

# SCIENCE:

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WE have received a copy of the *Annuaire de l'Observatoire Royal de Bruxelles*—a book of nearly four hundred pages, published under the supervision of Dr. J. C. Houzeau. This number is the forty-eighth issue of the series, and contains the customary data regarding calendars; rising, setting and meridian passages of the sun, moon and planets; eclipses of the sun and moon, and transit of Mercury; occultations of stars by the moon; eclipses of the satellites of Jupiter; positions of fixed stars; elements of the planets and their satellites, and of the periodic comets; various data pertaining to weights and measures, geographical positions, etc. It is a noteworthy fact, that while the astronomical repertoire supplies a need for Belgium—as the similar *Annuaire du Bureau des Longitudes* does for France—we have no like publication in America. It must cost really very little to print it, and the expense of compilation can not be great. It is not a little remarkable that Americans generally should so long be content with dependence upon patent medicine almanacs for this class of information.

Among the appended articles, we note a few which carry more than a passing, special interest—*Le Globe Terrestre—Quel est le Climat le plus Favorable au Développement de la Civilisation?—L'Astronomie dans l'Antiquité—L'isthme de Panama*. Monsieur L. Niesten, a well known astronomer of the Royal Observatory, contributes no less than four articles to this issue of the *Annuaire*, two of which appear to have been prepared with great care, and are astronomically of much importance. The last transit of Mercury, May 6, 1878, was very fully observed everywhere, and M. Niesten deserves much credit for his well arranged digest of every sort of observation on that occasion. Those who are concerned with gene-

ral relations on the rapidly multiplying group of small planets will get a deal of information from Niesten's article, *Les Astéroïdes*—which is, in fact, a comprehensive history of these bodies. An accompanying map serves to bring out some points which are made clearer by graphical representation. Astronomers and others will have frequent occasion to refer to an article (which it is remarkable should not have long ago been prepared by some one)—*Nomenclature des Observatoires Astronomiques Existants, qui ont la Caractère d'Etablissements Publics*. About 120 observatories are included in this list, and there are given, as far as known, the year of founding, the connection of the observatory, some brief description of the instruments, and the names of all the directors of each establishment, including the dates of their installation.

## THE AMERICAN CHEMICAL SOCIETY.

The June meeting of the American Chemical Society was held Friday evening, the 6th inst., Prof. A. R. Leeds presided. Mr. A. P. Hallock was elected a regular member. The first paper before the Society was by Dr. Chas. A. Doremus, "On the Composition of Elephants Milk." The sample was obtained from the mother of the baby elephant "America" which is now on exhibition in this city. The baby weighed 213½ pounds at birth and at the end of a year turned the scales at 900 pounds. Considerable difficulty was experienced in procuring the sample, and but a very small quantity was obtainable. Three analyses were made and the figures are herewith given:

	I. April 5. Morning.	II. April 9. Noon.	III. April 10. Morning.
Quantity.....	19cc.	36cc.	72cc.
Cream, per cent.....	52.4	58.	62.
Reaction.....	Neutral.	Slightly alkaline.	Slightly acid.
Sp. Grav.....	.....	.....	1.0237
IN 100 PARTS BY WEIGHT.			
Water.....	67.567	69.286	66.697
Solids.....	32.433	30.714	33.303
Fat.....	17.546	19.095	22.070
Solids in fat.....	14.887	11.619	11.233
Casein.....	14.236	3.604	3.212
Sugar.....		7.207	7.392
Ash.....	0.651	0.658	0.629

It will be noticed from these analyses that the milk is peculiarly rich in the nitrogenized materials. The volume of cream compared with that obtained from an Alderney cow is also quite large. Under the microscope the milk globules appeared very uniform in size and were unusually clear. Although it is generally claimed that the fat when burned emits a peculiar odor by means of which it is possible to distinguish the animal from which it has been obtained, yet in the present instance no odor was perceptible from the fat which was separated from the milk. This is the only analysis of elephant's milk on record, and Dr. Doremus is certainly deserving of much credit for the interesting information which he has obtained. His entire paper will be published in the proceedings of the Society. An analysis of the milk of an hippopotamus is added for the sake of comparison:

Water.....	90.43
Solids.....	9.57
Fat.....	4.51
Casein, and milk sugar.....	4.40
Ash.....	0.11