the inventor of a match containing no yellow phosphorus. Mr. Cunningham has called attention to the fact that if the head of an ordinary 'safety' be dipped in the paste which is put upon the sides of the match box, and which contains red phosphorus and sulphide of antimony, the match will be found capable of igniting upon any surface. Meanwhile it is said that in France the State engineers have succeeded in giving a formula for making lucifer matches which does not include either white phosphorns or any substance injurious to the health of the hands or that of the public. Machinery has also been ivented which will contribute to the health and safety of the hands. The machinery has been tested; after a few improvements have been made in it, it will be generally adopted in the government lucifer match factories.

THE Governor of Madagascar, the native government of which has recently been supplanted by that of civilized France, has issued an order forbidding any except Frenchmen to collect fossils in the island. *Natural Science*, which takes this information from the *Geographical Journal*, which finds it in the *Politique Coloniale* for May 25th, properly asks whether the naturalists of France, official and otherwise, have been consulted on this subject, or whether it is merely the order of a politician ignorant of the methods of scientific men.

DR. GEORG WALTEMATH, of Hamburg, is insatiable of moons. He has sent us, under the date of July 20th, an announcement of a third moon for the earth. This moon is said to be 427,250 kg. distant and is 746 km. in diameter. It is nearer than Dr. Waltemath's other moon, and is a 'wahrhafter Wetter-und Magnet-Mond.' Perhaps it is also the moon presiding over lunacy.

UNDER the editorship of Professor Joseph S. Ames, of Johns Hopkins University, the Harpers announce a series of scientific reprints similar in plan to Oswald's Klassiker der exacten Wissenschaften. The first volume of the series will include the papers by Guy-Lussac and Julien Thomson on the free expansion of gases, and the second, Fraunhofer's papers on prismatic and diffraction spectra.

THE Berlin correspondent of the London *Times* telegraphs that an appeal has just been made to patriots, thinkers, writers, and to the world of thought and culture in Germany at large, to unite together in the foundation of a Kaiser Wilhelm Library for Posen, similar to that subscribed for and presented to the city of Strassburg after the war of 1870–71. The library is to be presented to Posen for the purpose of furthering German culture and influence among the Slavonic population and for combating the ever-increasing antagonism of the Poles. The importance of Germanizing the Poles has been recognized as a growing necessity, and for that purpose a provincial library in Thorn and a technical high school in Danzig are to be established. The ultimate foundation of a German university in the province of Posen is considered as a future possibility. In the meantime donations and offerings of books are earnestly solicited, and by spreading German knowledge it is hoped to diffuse a strong feeling for German ideas among the peasantry of East Prussia.

UNIVERSITY AND EDUCATIONAL NEWS.

PROFESSOR SIMON NEWCOMB will next year resume the active superintendency of the work in mathematics and astronomy in Johns Hopkins University. He expects to give a course of lectures on the Encyclopædia of the Mathematical Sciences, and will especially direct students pursuing advanced work in celestial mechanics.

THE chair of physics in McGill University has been filled by the election of Mr. Ernest Rutherford, and the chair of organic chemistry by the election of Dr. J. W. Walker. Professor Rutherford comes from New Zealand, but has recently been in residence at Trinity College, Cambridge, holding the Couttes-Trotter Studentship. Professor Walker has been since 1896 lecturer in organic chemistry in University College, London.

THE assistant professorship of civil engineering in McGill University is vacant. Candidates should apply by letter to the principal, whose present address is 81 Iffley Road, Oxford.

BUILDINGS of the Niagara University, a Cath-

olic institution near Niagara Falls, have been destroyed by fire, supposed to have been of incendiary origin, involving a loss of $70,000.

Herr von Miquel, Prussian Minister of Finance, has proposed a plan for taxing professors of medicine who also practice. His plan would result in paying no salary to professors who have a practice of the value of $5,000.

Dr. Steven Crowe and Dr. E. S. Pillsbury have been elected lecturers in bacteriology in the College of Physicians and Surgeons, San Francisco.

The University of Pennsylvania has this year awarded five senior fellowships, two honorary fellowships, fifteen regular fellowships for men and five for women and the Hector Tyndale Fellowship. The awards in science are as follows: *Senior Fellowship:* Chemistry, W. L. Hardin. *Honorary Fellowships:* Botany, A. F. Schweley and S. C. Schmucker. *Fellowships:* Pedagogy, C. D. Nason; Chemistry, Alfred Tingle; Biology, J. M. Greenman; Mathematics and Astronomy, J. M. Hadley; Sociology, G. R. Wicker; Mathematics, J. B. Faught. *Fellowships for Women:* Psychology, A. J. McKeag; Chemistry, L. G. Kollock. *On the Hector Tyndale Foundation:* Physics, M. G. Lloyd.

Dr. Georg Klebs, of Basle, has been appointed professor of botany in the University at Halle. Dr. Hefs has been promoted to a full professorship of physics in the Lyceum at Bamberg. Dr. Holde has qualified as docent in chemistry in the Technical Institute at Charlottenberg, and Dr. Kopsch in anatomy in the University of Berlin.

DISCUSSION AND CORRESPONDENCE.

STABILITY IN GENERIC NOMENCLATURE.

In the June number of the *Botanical Gazette* Dr. B. L. Robinson has called attention to the fact that the Rochester Rules do not provide criteria for determining the application of generic names. It is also pointed out that a strict interpretation of the principle of priority would demand that the first species placed under a genus should serve as its nomenclatorial 'type,' to which the name should remain attached. The execution which such a rule would work among the older names is, it appears, the reason why the makers of the Rochester Code have hesitated to enact or put it in practice. This omission is criticised as gravely inconsistent in a system of 'absolute and decisive character.'

Much nomenclatorial discussion has failed of any definite purpose for lack of agreement as to the nature of the taxonomic problem. Consciously or unconsciously, systematists belong to two schools, representing, for the purposes of illustration, the idealists and realists. According to the former, systems of classification and their categories are mental concepts merely—pigeon-holes, so to speak, into which the individual units of biologic phenomena can be assorted. If the arrangement of the pigeon-holes prove too inconvenient, changes may be necessary, but these are made with reluctance, and it is fondly hoped that each readjustment may be the last. The idealistic systematist views nature from the standpoint of the system, and while he may not be a philosophic idealist as well, and deny the material existence of the objects of his study, he not infrequently declares, and uniformly acts on the opinion, that species, genera and families do not exist in nature, but are *made* by the naturalist. In accordance with this view, the various categories mentioned consist primarily of *definitions* to which names are attached. The usage of the earlier systematists corresponded somewhat to our present custom of patenting new inventions. If the definition or specification proved faulty it was set aside, name and all, and a supposedly improved combination of characters was arranged for the consideration of posterity. This was entirely just and logical, for if the genus (definition) did not correspond to anything in nature it was of no use to the naturalist and should properly give way to the clearer concept of the later student with his presumably wider knowledge of forms. No uniformity nor stability could come, however, from such a method; biologic progress would mean an endless succession of names, an infinite mass of competing generic concepts to be sifted and arranged, constituting an almost insurmountable barrier between nature and formal knowledge. To avoid this threatened chaos it became customary to retain older names, emend the descriptions and credit