to hold a mining machinery exhibition, and to open the same in October, 1897, but the proposal received so much support in the colony, and was responded to so freely by manufacturers in all parts of the world, that it became necessary to fix upon a later date, and to make the exhibition more comprehensive. The scope of the exhibition was therefore enlarged, and it was determined to call it the Western Australian International Mining and Industrial Exhibition, the objects of which should be to obtain the fullest and best possible display of mining and other machinery, and of all kinds of manufactures suited to the requirements of the mining, timber and agricultural industries of the colony, and to its growing population, in order generally to promote and foster industry, science and art, to encourage invention, and to stimulate commerce in the goldfields and throughout the colony.

THE Commissioners of Fisheries, Game and Forest, of the State of New York, have issued their Second Annual Report. Nearly 200,000,000 fish were placed in public waters upon the application of local authorities. Atlantic salmon fry and yearlings, American brook trout (*Salmo fontinalis*), rainbow trout (*Salmo irideus*), Sunapee trout, Swiss lake trout obtained from the Swiss government, and Labrador whitefish, are among the species introduced, and in addition various streams and lakes have been stocked with different forms of fish food. The report contains articles by Professor J. D. Quackenbos, on the American saibling, a member of the Salmonidæ, which has only recently attracted attention; by Mr. G. W. Rafter, on stream-flow in relation to forests; by Mr. Surface, on the game birds of the State, and other matters of scientific interest.

THE U. S. Fish Commissioner has presented to Cornell University a collection of fresh-water and salt-water fishes, numbering between four and five hundred thousand specimens. The collection, in so far as it consists of living fishes, will be of great value not only to the zoological department, but also to the College of Forestry, in which a course in pisciculture and venery is to be introduced. It is understood that duplicates of this collection are to be presented to other institutions.

UNIVERSITY AND EDUCATIONAL NEWS.

THE will of the late Col. Joseph M. Bennett, who during his life-time had made generous gifts to the University of Pennsylvania, leaves to the University property valued at $400,000. The money is to be used for the higher education of women.

A SUM of money, said in the daily papers to be $158,000, has been given by friends of Barnard College to pay the entire indebtedness of the College due to its removal to the new site adjacent to Columbia University.

A DONOR whose name is withheld has given Wellesley College an astronomical observatory and a telescope, said to be of large size.

VASSAR COLLEGE receives $10,000 by the will of the late Adolf Sutro, of San Francisco. The same College has been given $1,000 by Senator Coleman, of Michigan, the income to be used to purchase books and instruments for the astronomical observatory.

THE estimates of the Navy Department for the ensuing year include $2,120,000 for the reconstruction of the Naval School at Annapolis.

THE annual report of President Low was presented to the Trustees of Columbia College on September 24th. During the year the University received $346,409 for permanent endowment and $43,909 for current uses. President Low urges the building of dormitories, both upon the grounds of the University and adjacent to them. The following account is given of the cost for land, buildings and equipment of the new site:

Cost of land.....	$2,000,000 00	
Legal expenses	3,637 95	
		$2,003,637 95
Library:		
Construction.....	1,100,542 09	
Equipment	97,037 38	
		1,197,579 47
Schermerhorn Hall:		
Construction.....	457,658 17	
Equipment.....	35,786 35	
		493,444 52
Fayerweather Hall:		
Construction	274,113 67	
Equipment	14,645 43	
		288,759 10

Havemeyer Hall:		
Construction.....	$516,488 62	
Equipment.....	53,474 86	
		$569,963 48
Engineering Building:		
Construction.....	284,075 50	
Equipment.....	20,325 47	
		304,400 97
University Building:		
Construction.....	842,887 85	
Equipment of power-house and connections.....	115,578 52	
Equipment of gymnasium.....	39,399 24	
		997,865 61
Vaults:		
East.....	30,382 79	
West.....	37,316 40	
		67,699 19
Old buildings—Repairs and equipment:		
West Building.....	10,252 67	
College Hall.....	5,113 34	
		15,366 01
Insurance.....		3,754 40
Outside street work.....		133,367 81
Improvement of grounds and incidentals.....		403,373 75
Expenses of removal.....		59,987 56
Interest.....		339,812 08
Total.....		$6,879,011 90

AT Columbia University Mr. J. H. McGregor has been appointed assistant in zoology; Mr. S. O. Miller, assistant in mechanical engineering, and Messrs. F. S. Hyde, E. J. Riederer and Victor Linher assistants in analytical chemistry.

MISS ROXANA H. VIVIAN has been given the Alumnæ fellowship for women in mathematics at the University of Pennsylvania, and Mr. H. B. Alexander, a Harrison fellowship in philosophy.

THE Hon. John McGregor has given £500 to the fund for the endowment of a chair of forestry in the University of Edinburgh.

DR. FERDINAND FISCHER, of Göttingen, has been promoted to an associate professorship of chemistry. Dr. O. Seeliger, of Berlin, has been appointed professor of zoology in Rostock and Dr. Haussner professor of mathematics at Giessen. Dr. Lorenz and Dr. Keller, of the Polytechnic Institute at Zurich, have been appointed to full professorships of electro-chemistry and zoology, respectively.

DISCUSSION AND CORRESPONDENCE.

THE METHOD OF TYPES.

IN discussing the outlook for stability in generic nomenclature* the method of types has been contrasted with what might be called the method of concepts. The notion of the individual naturalist regarding a certain genus at any particular time is, of course, conceptual, but with increasing knowledge this concept is subject to frequent change resulting commonly in nomenclatorial confusion. With the older naturalists each concept was given a distinct name, while modern practice is less logical in employing a single designation for numerous and varying ideas, to the great detriment of systematic study, since the definite location of genera is rendered theoretically impossible.

The method of concepts originated in the days of mediæval scholasticism, when abstractions commanded great respect and were the subjects of careful study. It was based on the doctrine of the separate creation of species and logically comported with that view of nature. A genus could not be more than an abstraction under a belief which held, in last analysis, that the most similar species were equally distinct with the most diverse. Not only were genera thus assailable, but destructive criticism threatened even the specific idea, as witness certain applications of the oft-quoted assertion of Goethe: 'Nature knows only the individual.' While such ideas obtained, classification could have no logical sanction, its only utility being that of an index giving access to names and descriptions. A system which could do this with the least effort and the greatest dispatch became popular because its users enjoyed a sense of rapidly-expanding knowledge, and much convenience was afforded collectors who preferred their specimens with names. In the manufacture of classifications for this purpose adroit statement often proved more successful than careful study or deep insight. The problem was, indeed, entirely conceptual, the most diverse facts becoming of identical significance if they could be covered by the same formal statement. The resulting conventionalized ideas still figure largely as 'characters,' so that many

* SCIENCE, August 12, 1898, pp.