

of these gases, or in a vacuum. No helium production was observed with palladium preparations that did not absorb hydrogen, although preparations were occasionally obtained that absorbed hydrogen well but gave little of no helium, especially if the hydrogen had been absorbed at a high temperature.

The above results indicated that palladium preparations that have long remained unused at room temperature should contain a little helium (not of atmospheric origin). Examination of a number of such specimens showed that helium was present in all of them, and in particular a specimen of palladised asbestos, which had been purchased from Kahlbaum two years previously, was found to be relatively very rich, 1 gm. of it containing  $10^{-6}$  c.c. of practically pure helium. After this specimen had been heated to expel the helium, and treated with oxygen for twelve hours, no fresh helium was detected, but at the end of five hours in contact with hydrogen a considerable amount of helium was found. This experiment was performed three times with the same result. The palladium, however, gradually lost its activity; at the beginning it produced helium at the rate of  $10^{-8}$ - $10^{-7}$  c.c. per day;

after twenty treatments it became inactive. Its activity was restored, although not to the original degree, in the manner described above. Finely divided platinum is less active than palladium, and the action of pyrophoric nickel is weaker still.

The authors discuss fully the possible sources of error in their experiments, such as the ingress of atmospheric helium, the adsorptive capacity of glass for helium, the conceivable preferential adsorption of helium by palladium, or by asbestos, and the possibility of helium being formed as a radio-active disintegration product of palladium; all of which they consider to be excluded. The hydrogen and oxygen used by them contained less than 0.001 per cent. of air. They were not able to detect any trace of the energy liberated during the transformation, and they point out that the amount set free from the conversion of such small quantities of hydrogen—about 0.28 calorie—would be extremely difficult to detect, and particularly so if thermal changes due to absorption or formation of compounds also take place. They incline to the view that the liberated energy is more likely to appear as radiation, *e.g.* as  $\gamma$  or Millikan-rays, than as heat.

### News and Views.

ONE of the subjects discussed at the recent World Power Conference at Basle was the exchange of electrical energy between countries. An interesting example of this interchange of energy occurs between Denmark and Sweden. Submarine cables crossing the Sund Straits transmit power at 25,000 volts and 50,000 volts respectively. When the water supply in Sweden is abundant they carry the excess hydroelectric power to Denmark, and when Sweden suffers from water shortage they convey thermally generated power in the reverse direction. It was pointed out that some countries, Switzerland for example, have great water power resources but yet are very unwilling to export electric power, and set up high tariffs. One of the reasons for their action would appear to be that, in the opinion of some Swiss engineers, Switzerland is destined to become one of the important centres for carrying out electrometallurgical and electrochemical processes on a large scale. In their opinion, the sale of electrical energy abroad helps the establishment of those industries outside their own frontiers and so is not in the national interest. Another objection is that the export of electricity in bulk to foreign countries will gradually subordinate Switzerland to these countries; the foreign capital introduced being conceivably a source of danger. Mr. Niesz of Baden held that these objections have no real foundation. The majority of the engineers present agreed that it is desirable that the authorities in different countries should place no obstacle in the way of a free interchange of electrical energy provided that economic conditions are favourable.

MR. ALAN COBHAM alighted on the Thames opposite the Houses of Parliament on October 1, thus completing his latest flying achievement. In recognition of his services to aviation the King has conferred upon Mr. Cobham the honour of knighthood (K.B.E.). His three long-distance flights are a notable advertisement

for commercial aviation. The De Havilland-50 aeroplane, with Armstrong-Siddely "Puma" engine and interchangeable floats and wheels, was designed for flying in countries with undeveloped transport services, where lake, river, or sea offer natural alighting places. An aeroplane of this type was flown to Rangoon and back. The same aeroplane fitted with the more powerful "Jaguar" engine was flown to the Cape and back. Finally, the same aeroplane and engine, after overhaul and fitting of forged "Y-metal" aluminium pistons, was flown to Melbourne and back, floats being fitted as far as Port Darwin, wheels for trans-Australian flying. The structural alterations required for the heavier engine, if any, are not known, but the following are some of the main characteristics:

D.H.-50.	Puma Engine.	Jaguar (Radial) Engine.
Span, 13 m. . . .	6 cyl. (water cooled).	14 cyl. (air cooled).
Surface, 41 m. <sup>2</sup> . .	180 kw.	290 kw.
Total wgt., 1770 kgm.	1400 r.p.m.	1700 r.p.m.
Speed, 180 km./hr. .	300 kgm. wgt.	360 kgm. wgt.

