

answer to an inquiry at the moment of going to press, it was stated that he was still unconscious and his condition remained grave.

MEMBERS of the staff of Rothamsted Experimental Station, Harpenden, Herts., are available for lectures during the winter to farmers' unions, chambers of agriculture, agricultural societies and similar bodies. No charges are made, but associations are expected to defray the lecturer's expenses. The subjects for lectures are included under such general titles as manuring, soil micro-organisms, weeds, chemistry of manuring and crop production, soil physics, insecticides and fungicides, insect pests, bees, and plant diseases. Communications regarding the lectures should be addressed to the secretary of the Station.

THE annual exhibition of electrical, optical, and other physical apparatus arranged by the Physical Society of London and the Optical Society is to be held on January 5-7, at the Imperial College of Science and Technology, South Kensington. In addition to the usual display by instrument makers, the exhibition this year will include new features in the shape of illustrations of recent physical research and of improvements in laboratory practice, examples of effective lecture experiments and repetitions of historical experiments in physics. These exhibits will be kept distinct from the trade exhibits, and a section of the catalogue will be devoted to them. Offers of such exhibits should be sent to the secretary of the Physical Society at the Imperial College of Science not later than November 16. The new development will afford an opportunity for the interchange of ideas between research workers and teachers, and will also be of service in bringing the

latter into touch with recent advances in physical science. The repetition of historical experiments will be of interest not only to teachers but also to the general public, who will be admitted to the exhibition on January 7. This is another novel feature, admission to the exhibition in previous years having been confined almost entirely to scientific workers.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned: An assistant lecturer in agriculture at the Farm Institute, Spars-holt, near Winchester—The Director of Education, The Castle, Winchester (October 26). A demonstrator in inorganic chemistry in the University of Leeds—The Registrar (October 26). A lecturer in the department of chemistry of the University of Cape Town—The Secretary to the High Commissioner for the Union of South Africa, Trafalgar Square, W.C.2 (October 27). A professor of botany in the Rhodes University College, Grahamstown—The Secretary to the High Commissioner for the Union of South Africa, Trafalgar Square, W.C.2 (November 4). Assistant-Secretary to the Royal Society of Arts—The Secretary, John Street, Adelphi, W.C.2 (November 7). An editorial assistant under the British Non-Ferrous Metals Research Association, for abstracting and reviewing British and foreign scientific and technical publications and for editing and interpreting research reports—The Secretary, B.N.F.M.R.A., 71 Temple Row, Birmingham. Two male junior assistants in the research department, Woolwich, for computing work in connexion with ballistic observations—The Chief Superintendent, Research Department, Woolwich, S.E.18.

Our Astronomical Column.

ANOTHER FAINT NOVA IN AQUILA?—Prof. Max Wolf recently detected a star of magnitude 8.7 in Aquila, which was absent both from the Bonn Durchmusterung and from numerous photographs taken in recent years at Königstuhl, which show stars down to magnitude 12 or 13. It has been in the neighbourhood of mag. 8.7 for about three weeks, and was observed on Oct. 3 by Mr. B. M. Peek at Bournemouth and on Oct. 5 by Mr. G. Merton at Blackheath. Its place for 1925.0 is R.A. $19^{\text{h}} 27^{\text{m}} 24.7^{\text{s}}$, S. Decl. $6^{\circ} 35' 10''$. It is either a Nova or a remarkable variable, and in either case deserves careful observation. The object souths at about 6 P.M., so it will be possible to follow it for at least two months before it gets too near the sun for observation.

BRIGHT METEORS.—Mr. W. F. Denning writes that, on the evening of October 6, meteors were rather abundant though fog prevailed and the gibbous moon was up during the latter part of the observation. Meteors are often plentiful in the first week of October, several minor showers of moderate richness being of annual recurrence at this period. A few bright meteors were among those recorded on October 6 at Bristol, namely, one at $19^{\text{h}} 39^{\text{m}}$ G.M.T., equal to Jupiter, passing upwards just under Cassiopeia from a radiant at $14^{\circ} + 31^{\circ}$ or $12^{\circ} + 7^{\circ}$; another at $21^{\text{h}} 0^{\text{m}}$ G.M.T. falling in the S.E. sky rather slowly from $18^{\circ} + 14^{\circ}$ to $33^{\circ} - 10^{\circ}$. This was brighter than Venus and probably directed from a radiant in Cygnus, Cepheus, or Draco. A third at $21^{\text{h}} 56^{\text{m}}$, about

equal to Jupiter, shooting from near β Ursæ Minoris to between α and β Ursæ Majoris. If one or more of these objects were noticed at other places; it would be interesting to hear of any details of their apparent paths which would enable their actual courses to be computed.

ORBIT COMPUTING.—There is at present a dearth of readily accessible books in English that give full details of the rather difficult but fascinating problem of orbit computing. Students of celestial dynamics will therefore welcome the paper on this subject by Mr. G. Merton (Monthly Notices of Royal Astronomical Society, June 1925). The method described is based on that of Gauss, but full use is made of various improvements introduced since his time, including some by Mr. Merton himself. Special attention is given to rapid convergence, a point in which many of the older methods are defective, and to the avoiding of all unnecessary repetition after the first approximation to the geocentric distance is obtained. In particular, the parallax is eliminated in a less clumsy manner than that of Gauss's *locus fictus*. There are two fully worked out numerical examples, elliptical orbits being illustrated by the case of Baade's planet 1924 TD (lately named Ganymede) and parabolic ones by Orkisz's comet 1925 II. Some tables are appended to the paper, which avoid the necessity of consulting any other work, except a table of logarithms and the Nautical Almanac for the sun's co-ordinates.