takes place in the dog and in man, but the difference need not occasion surprise, in view of the difference in food and habits.

M. Moissan reported to the Paris Academy of Sciences on May 31st that, in conjunction with Professor Dewar, he had succeeded in liquefying fluorine.

We learn from *Nature* that the British Board of Agriculture has issued an order which prohibits the importation of dogs into Great Britain from any other country (except Ireland and the Isle of Man) otherwise than in accordance with certain provisions set forth. The order takes effect on September 15, 1897. After that date no dog may be landed in Great Britain from any other country without a license from the Board of Agriculture, application for which is to be made to the Secretary of the Board.

The maps of the Orinoco-Essequibo region of South America compiled for the use of the Venezuela Boundary Commission have been published in atlas form. There are seventy-six maps in all, of which fifteen are new and made especially for the Commission's use, while the remaining sixty-one are fac-simile reproductions of old ones selected from the large number brought to the attention of the Commission.

An Association of Teachers of Science in Indiana was organized in 1896, and held its second meeting at Lafayette on February 26th and 27th. We learn from the *Inland Educator* that a committee consisting of Professor D. W. Dennis, Richmond, Ind.; Professor Dumont Latz, South Bend, Ind.; Professor M. B. Thomas, Crawfordsville, Ind.; Professor J. T. Scovel, Terre Haute, Ind., and Professor G. A. Abbott, Evansville, Ind., was appointed by the Association to investigate the questions discussed and report a course of science study for the high schools of the State. The questions before the committee are: What subjects should constitute a science course? How much time should be given to each? In what order should they be considered? How much laboratory work should be required? etc. The committee would be glad to hear from every science teacher and interested school official in the State in regard to these and kindred questions.

Natural Science states that Mr. A. Gibb Maitland, late of the Geological Survey of Queensland, has been appointed Government Geologist of West Australia, and is reorganizing the staff with the view of making a proper geological survey of the mining fields of the colony and publishing maps of the same. As a preliminary to this a typographical survey is being prepared with the assistance of a topographer. Mr. Torrington Blatchford, of the Sydney School of Mines, who has had much practical experience of mining geology, has been added to the staff. Applications have also been invited by the government for the position of Assistant Geologist; while as Mineralogist and Assayer there has been appointed Mr. Simpson of the Sydney School of Mines, late Chief Assistant Assayer to the Mount Morgan Co., Queensland.

UNIVERSITY AND EDUCATIONAL NEWS.

Five additional fellowships have been established at the University of Pennsylvania on the Harrison Foundation. The University now offers nineteen fellowships of the annual value of $500 each and five senior fellowships of the value of $800.

The Lawrence Scientific School of Harvard University receives $5,000 by the will of the late Miss Edith Rotch, of Boston.

A memorial scholarship of the value of $8,000 has been given to Vassar College by Mrs. Ann Shepard, of Brooklyn.

Mr. H. A. Morgan, of the Board of Trustees of Wells College, has given the College $30,000, covering the debt on the rebuilding of the main building in 1890.

The Trustees of Syracuse University have contributed $32,000 to cover the deficit in current expenses, half of this amount being given by Mr. Jno. D. Archbold, President of the Board.

The naval authorities have decided to establish a post-graduate course at the Naval Academy for cadets intended for the construction corps, and orders have been issued directing Assistant Constructor Hobson to report for duty at the head of the department.

The catalogue of the University of Minnesota for the year 1896 shows that there was at the University an attendance of 2,647 students, of which number 728 were women. There were 156

students in the graduate departments, 909 in the College of Science, Literature and the Arts, and 181 in the College of Engineering, Metallurgy and the Mechanic Arts. 307 degrees were conferred at the commencement exercises on June 3d.

OF the £30,000 immediately required towards the endowment fund of the new Sheffield University College £24,000 has already been subscribed.

DR. A. HILL, Master of Downing College and lecturer on human anatomy, has been elected Vice-Chancellor of Cambridge University for the coming year.

AT Columbia University Mr Herbert M. Richards has been appointed tutor in botany; Dr. James Ewing, instructor in clinical microscopy; Dr. Charles Norris, tutor in pathology; Mr. Benjamin Jakish, assistant in chemistry; Mr. William E. Day, assistant in physics, and Mr. James H. McGregor, assistant in zoology.

AT the Teachers' College, New York, Mr. Richard E. Dodge has been promoted to a professorship of geography, and Mr. C. E. Bickle to an associate professorship of mathematics.

DR. CHARLES ST. JOHN, of the University of Michigan, has been made professor of physics at Oberlin College.

PROFESSOR WILLIAM A. ROGERS has resigned from the chair of physics and astronomy at Colby University, and it is reported that he has accepted a professorship of physics at Alfred University.

DISCUSSION AND CORRESPONDENCE.

THE DISTRIBUTION OF MARINE MAMMALS.

TO THE EDITOR OF SCIENCE: The interesting memoir of Dr. P. L. Sclater 'on the Distribution of Marine Mammals' (SCIENCE, V., 741–748) ignores previous investigators, and the general reader might, therefore, receive the idea that the subject under consideration has been entirely neglected by other writers, and would be also liable to suppose that his 'six sea-regions' were of equal value. In both postulates he would be entirely mistaken. The bearings of marine mammals on zoogeography and the differentiation of the 'regions' into primary and secondary ones have been frequently considered by others.

Dr. Sclater considers that, "for the geography of marine mammals, the ocean may be most conveniently divided into six sea-regions, which are as follows:"

'I. *Regio Arctatlantica.*'
'II. " *Mesatlantica.*'
'III. " *Indopelagica.*'
'IV. " *Arctirenica.*'
'V. " *Mesirenica.*'
'VI. " *Notopelagica.*'

The characteristic types of each of these regions are named, but Dr. Sclater has evidently overlooked some sources of information and hence has unduly restricted certain forms. Thus, the *Balæna mysticetus* is by no means 'peculiar to Arctatlantis,' but has been the object of an extensive fishery north of Bering strait.* Nor are *Delphinapterus* and *Monodon* 'not found elsewhere,' for they also occur in Arctirenia. Further, *Berardius* is not restricted to the Notopelagian area, for a species occurs in the North Pacific.† It follows that these extensions of the ranges of the several genera diminishes the value of the regions supposed to be distinguished by their exclusive possession. If we have regard for the most characteristic aggregates of sea mammals, we are led to three primary divisions, viz:

Arctalian realm.	I.	Regio	Arctalantica.
	IV.	"	Arctirenica.
Tropicalian realm.	II.	"	Mesatlantica.
	III.	"	Indopelagica.
	V.	"	Mesirenica.
Notalian realm.	VI.	"	Notopelagica.

The Arctalian realm is characteristic from the development of the Phocine Phocids, the Odobænids or 'Trichechidæ' and the Delphinapterine Delphinids. The North Atlantic and North Pacific 'sea-regions' are distinguished from each other by features of much inferior importance.

The Tropicalian realm is remarkable for the development of the existing Sirenians and likewise of numerous Delphinine Del-

*See Dall in SCIENCE (n. s.), V., 843, May 28, 1897.

†Berardius Bairdii Stejneger, Proc. U. S. Nat. Mus., VI., 75, 1883.