The last of the three flights was equivalent to flying 800 km. every other day from June 30 to October 1, a high feat of personal skill and endurance, and an equally remarkable record of aeroplane and engine performance.

THE specificity of quinine in curing or relieving the symptoms of malaria has long been known. At the present time, the chief drawback to its use is its cost, due in part to the few areas in which the bark yielding the highest proportion of this alkaloid can be cultivated and in part to the restriction of output. Other drugs have therefore been tried in the treatment of this disease; the other crystalline alkaloids present in the more common variety of bark, quinidine, cinchonine, and possibly cinchonidine, have been

shown by Fletcher to be nearly as efficacious as quinine itself (see *Brit. Med. Journ.*, 1926, vol. i. p. 154), and their use therefore should result in a considerable reduction in the cost of treatment. On the other hand, no synthetically prepared compound has so far been found to be of value, but this statement may soon be no longer true if the report from Germany which appeared in the *Times* of September 25 is confirmed. The new drug is called 'Plasmochin,' and has been tested both experimentally in birds and animals and also clinically of endemic malaria and in cases of general paralysis of the insane who have been submitted to the malarial treatment. This treatment consists in infecting the patient with one form of the malarial parasite, and after a week or two curing him with quinine; great improvement of the original symptoms has resulted in many cases. The drug appears to be non-toxic, but caution is expressed as to whether it will replace quinine completely in the treatment of malaria. It has, however, been found to destroy the crescent forms of the 'malignant' tertian parasite within five to seven days. It is possible that it may form a useful adjunct to treatment with quinine or the other cinchona alkaloids.

MR. G. N. HUMPHREYS, of the Uganda Survey Department, has recently led two expeditions to Ruwenzori; he has climbed most of the chief peaks, and made an extensive examination of the range. His first expedition in February of this year was hampered by bad weather, but he climbed Mount Speke and the peak Vittorio Emanuele, and an unnamed peak; and the expedition achieved the first crossing of the range from east to west; it used a pass near Mount Gessi, and discovered three new lakes, of which the largest is two miles long. The second expedition in July had better weather, and the party climbed both the peaks Margherita and Alexandra on Mount Stanley, some of the higher peaks on Mount Baker, and Mount Luigi di Savoia. The expeditions made some natural history collections. A preliminary account of the journeys was given by Mr. Humphreys in a lecture to the Uganda Literary and Scientific Society on August 27 last.

THE British Aquarists' Association has just held its first exhibition in the British Sea Anglers' rooms in Fetter Lane, London, E.C. 4. Judging by the exhibits alone, one would gather that the primary object of the Association is the study of the elegant and comfortable management of freshwater vertebrates, and the provision of expert advice to its members on the construction and maintenance of aquaria. A glance through the *Amateur Aquarist and Reptilian Review*, the official organ of the Association, however, shows that it has much wider biological interests in the structure, habits and life-histories of aquatic organisms generally. In a first exhibition, it was natural that the goldfish family and the quaint and more ornamental water vertebrates should predominate, and we were surprised to find four healthy specimens of such a rarity as *Proteus* in one aquarium. The exhibition gave special attention to the problem of the respiratory balance. The mechanical method

was represented by a recurrent siphon fountain of simple make, an aerating cylinder in which a pump is used to develop air-pressure sufficient for twelve hours' aeration, and a fish aquarium with a sluice under the perforated floor which flushes away the accumulated debris without disturbing the water above. Biologists who prefer the plant-animal balance would be interested to find that such a large variety of aquatic plants from all over the world can now be purchased from dealers in London. The experience of the Association should prove of value to biologists intending to do experimental work with living aquatic animals.

