

program of papers and informal talks by numerous astronomers and physicists has been arranged, and experimental demonstrations are to be given of certain important recent discoveries, such as the effect of pressure upon wave-length, the application of interference methods to astronomical measurements, the effect of a magnetic field on radiation, etc.

Many celestial objects and the solar phenomena are also to be shown with the forty-inch Yerkes refractor.

E. B. F.

NOTES ON INORGANIC CHEMISTRY.

FROM an article in the *Eisenzeitung* on the output of platinum in Russia, we take the following notes: The Russian production of platinum is forty times greater than that of all other lands together. In Russia it is found exclusively in the southern Oural region. It is shipped in its crude state to Germany and there refined. (This statement is surprising, as it has been commonly supposed that most, at least, of the Russian platinum is worked up by Johnson, Matthey & Co., of London.) The output in 1895 was 4,413 kilos as against 2,946 kilos in 1880. The cost of crude platinum in Russia is at present about \$216 per kilo. The amount of iridium found with the platinum is very small, being in 1895 only 4.1 kilos, in 1894 only slightly more than this.

In the *American Journal of Science*, E. T. Allen describes several specimens of native iron from the coal measures of Missouri. They consisted of small grains, massed together in one instance in a calcareous sandstone, and in the others in a shale. Both sandstone and shale contained iron, and in two instances the grains were in close proximity to coal seams. The metallic iron in each case was quite pure and contained no nickel, and is considered to be undoubtedly of terrestrial origin.

In the *Journal* of the Russian Physico-Chemical Society, G. P. Czernik gives an account of the investigation of the gases contained in two minerals from the Caucasus, a titaniferous cerite and a coal from Tkhibulsk containing in its ash 10 per cent. of the oxides of cerium, lanthanum and didymium. The former contains 1.1 per cent. of gases, chiefly argon, with a little oxygen and hydrogen. By heating to a red heat only one-fourth of the argon was liberated, by the action of 25 per cent. sulphuric acid at 60° rather more than one-half. Much more was given off by fusion with potassium bisulphate. The author from this concludes that the argon is in chemical combination. The second mineral contains helium, which is liberated by fusion with potassium bisulphate, even after the ash has been heated to a white heat. Here, too, the inference is that the helium is in chemical combination.

THE *Bulletin* of the Pharmaceutical Society of Bordeaux, for July, contains an article by Dion on the formation of the fossil phosphate deposits of the Province of Oran. He concludes that they have an aqueous origin, being formed from above downwards by the action of infiltrating rain-water, and that animal remains were the only source of phosphorus in the deposits.

J. L. H.

SCIENTIFIC NOTES AND NEWS.

THE SPELLING OF GEOGRAPHIC NAMES.

AT the regular monthly meeting of the U. S. Board on Geographic Names, held a few days ago, decisions were made as to the spelling of 149 geographic names. This Board, it will be remembered, is composed of ten members, representing those bureaus and departments of the government which are more or less concerned with geographic publications. It was created by executive order September 4, 1890, to the end that uniform usage in regard to geographic nomenclature and orthography shall obtain