

that Brooks holds has startled me, even although I cannot altogether appreciate his appeal to writers whose thought is still so comparatively medieval as Sir Thomas Browne and Berkeley. The remarks on determinism, for instance, are particularly apposite. If, in my turn, I might dare to speak for contemporary philosophers, I should say, there is no material for controversy, save under that misconception of the situation which Brooks so well lays bare. The crux of our discussion, it may be noted, seems to center in an equivocal as between the precise meaning attached to the term 'naturalism' by Brooks and Ward respectively.

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#### NOTES ON INORGANIC CHEMISTRY.

At the sixth annual meeting of the German Electro-chemical Society, held at Göttingen in June, a strong address was delivered by Professor Hittorf on the necessity for the erection of special laboratories and creation of new chairs for inorganic chemistry in the German universities. After alluding to the address before the last meeting of the Society by Van t'Hoff on the increasing significance of inorganic chemistry, he showed the overwhelming predominance given to organic chemistry in the universities. There are but three German universities where there is any adequate teaching of inorganic chemistry. At all the rest the full professors of chemistry are almost exclusively devoted to the organic field. If Germany is to keep pace in the practical world with England, America and France, a revival of inorganic chemistry is necessary, and for this men and laboratories are needed.

At the same meeting a new electrical resistance material for high temperature was described by W. C. Heräus. The platinum alloys are not satisfactory owing to their actual low resistance, although their relative resistance is high. The poorest conductor is the 30% iridium platinum alloy, and here the resistance for a meter of wire 0.3 mm. diameter is only 5 ohms. The new resistance material is formed by mixing clay with 10% to 15% of platinum, molding into pencils and heating to about 1250° in a reducing atmosphere. There appears to be

formed a platinum silicon alloy which serves as the conductor. The resistance increases with the temperature up to a certain point, and then at higher temperature decreases, perhaps owing to the formation of more platinum-silicon alloy. The pencils can be used up to a red heat and promise to have a very considerable practical application.

SOME time since a specimen of malachite was described by W. Autenrieth which contained an appreciable quantity of iodine. Exhaustive search, however, failed to find any further similar malachites until recently, when a series of malachites and cuprites from New South Wales proved almost without exception to contain iodine. These are described in the *Chemiker-Zeitung*. The amount of iodine in the malachite is 0.15%, and the iodine is given off merely on heating the mineral to low redness. The amount of iodine in the cuprite is less than one-tenth that in the malachite. These minerals were wholly free from silver and bromine, and chlorine was only occasionally present and then in mere traces.

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#### CURRENT NOTES ON METEOROLOGY.

##### WEATHER PERIODICITIES.

THE question of periodicities in the weather has received the attention of many meteorologists and physicists; publications on this subject have been numerous and varied; but as yet no sort of general agreement as to, or acceptance of, results has been reached. In this country Clayton has been studying weather periodicities for some years, and his conclusions, although they have not attracted the notice that they deserve, have been noteworthy. In a recent paper entitled *Investigations on Periodicity in the Weather* (Proc. Amer. Acad. Arts and Sciences, XXXIV., No. 22), Clayton carries his investigations a good step farther in advance. Among his results it is shown that there is a small range in the frequency of thunderstorms in the United States, the plotted curves indicating a maximum a few days preceding the greatest northern declination of the moon. A similar result was obtained by Ekholm and Arrhenius for the thunderstorms of Sweden. Further, when the mean daily departures from