THE work of the Building Research Station of the Industrial Research Department is described in a ten-page pamphlet issued by H.M. Stationery Office. Originally housed in temporary buildings at Acton, this station has now been transferred to permanent quarters at Garston, near Watford, which change admits of considerably increased activities. The highly technical problems involved in modern building are often insufficiently appreciated. These problems refer not only to the purely engineering, constructional, and accessories features contained in most large buildings but also embrace developments in the use of, and a scientific knowledge of, the materials which are popularly associated with ordinary building. To elucidate these matters, the co-operation of the chemist, physicist, architect, and engineer is necessary. As is pointed out, quite apart from the general claims of this industry to a share in the efforts of the scientific worker, the country is involved in huge sums spent upon housing, and it is in the national interest that every effort should be made to utilise science in the interests of real economy in construction. By arrangement with other institutions, the station carries out special researches in addition to the work within its own walls, and is prepared to deal with problems for private individuals at arranged fees. Included in the scope of its work is the collection and co-ordination of current results of investigation from other sources.

DURING the week-end September 24-27, the third conference of the Association of Special Libraries and Information Bureaux was held at Balliol College, Oxford. The immediate object of the Association is the preparation of a directory which, with suitable classification, will direct attention to the sources where special collections of books or other materials have been brought together, whether these be in public libraries or in private collections. This task is a large one, and it is being assisted by a grant of 2000*l.* from the Carnegie United Kingdom Trust. Information bureaux are now being rapidly founded in connexion with many industrial and commercial enterprises, and several of the papers and discussions at the conference dealt with these developments. Papers dealing with the collection of technical information and its utilisation by research associations for the benefit of manufacturers in different branches of industry were also read. The Association is keeping in close touch with foreign sources of information,

and is securing liaison with similar developments abroad. At the conference, Dr. de Vos Van Steenjiwk gave an account of the work of the new International Institute of Intellectual Co-operation at Paris. The Association, in preparing the directory and acting as a clearing-house for sources of information, is rapidly placing itself in a unique position to offer valuable service, which will doubtless attract a large membership from professional and business circles. Further information on the Association's work can be obtained from its office at 38 Bloomsbury Square, W.C.1.

DR. D. G. HOGARTH in "The Twilight of History," a lecture delivered as the eighth Earl Grey Memorial Lecture at Armstrong College, Newcastle, in February last, and now published by the Oxford University Press, suggests a new orientation in approach to the problems of the obscure period between the downfall of the second Late Minoan kingdom in Crete and the rise of Hellenism. He does not regard the decadence in art which is to be observed in this period as necessarily implying a set-back in civilisation. While he would agree with the late Sir William Ridgeway in the view that Minoan was not 'Minoan' at all, and did not participate in the civilisation named after him, he would not concur in calling him the 'destroyer.' Neither the Achæan nor the Dorian invasion, on his view, was catastrophic. He argues that pre-eminence in artistic products is an accompaniment of an aristocratic regime based upon a subject population of inferior culture, whereas the decadence in artistic motives which follows Late Minoan II., being accompanied by improved technique, for example in pottery, points to the substitution of the artisan for the artist, and a wider diffusion of culture among the people at large. The wider distribution of Minoan products indicates a period of expansion rather than dispersal and the development of an export trade which brought the Greek world into contact with the fertilising influence of the Oriental. Dr. Hogarth concurs in the view that the break up of the Mycenæan Empire was due to the Dorians, but so far from regarding this as the beginning of a 'Dark Age,' he looks upon the isolated communities under hereditary nobles which they founded as the precedent condition of the evolution of the Greek city state. A brief summary does less than justice to Dr. Hogarth's sanity of outlook and his sense of proportion. A careful study of his stimulating lecture might perhaps serve to curb some of the wilder flights of enthusiasm which, apparently, fail to surmount a wall erected somewhere about 776 B.C.

IN connexion with the opening of the reorganised public exhibition galleries of the Imperial Institute, Mr. Arthur M. Samuel, Parliamentary Secretary of the Department of Overseas Trade, addressed a well-attended meeting of head teachers of schools in the London area, held in the great hall of the University of London on the evening of September 28. The Hon. W. G. A. Ormsby-Gore, Under-Secretary for the Colonies, and the Duchess of Atholl, Parliamentary Secretary to the Board of Education, also addressed the teachers. The galleries were opened to the

