

The Board of Trade accordingly desires it to be known that an order will be made in due course, removing the names of the copper and green pheasants from the Schedule, with effect from January 1, 1924.

Science announces that the committee of the Daniel Giraud Elliot Medal desires to receive nominations for the awards of the years 1921 and 1922, which are still open, because the committee has not been able to reach unanimous conclusion on any work thus far brought to its attention. The Elliot Medal is awarded for some especially great contribution, not for general accomplishment, in the field of either zoology or palæontology. It is not restricted in either branch to the vertebrates, but may be made in either the vertebrate or invertebrate field and is open to scientific workers of the world. The award of the gold medal is accompanied by a generous honorarium. Nominations for the two years mentioned, namely, 1921 and 1922, and also for 1923, can now be received. Communications should be addressed to the Secretary of the National Academy of Sciences, Washington, D.C.

The eleventh meeting of the Indian Science Congress will be held at Bangalore on January 14-19, 1924. H.H. the Maharajah of Mysore will be patron of the meeting, and Sir Asutosh Mookerjee will be president. The following sectional presidents have been appointed:—Mr. B. C. Burt (agriculture); Prof. C. V. Raman (physics and mathematics); Dr. E. R. Watson (chemistry); Prof. K. N. Bahl (zoology); Prof. Agharkar (botany); Mr. H. Bosworth Smith (geology); Lieut.-Col. Christophers (medical research); Mr. J. Hornell (anthropology). The honorary local secre-

taries will be Prof. F. L. Usher, Central College, Bangalore, and Mr. S. G. Sastry, Secretary, Board of Scientific Advice, Bangalore. Further information can be obtained on application to the hon. general secretary, Dr. J. L. Simonsen, Forest Research Institute and College, Dehra Dun, U.P. India.

THE Journal of the Röntgen Society (the oldest radiological society in the world) for July (vol. xix. No. 76) contains an account of the twenty-fifth anniversary dinner of the Society held in March last, and a translation of Röntgen's first and second memoirs on X-rays, entitled "Concerning a New Kind of Ray," which are interesting reading.

THE latest catalogue (No. 378) of Messrs. Bernard Quaritch, Ltd., 11 Grafton Street, W.1, is of a miscellaneous character, but of the 1399 second-hand works offered for sale many deal with science, and, as is usual with the lists issued by this firm, some are very scarce and choice. The catalogue also comprises a list of selected new and recent publications.

THE McGraw-Hill Publishing Co., Ltd., announces an interesting new series of books under the title of "Concise Studies in Economic Problems," which will embody the results of research studies made by the Institute of Economics of Washington, D.C., U.S.A. The first volume will be "Germany's Capacity to Pay." Succeeding works will deal with International Economic Reconstruction, International Commercial Policies, Industry and Labour, and Agricultural Economics.

Our Astronomical Column.

THE DENSITY OF THE CORONA.—The question of the density of the corona is of interest both with regard to possible refraction of starlight in the investigation of the Einstein light-deviation, and with regard to the amount of resistance met with by comets of small perihelion distance. *Astr. Nach.*, 5238, contains a discussion of the subject by B. Fessenkoff, of Moscow.

The author assumes that the total light of the corona is equal to that of the full moon, and that the light intensity varies (1) as the inverse square, (2) as the inverse fourth power, of the distance from the sun's surface. He utilises some studies of his own on the light-reflecting powers of the terrestrial atmosphere at various heights, obtained from measures of the brightness of twilight for different angles of depression of the sun. He calculates that the light given by a small volume of the corona, 5' from the sun's limb, in terms of the light given by an equal volume of terrestrial atmosphere, of the density and composition that exist at a height of 100 km., placed in the same situation as the coronal volume, is:—on supposition (1) 0.52×10^{-8} ; on supposition (2) 0.27×10^{-4} . The density of the corona at 5' from the limb is that of hydrogen at pressures 0.43×10^{-5} mm. and 0.22×10^{-6} mm. (temperature 0° C.) on the two suppositions. It will be remembered that the nearest stars that have been observed in the Einstein investigation were considerably further from the limb.

REPORT ON THE KAPTEYN SELECTED AREAS.—Prof. Van Rhijn, of Groningen, has issued a useful

report on the progress of researches on these areas. They are distributed on a uniform plan over the celestial sphere, and are to be studied in an exhaustive manner by a number of co-operating observatories. The first step is the formation of a photographic Durchmusterung of the stars in the areas; this is being done at Harvard and Arequipa, with apertures of 16 and 24 inches, and limiting magnitudes 15.9 and 16.3 respectively; these plates are being measured at Groningen. It is estimated that the number of stars is about a quarter of a million, the total area being 225 square degrees, or $1/183$ of the sphere. The positions are determined to an accuracy of half a second, the magnitudes to 0.1 mag. The centennial proper motions of the stars of mag. 12 and brighter are determinable to a third of a second with the aid of the *Carte de Ciel* plates; those of the fainter stars will not be obtainable for some years with the necessary accuracy.

The best methods of determining absolute motions and eliminating magnitude error are discussed; the author hopes that Kapteyn's plan for a photographic parallax Durchmusterung will not be abandoned. He admits that the results are illusory for particular stars, but he thinks that they will serve to compare the parallaxes of stars of the same magnitude with large and small proper motions. The colour-indices are being determined by Seares by comparison of photographs on ordinary and orthochromatic plates. Altogether the report gives a hopeful summary of the results already attained and those to be looked for in the near future.