issued its first report. This consists of a collection of six papers which appeared in the *Journal of Physical Chemistry*, April 1928, together with a short introduction by H. S. Taylor. The subject is considered from both the experimental and theoretical points of view, and the authors are : H. S. Taylor, W. D. Bancroft, G. S. Forbes, H. G. De Laszlo, S. C. Lind, and L. A. Turner.

WE have received a copy of Messrs. Oertling's new catalogue of British chemical balances and weights, in which a brief outline of the history of this wellknown firm from its foundation in London in 1849 to the present day is sketched. Precision instruments suitable for the finest work are now being made extensively in London by the firm, which claims to be employing only British capital and labour. Recent developments have necessitated the acquisition of a new factory, and the showrooms have been removed to 65 Holborn Viaduct, London, E.C.1, where the latest models may be inspected. The list includes balances suitable for use in schools and colleges, and also more elaborate instruments for research laboratories and factories. Special features are the precision torsion-balance, designed for the rapid weighing of very light objects up to 500 milligrams in weight with a sensitivity of 1 milligram, a micro-chemical balance with a concave cylindrical reflector for magnifying the fine divisions on the index, a flour-moisture tester and the 'chainomatic' balance, which has a capacity of 200 grams and a sensitivity of 0.1 milligram, although riders and fractional weights below 0.1 gram are not

CONJUNCTION OF URANUS AND A STAR.—On the night of Sept. 23, Uranus will make a very near approach to a small star of the sixth magnitude in the constellation Pisces. The two objects will appear in a telescope as a double star of faint and nearly equal magnitude. It will be interesting to find if they can be distinctly seen and separated by the unaided eye. An opera or field glass will show them well, and will exhibit their changes of position on succeeding nights due to the motion of the planet. The latter will pass the star on its southern side, its motion being from east-north-east to west-southwest.

The objects may be readily identified though they occupy a position in a decidedly barren region of the sky. If a line is drawn southwards from Sirrah to Algenib, the two bright stars forming the eastern side of the "Great Square of Pegasus," at about the same distance as that separating the two stars, the planet Uranus and the star 44 Piscium will be found a little to the south-east of the end of this line. The objects will be just visible to the naked eye on a dark moonless night, but whether they may be individually discerned is a little uncertain, as a good deal must depend upon the observer's vision and the state of the atmosphere. The gibbous moon will set on the night following Sept. 23 at midnight.

A RECENT LARGE SUNSPOT.—A large group of sunspots which showed considerable changes from day to day has recently been under observation. The group, which was of the stream type, did not develop in the usual manner, and on Sept. 11 several irregularly shaped spots composing the train became nearly linked up with the leader, thus almost completing one

required. The prices compare favourably with those of continental makes.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned :---A reader in physics in the University of Dacca (East Bengal, India)-The Registrar, University of Dacca, East Bengal (Sept. 30). A male senior lecturer in education at the Rhodes University College, Grahamstown -The Secretary, Office of the High Commissioner for the Union of South Africa, South Africa House, Trafalgar Square, W.C.2 (Sept. 30). An assistant lecturer in education at the University College of Swansea-The Registrar, University College, Swansea (Oct. 1). A lecturer in dental prothesis and orthodontics in the Dental School, Cairo-The Dean of the Faculty of Medicine, Kasr-el-Ainy, Cairo (Oct. 3). A physicist with electrical engineering experience, under the directorate of radiological research of the Research Department, Woolwich-The Chief Superintendent, Research Department, Woolwich, S.E.18. An advisory entomologist in the West Midland Province of Shropshire, Staffordshire, and Warwickshire, at the Harper Adams Agricultural College, Newport, Shropshire-The Principal, Harper Adams Agricultural College, Newport, Shropshire. A temporary architectural and civil engineering assistant at H.M. Dockyard, Rosyth-The Superintending Civil Engineer, H.M. Dockyard, Rosyth. A lecturer in zoology and botany at the Birmingham Central Technical College-The Principal, Central Technical College, Suffolk Street, Birmingham.

## Our Astronomical Column.

big composite spot. As indicated by changes directly observable within some hours, the group was active spectroscopically. Mr. Newbegin, using a spectroscope of the Littrow type which he has added to his private observatory at Worthing, noted Doppler displacements of the *C*-line of hydrogen on Sept. 11, and later a bright reversal of this line was seen. A magnetic disturbance might reasonably have been expected about Sept. 13, but although the Greenwich magnetograph traces were somewhat disturbed for a few days about this time, no pronounced disturbance was registered. This group of spots, together with another large one seen six weeks ago, continues the list of naked-eye spots given in NATURE of July 28 (p. 142).

No.	Date on Disc.	Central Meridian Passage.	Latitude.	Maximum Area.
6	July 27-Aug. 6	July 31.8	14° N.	1/1000
7	Sept. 6-18	Sept. 12.7	14° N.	1/1000
Are	eas are expressed as pro	oportion of sun's he	misphere c	overed.

METEOR OF SEPT. 9.—Mr. W. F. Denning, 44 Egerton Road, Bristol, informs us that a bright meteor was observed by Mr. R. Kingman at Bristol on Sept. 9, at  $8^{h} 35^{m}$  G.M.T. It passed almost vertically through Ophiuchus along a path of about 27° from  $270^{\circ} + 24^{\circ}$  to  $261^{\circ} - 2^{\circ}$ . The meteor was about as bright as Venus, and it gave a flash at the end which illuminated the southern sky. The motion was swift and the flight of the object seemed directed from a radiant at  $290^{\circ} + 52^{\circ}$  in Cygnus, which is well known as supplying many meteors in August and September. A duplicate observation would be valuable and enable the radiant to be ascertained with certainty, as well as the height and velocity of the object.

No. 3073, Vol. 122]