public on the following day. The present system of arrangement, which has been introduced by the new director of the Institute, Lieut.-General Sir William Furse, has as its main object the development of the educational value of the collections, which are planned to illustrate as completely as possible the economic and physical geography of the overseas countries of the Empire. The plan of arrangement which has been adopted for the courts is in keeping with modern ideas in regard to the teaching of geography. Maps and models in relief illustrate the topography and configuration of the country, the distribution of rainfall and other important features. Wherever possible or appropriate, space is devoted to exhibits illustrating the ethnology of the country, and the visitor then passes to a series of show cases in which are displayed selected natural products and manufactures of the country, particular attention being given to new products and developing industries. Complete series of samples for inspection by commercial men and others are to be arranged in special sample rooms. Exhibits illustrating the opportunities for sport are also a feature in certain courts. Full use has been made of the experience gained at the British Empire Exhibition in developing effective means of display, a notable example being the installation of a striking series of finely executed dioramas which portray scenery and natural features, industries, and sport. The scheme has not yet reached its full development in all the courts, but it is clear that the reorganised galleries should prove of great value for teaching purposes and at the same time offer a most attractive display to the general public.

THE *Empire Cotton Growing Review*, vol. 3, No. 3, July 1926, continues to publish interesting accounts of the possibilities of cotton-growing in various tropical dependencies overseas. Mr. G. F. Keatinge, revisiting South Africa in 1925, finds that the production of 1000 bales in 1919, is now 10,000, but would have been more but that many farmers have been discouraged as the result of drought in 1924, excessive rain in 1925, and insect pests at all times. Where, however, cotton is grown continuously on the same land for a series of years, a slow accumulation of pests is to be expected. Cotton prospects in Papua and in New Guinea are discussed by Mr. G. Evans. This number of the journal contains the second part of an article of more general interest to agriculturists, in which Messrs. F. L. Engledow and G. Udny Yule discuss the principles and practice of yield trials. This discussion, which deals with the many difficulties of such yield trials in a critical and yet practical spirit, will be of very general value; the authors state that the form of their paper is the result of their experience in training six generations of 'cotton men' at the School of Agriculture, Cambridge. The Empire Cotton Growing Corporation has also published separately a very full report by Col. C. N. French upon cotton-growing in Nigeria, which is a very interesting discussion of the problems of cultivation, transport, and marketing which arise in a territory where cotton is grown by native farmers.

The report is a striking tribute to the work of the Director of Agriculture, Mr. Faulkner, and his staff.

WE have received a copy of No. 2 of *Continental Metallurgical and Chemical Engineering*, a publication in English, issued by the Dr. Joachim Stern Verlag in Berlin. This periodical is devoted to metallurgical and chemical subjects, and the number received, which is that for September, contains the first part of an article on the cutting and turning of metals, describing important experiments now in progress in the Technische Hochschule of Berlin with the object of determining the forces in action at the cutting edge of the tool and the mechanism of the cutting process. Another subject which is treated in detail is the extraction of radium, vanadium, and uranium from carnotite, whilst the manufacture of ruby glass and the production of synthetic camphor are also topics which receive notice. The review of current literature is, in this number, confined to chemical and metallurgical papers from French and German periodicals. On the commercial aspect, the most interesting article is one describing the movement for the formation of a continental iron and steel syndicate, containing an account of the steps which have been taken in this direction in various European countries, mainly with the object of countering the efforts of the great American steel-marketing organisations. The new periodical is associated with the *Metallbörse*.

THE issue of the *Physikalische Zeitschrift* for July 15 contains a portrait of the late Prof. Otto Lummer and an account of his life and work from the pen of Prof. E. Riecke. Otto Lummer was born in Gera on July 17, 1860, studied mathematics and physics at the Universities of Tübingen and Berlin, obtained the degree of doctor at the latter in 1884 and acted as assistant to Helmholtz at the University until 1887, when he followed his chief to the newly established Reichsanstalt at Charlottenburg. He lectured at Berlin from 1901 until 1904, when he became professor of physics at the University of Breslau. He died suddenly on July 5, 1925. Throughout his life he was a skilled experimenter and an attractive lecturer. The work for which he is best known was done while at the Reichsanstalt—the invention of the Lummer-Brodhun photometer in 1889 and the Lummer plate in 1902, the accurate measurement of the ratio of the specific heats of gases with Pringsheim in 1887–1898, and the measurement of the emission spectrum of a black body also with Pringsheim in 1899–1900, which furnished Planck with the starting-point for the quantum theory. His work while at Breslau was concerned mainly with photometry and its industrial applications.

