industrial exploitation of the forests. Yet statecraft lagged behind industry so far that these enormous values below and above the surface were alienated nominally as land, passed under monopolistic control, and were diverted from the whole people to which they rightfully belonged; while free citizenship largely gave place to industrial dependence. At first water was neglected as a mere appurtenance to land; and now that it is recognized as the primary resource—that on which life depends, so that it gives value to all the rest—it also is passing under a monopolistic control whereby all citizenship will tend to merge into industrial dependence on centralized power. The situation is one of the gravest ever confronted by any people in the world's history, graver than any ever survived by a nation; and it behooves those possessing the advantage of scientific training and knowledge of principles to give it earnest consideration—and to aid in defining the interrelated duties of the individual, the family and the state in ways tending toward the perpetuity of our people.

A lengthy discussion of this paper closed the meeting.

JOHN R. SWANTON,
Secretary