NOTES ON INORGANIC CHEMISTRY.

PLATINUM IN ANTIQUITY.

PROFESSOR BERTHELOT reports in a recent number of the *Comptes Rendus* that on a metallic box from Egypt, covered with inscriptions, he found a portion of one of the characters made of platinum. The mass was too small for a complete analysis, but from its behavior toward aqua regia, it appeared to be native platinum. The date of the box was about 700 B. C. From two standpoints this discovery is of more than passing interest. It has been a much disputed question whether platinum was known to the ancients. Passages from the classics have been quoted which appear to some to be references to platinum, but this application is in every case very doubtful. A much stronger argument against the probability of platinum being known more than a few centuries ago, is, that until this discovery of Berthelot's, no trace of the metal has been found in any ancient remains. Had platinum been known, it is hardly conceivable that specimens of it should fail to be found somewhere among the multitudinous remains of antiquity. This present discovery really emphasizes the argument, for it would seem from the description given by Berthelot that this specimen of platinum was used by the workman unwittingly, resembling as it does some of the pale gold of Egypt. A second interesting point is that if Berthelot's conjecture be true that this is native platinum, obtained from the alluvial deposits of Nubia or the upper regions of the Nile valley, it is the first recorded occurrence of platinum in Africa, with the single exception of an observation of Aimé, in 1838, that some of the galena from Algeria contains a trace of platinum.

LEAD IN POTTERY GLAZES.

THERE has been much discussion in England the last few years regarding the use of lead in pottery glazes, with reference both to the health of the potters and to the dangers attending the use of lead-glazed vessels in culinary operations.

In continental potteries a lead glaze is in frequent use which seems to be far more resistant to the action of solvents than those in use in England. The subject was recently brought before the Chemical Society by Professor T. E. Thorpe and C. Simmonds, and an abstract of their work and of the discussion of their paper is found in the *Proceedings* of the Society. Examining a large number of glazes, they find that many of them are attacked by dilute acids, comparable with the acids found in the human system, such as the hydrochloric acid of the gastric juice. They find that the resistance depends upon the ratio of base to silica in the glaze. Provided that the ratio falls within certain limits, the amount of lead extracted under the prescribed conditions is always small, though the actual quantity of lead in the glaze may vary from zero to 50 or even 55 per cent. The amount of the other bases, such as alumina, lime and alkalies, may vary considerably and the silica may be replaced to some extent by other acids, as boric acid. It is to be hoped that American potters, as well as the English, may profit by these investigations, which after all only serve to bring out what has long been in practice in the potteries of Germany.

COSMIC DIFFUSION OF VANADIUM.

IN 1897 Hasselberg called attention to the occurrence of vanadium in many specimens of rutile, as had indeed been noticed by Sainte-Claire Deville as early as 1859. Hasselberg has now turned his attention to the examination of meteorites, and finds the presence of vanadium in all those examined of the stony type, while in metallic meteorites it is absent, save in a single specimen in which a very small quantity was found. He has gone over the work of Lockyer on the meteoric iron from Nejed and Obernkirchen, and finds that his observation that vanadium is present in these irons is erroneous. From these investigations he deduces the conclusion that a different origin is indicated for stony and for metallic meteorites.

J. L. H.

CURRENT NOTES ON METEOROLOGY.

ANNALS OF THE MONT BLANC OBSERVATORY.

VOL. IV. of the *Annales de l'Observatoire météorologique, physique et glaciaire du Mont Blanc (altitude 4,358 m.), publiées sous la Direction de J. Vallot*, contains several interesting

papers. A study, entitled 'Influence de la Pression Barométrique sur l'Action chimique de la Lumière directe du Soleil,' by Dr. M. Andresen, deals briefly with the work of Bunsen and Roscoe, and other investigators, and presents results obtained by the author at the Mont Blanc Observatory. A short paper by M. and Mme. Vallot deals with 'Expériences sur la Vitesse de la Circulation de l'Eau dans les Torrents et sous les Glaciers.' The most important contribution is one by M. Vallot, entitled 'Expériences sur la Marche et les Variations de la Mer de Glace.' This is an elaborate study, setting forth the results of observations made by the author on the Mer de Glace during the nine years 1891–1899. The observations included variations in level, variations in velocity, and variations in velocity in relation to variations in level. The paper is illustrated by means of a series of 61 plates, published in Vol. V. of the *Annales*, and deserves attention on the part of all who are interested in glacial problems. These two volumes are further evidence that M. Vallot's Observatory is doing effective scientific work.

THE MOON AND THE WEATHER.

A NEW journal, *Climat*, printed in four languages under the editorship of M. Demschinsky, of Torbino, Russia, and devoted to the publication of articles on the relation of the moon and meteorological phenomena, has recently been widely advertised. So far, three numbers of this magazine have been received. M. Demschinsky published, in Nos. 1 and 2 of *Climat*, a series of curves showing the probable course of the barometer and thermometer during the month of April at a large number of stations. The only comparison of the predictions with the facts of observed weather conditions that has thus far been given publicity is discussed by Dr. H. R. Mill, in *Symons's Monthly Meteorological Magazine* for May. Dr. Mill has made a careful comparison of the predicted conditions and of the actual weather observed in the cases of Aberdeen and of Valencia. The conclusion reached is, as might have been expected, that 'practically the forecasts as a whole appear to be valueless,' so far as these two stations are concerned.

NOTES.

IN the *National Geographic Magazine* for May an article by Gannett, on 'The General Geography of Alaska' (pp. 180-196), gives a good general account of the climate of that territory. This article forms one of the chapters of the volume dealing with the Harriman Expedition. The writer is inclined to believe "that if any part of Alaska can become of agricultural importance it is the interior rather than the Pacific coast. But it is doubtful whether even this region will admit of profitable farming. * * * However, as the higher rate of freight to the interior will have the effect of a protective tariff on home products, it may be possible to raise grain and vegetables at a profit under conditions which would be prohibitory on the coast."

The *Meteorological Observations for 1900*, as contained in the 13th Annual Report of the Colorado Agricultural Experiment Station, at Fort Collins, Colo., show that the mean annual evaporation at that station is 41.16 inches (10 years). This is the amount evaporated from a water surface in a tank 3 x 3 x 3 feet, flush with the ground.

Part VII. of the *Report of the Chief of the Weather Bureau for 1899–1900* contains the 'Meteorological Observations of the Second Wellman Expedition,' by Evelyn B. Baldwin, the leader of the present Baldwin-Ziegler Expedition.

R. DEC. WARD.

SCIENTIFIC POSITIONS UNDER THE GOVERNMENT.

THE U. S. Civil Service Commission announces that it is desired to establish an eligible register for the position of laboratory assistant in physics, National Bureau of Standards, Treasury Department. It will not be necessary for applicants to appear at any place for examination. The examination will consist of the following subjects:

Education and training	30
Original investigations	30
Experience	20
Thesis	20
Total	100

From the eligibles resulting from this examination it is expected that certification will