THE annual report of the Field Museum of Natural History, Chicago, for 1925 contains, as usual, much to make museum workers in Great Britain think. Take, for example, the expeditions during the year: there were three making archaeological collections—in Mesopotamia, Egypt, and Peru; two making ethnological collections—in the neighbouring states and in Madagascar; three dealt with various branches of botany—in Peru, Chile, and British Guiana; one

sought for fossil vertebrates in Argentina; the Roosevelts led a general zoological expedition through the high lands of central Asia; and four other zoological expeditions worked in Central Africa, Southern Georgia, Saskatchewan and Alberta, and British Columbia. Out of the 21 collectors thus engaged eight were members of the ordinary scientific staff, very nearly one-third of the whole. What one ponders over is how the staff manages to deal with the mass of material that is pouring in. That it does deal with some of it in a highly successful manner is clear from the photogravure plates of various exhibits, such as the man-eating lions of Tsavo and the reproduction of a flowering cactus from British Guiana. These plates, it should be mentioned, are all produced in the museum, and are but one example of its unusual activities. Many solutions of our problem suggest themselves, but one seems certain: the museum must employ many highly-skilled technical assistants. We should like to see a complete establishment list, with the rates of pay.

THE Royal Meteorological Society has lately issued the first three numbers of a new series of publications, entitled *Memoirs*, in which it is intended to include the more technical papers printed by the Society. Such papers have hitherto appeared in the *Quarterly Journal* of the Society, which is circulated to all the fellows, but with the recent growth in the mathematical and technical developments of meteorology, this course has been judged less suitable than the new plan now adopted. The *Quarterly Journal* is intended to make a wide general appeal to those interested in meteorology, and will continue to include a large number of the papers submitted to the Society, together with other meteorological notes and articles: but the more technical and difficult papers, which, for reasons of economy, will be sent only to those fellows who indicate their special interest in these papers and express a desire to receive them, will be noticed in the *Quarterly Journal* only by title or in abstract. The Society, like most other publishing scientific societies, finds the financial difficulties due to increased cost of printing enhanced by the growth in the number of papers presented to it, and this new departure is rendered possible only by the aid of a share of the recently increased Government grant for scientific publications, administered by the Royal Society.

ORDERS of the Committee of Privy Council have been issued by which Dr. Charles J. Martin, Director of the Lister Institute and professor of experimental pathology in the University of London, and Sir Frederick G. Hopkins, professor of bio-chemistry in the University of Cambridge, are appointed members of the Medical Research Council into the vacancies caused respectively by the death of Lieutenant-General Sir William B. Leishman and by the retirement of Prof. T. R. Elliott.

MR. W. R. THOMSON, formerly a member of the staff of the Royal Agricultural College, Cirencester, has been appointed by Messrs. Fertilisers Sales, Ltd., Adelaide House, King William Street, London, E.C.4, to be director of propaganda for calcium cyanamide in Ceylon.

THE Chemical Society is publishing a series of photographs of eminent chemists, reproduced by a photo-lithographic process. So far eight are available: Bunsen, Emil Fischer, Hofmann, Mendeléeff, Pasteur, Sir William Perkin, Ramsay, and Roscoe. The portraits should be admirable and inspiring decorations for chemical and other laboratories.

FROM the fifty-sixth annual report of the Newport (Mon.) Public Libraries, Museum, and Art Gallery, for 1925-26, we learn that a new building for the Museum and Art Gallery is as urgently needed and as far off as ever. Meanwhile valuable objects of art and science, which should find a home in Newport, are directed elsewhere, and the educational activities of the Museum are hampered for want of a lecture room.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—A medical practitioner as bacteriologist for the City of Salford—The Medical Officer of Health, 143 Regent Road, Salford (October 11). An assistant lecturer in the principles of teaching (logic, psychology and ethics) at the Glasgow Training Centre of the National Committee for the Training of Teachers—Director of Studies, Training Centre, Jordanhill, Glasgow (October 16). An assistant pathologist at the Royal Free Hospital and London School of Medicine for Women—The Secretary, R.F.H., Gray's Inn Road, W.C.1, or The Warden and Secretary, London School

