handily to explain the non-extinction of species. On this point the second century writer, Aulus Gellius, in his highly prized 'Attic Nights' (xiii, 7), has left on record the following interesting observations:

"Herodotus has related in his third book that the lioness produces but once in its life, and at that birth never more than one whelp. But Homer says that lions produce and bring up many whelps, these being the lines in which he plainly asserts this:

> Thus in the center of some gloomy wood,
> With many a step, the lioness surrounds
> Her tawny young, beset by men and hounds.
> * * * * * * * *

"When this difference and opposition of sentiments between the most celebrated poet and most eminent historian greatly perplexed me, I thought proper to consult Aristotle's exquisite 'Historia Animalium,' and whatever he has there written upon this subject, I have put down in these commentaries. His statements are found in book VI. [as follows]:

"That the lion copulates backwards and is retromingent, has been mentioned before. But it copulates and produces not at all seasons, though in every year. It produces in the spring, and generally has two offspring. When its produce is most numerous it has six, but sometimes it has only one. It is an idle story which tells us of the lioness, that when she brings forth her young, she loses the future power of generating, and it arises from the scarcity of the lion's race, for the kind is rare, not known in many places and nowhere in Europe except in that country which is between the river Achelous and the Nessus. * * * The Syrian lions produce five times in their life, at first five cubs, then one less every time, after which they become barren."

In that mystical early Christian bestiary, whose unknown author is called the 'Physiologus,' and whose authority was widely accepted throughout Europe during the middle ages, three peculiarities are claimed for the lion. First, to throw hunters off his tracks he rubs out his footmarks with his tail. Secondly, when the lion sleeps, his eyes never close. Thirdly, the lioness bears her cub dead, but on the third day his sire comes, breathes into his face, and thus brings him to life. These attributes were all supposed to have a deep religious significance, the meaning of which has been explained by the commentators of 'Physiologus.' Dante's idea of the lion forms the subject of a special chapter in R. T. Holbrook's 'Dante and the Animal Kingdom' (1902).

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THE BRITISH ASSOCIATION.

The Cambridge meeting of the British Association adjourned on August 24 to meet at Cape Town, South Africa on August 15, 1905. The attendance at the Cambridge meeting was 2,789, the largest except on five previous occasions—at Manchester in 1861, at Newcastle in 1863, at Bath in 1864, at Manchester in 1887 (the largest meeting ever held), and at Liverpool in 1896.

Scientific grants to the value of £1,000 were made, as follows: Mathematical and Physical Science.—Electrical standards, £40; Seismological observations, £40; investigations of the upper atmosphere (kites), £40; magnetic observations, £50. Chemistry.—Aromatic nitramines, £25; dynamic isomerism, £20; wavelength tables of spectra, £5; study of hydroaromatic substances, £25. Geology.—Movements of underground waters, balance in hand; life zones in British carboniferous rocks, balance in hand; fossiliferous drift deposits, balance in hand; erratic blocks, £10 and unexpended balance; fauna and flora of British trias, £10. Zoology.—Index animalium, £75; table at zoological station at Naples, £100; development of frog, £10 and unexpended balance; higher crustacea, £15 and unexpended balance. Geography.—Investigations in the Indian Ocean, £150. Economic science and statistics.—Trade statistics, £20. Anthropology.—Age of Stone Circles, £40; anthropometric investigations, £10; excavations on Roman sites in Britain, £10; excavations in Crete, £75 and unexpended balance; anthropometry of native Egyptian troops, £10; Glastonbury Lake Village, balance in hand; anthropological teaching, balance in hand. Physiology.—Metabolism of individual tissues, £30 and unexpended balance; state of solution

of proteids, £20; the ductless glands, £40. Botany.—Structure of fossil plants, £50; physiology of heredity, £35; botanical photographs, £5. Educational Science.—Studies suitable for elementary schools, £20. Corresponding Societies Committee, £20.

We hope to receive accounts of the scientific work of the meeting, which according to the programs were of more than usual interest and importance.

THE EIGHTH INTERNATIONAL GEOGRAPHIC CONGRESS.

As we have already announced, the eighth International Geographic Congress will meet in the United States, beginning at Washington, on September 8. It will reconvene in Philadelphia on September 12, at 9 o'clock; and again in New York on September 13, at 10 o'clock. After a field meeting at Niagara Falls on September 16, it will reassemble in Chicago on September 17, at 10 o'clock; and it will finally convene in St. Louis, in conjunction with the International Congress of Arts and Science on September 19, at 10 o'clock.

Among the more detailed arrangements for the members, it may be noted that there will be an informal reception at Hubbard Memorial Hall of the National Geographic Society on the evening preceding the meeting; a reception by Mrs. Gardiner G. Hubbard, on September 9, and a reception by Commander and Mrs. Peary, on September 10; Professor E. von Drygalski will give a lecture on the evening of September 9.

At Philadelphia, members will be entertained by the Geographical Society; a luncheon will be given by the University of Pennsylvania, and dinner will be provided in the evening. In New York the members will be entertained by the American Geographical Society, which offers a reception on September 13, and there will be a dinner on September 14; luncheon will be served at the American Museum of Natural History; Sir John Murray will make an address, introducing a discussion on oceanography. On September 15 there will be an excursion up the Hudson River to Mt. Beacon, on the steamer *Richmond,* and a visit to West Point. Professor W. M. Davis, of Harvard University, will conduct the field meeting on Mt. Beacon. At Niagara Falls, on September 16, Mr. G. K. Gilbert, of the U. S. Geological Survey, will give an address on the geographic development of the cataract, and a field meeting will be held in charge of geographers familiar with the region.

At Chicago, on September 17 and 18, members will be entertained by the Geographical Society of Chicago and by the University of Chicago. On Monday, Tuesday, Wednesday and Thursday, the congress will meet with the International Congress of Arts and Science, at St. Louis. Commander Peary, the president of the congress, will give an address on the evening of December 20, and the closing session will be held on September 22.

At the various scientific sessions a very large number of papers will be presented. They are classified as follows: physiography, mathematical geography, biogeography, exploration, technique, historical and educational. The president of the United States is honorary president of the congress, and apparently all the foreign ambassadors and ministers are honorary vice-presidents; the general secretary is Mr. Henry Gannett, and the treasurer is Mr. J. J. Edson; Dr. W J McGee is chairman; and Dr. J. H. McCormick, secretary of the committee of arrangements.

A cordial and specific invitation is given to all persons interested in the science of geography to become members of the congress and participate in its proceedings. Application for membership, the fee being $5, should be addressed to The Eighth International Geographical Congress, Hubbard Memorial Building, Washington, D. C.

THE INTERNATIONAL CONGRESS OF ARTS AND SCIENCE.

A MEMORANDUM has been issued for the use of foreign speakers at the Congress of Arts and Science. A New York reception committee has been formed, with Mr. F. P. Keppel, secretary of Columbia University, as chairman. The members of the committee will so far as possible meet the guests on arrival. Professor Hugo Münsterberg, one