of Medicine for Women, Hunter Street, W.C.1 (October 18). A professor of mathematics, a reader in physics and a reader in chemistry at Raffles College, Singapore—The Board of Education or the Scottish Education Dept., Whitehall, S.W.1 (October 22). A lecturer and demonstrator in chemistry and a lecturer in pharmacy in the University of Sydney, New South Wales—The Agent-General for New South Wales, Australia House, Strand, W.C.2 (October 30). An Editor for "Science Abstracts" having a knowledge of physics, electrical engineering and foreign languages—The Secretary, Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2 (November 8). An assistant curator in zoology in the Bristol Museum and Art Gallery—The Director (November 15). A State mining engineer to the Western Australian Government—The Agent-General for Western Australia, 115 Strand, W.C.2 (November 30). The "J. C. White" lectureship in bacteriology in the Queen's University, Belfast—The Secretary (December 1). A teacher of biology at Gordon College, Khartoum—The Sudan Government Offices, Wellington House, Buckingham Gate, S.W.1 (marked "Teacher of Biology"). A warden of the Ellis Llwyd Jones Hall of Residence for Women Students, Victoria University of Manchester—The Registrar of the University. A lecturer in mathematics at the Chelsea Polytechnic—The Secretary, Chelsea Polytechnic, Manresa Road, S.W.3.

### Our Astronomical Column.

THE METEORIC PHENOMENA OF SEPTEMBER 6.—Mr. W. F. Denning writes that, with reference to the meteoric phenomena observed on Monday, Sept. 6, though there were probably two different meteors seen at about 20<sup>h</sup> 45<sup>m</sup> G.M.T., the various observations are not sufficiently definite to determine the real paths with certainty except in one case. This refers to the great fireball which was directed from the north-east and passed over Yorkshire from the North Sea to disappear finally over Matlock, Derbyshire. Its height was from 60 to 28 miles, path about 133 miles, and velocity 15 miles per second. The radiant point was near  $\epsilon$  Persei over the north-east horizon at the time of the fireball's appearance.

Statements have appeared in the newspapers that a London photographer released a number of gas balloons earlier in the same evening. Those were so arranged as to acquire altitudes of about 5000 feet and to explode finally with great noise and light. The originator of the scheme alleges that he sent the balloons up as an 'amusement' and 'experiment,' and claims that the supposed meteors and curious flashes observed on the same evening were the products of his experiment. This claim cannot apply to the Yorkshire fireball at least, which gave a dazzling illumination, occasioned loud detonations, and caused buildings to vibrate as during an earthquake. A small gas bag could scarcely induce results of this character.

DESIGN OF A 25-FOOT REFLECTOR.—There is no finality in telescope design, and Mr. F. G. Pease, of Mt. Wilson Observatory, pronounces that the making of a 25-foot mirror is quite within the bounds of possibility, and gives a design for such an instrument and its dome in *Publ. Astr. Soc. Pacific* for August. He makes the focal length only 3.3 times the aperture, so that the dome has only twice the span of that

of the Hooker telescope. The estimated cost is 12 million dollars. Various materials are suggested for the mirror: glass, pyrex, obsidian, stainless steel; Mr. Pease is not without hope that an alloy may be found with a low coefficient of expansion like invar, but superior in reflective power.

The proposed instrument would carry a 70-foot interferometer. Mr. Pease considers that the climate of Mt. Wilson would permit of the effective use of such an instrument on nearly as many nights as the 100-inch Hooker telescope.

CATANIA OBSERVATORY.—This observatory undertook the photography of the zone  $+46^{\circ}$  to  $+55^{\circ}$  of the Astrographic Catalogue. The printing of its results is much in arrears, owing to shortage of funds since the War and frequent changes of directors (A. Ricco died in 1919 and B. Viaro in 1922), but the appearance of Vol. 2, Part 2 will be welcomed. This extends from declination  $+47^{\circ}$  to  $+49^{\circ}$ , and from R.A. 3<sup>h</sup> to 6<sup>h</sup>. There are 48 pages of catalogue, with an average of about 120 stars on each, going down to mag. 12.2 (photographic). The information given is fuller than in most astrographic catalogues, R.A. and decl. being given for all stars (to 0.01<sup>sec</sup> and 0.1"), also meridian positions and spectral types for all stars for which they are available. There is difference of opinion as to the advisability of thus increasing the size and cost of the work, but there can be no question that it makes the catalogue much more convenient for reference.

The *Annuario* of the Observatory for 1926 contains drawings of sunspots and prominences by G. Favaro, and of Mars (opposition of 1924) by M. Maggini. The latter show an unusual number of small round markings, both bright and dark; some of the former may be clouds. A bright bridge crosses Syrtis Major, a feature that others have noticed at times.