News and Views.

THE continued illness, and consequent physical weakness, of his Majesty the King fill the minds of his devoted people with anxiety and their hearts with deep sympathy for all the members of the royal family. During the past month the thoughts of millions of citizens at home and overseas have been turned towards the bed of sickness at Buckingham Palace, and every bulletin recording the King's condition has been eagerly awaited. It is not surprising that the very trying time through which his Majesty has been passing should have led to weakness and almost to exhaustion, but by using every resource at the disposal of modern medical science, the royal physicians have been able to maintain his strength sufficiently to justify the hope that the troublesome malady and its effects will be completely overcome, though progress towards perfect health may be slow. What we are anxiously watching is veritably a fight against disease with weapons provided by the best existing knowledge of bacteriology, radiology and electro-therapy, aseptic surgery and neurology. cannot entertain any other thought than that through these applications of science and medical skill his Majesty will be preserved for many years yet to receive the homage of his faithful people.

SIR WILLIAM BOYD DAWKINS, distinguished in the departments of geology, archæology, and anthropology, celebrates the ninetieth anniversary of his birth on Wednesday next, having been born on Dec. 26, 1838. We offer very hearty congratulations, in which we are sure all scientific workers will join, to this veteran of the old-time 'joyous band' of geologists. Sir William was elected a fellow of the Royal Society sixty-one years ago; his fellowship of the Geological Society is, however, of longer period-sixty-seven years, though that is exceeded in the case of Mr. Ernest Noel, who has been on the roll actually seventynine years, and whose age is ninety-seven. Son of a clergyman, Sir William Boyd Dawkins was born at Buttington Vicarage, near Welshpool, Montgomeryshire. Educated at Rossall, he graduated at Jesus College, Oxford, of which college he is an honorary fellow. Evincing a strong bent for geology, he obtained a post on the Geological Survey of Great Britain in 1862, remaining until 1869, when he became curator of the Manchester (Owens College) Museum, his connexion in this capacity covering a long series of years; it would be difficult indeed fully to appraise the consequent high value of his services. He is still personally concerned in the development of the institution. Sir William took up in 1874, and long held, the chair of geology and palæontology in Owens College (afterwards Victoria University). An original member (1882) of the scientific committee discussing the Channel Tunnel project, Sir William was entrusted with the geological survey of the English and French coasts. Stimulated by the researches of Prestwich, he engaged in considerations referring to the existence of coal deposits in Kent. Thirty-eight years back, in a communication to NATURE of Mar. 6, 1890, entitled, "The Discovery of Coal near Dover,"

the story of the enterprise was recited in illustration of the progress of a scientific idea passing through various phases. The south-eastern coalfield is now "clearly defined, and ranks among the assets of the nation" (Dawkins, 1918).

A LONG and varied list of papers recorded in the Royal Society's "Catalogue of Scientific Papers" stands to the credit of Sir William Boyd Dawkins. Chief in importance may be mentioned his series of monographs on "The British Pleistocene Mammalia," issued by the Palæontographical Society (1866-87). Wild animals, he remarks, are of equal interest to the geologist, the archæologist, and the historian; for they afford to the first a means of classifying the deposits with which he has to deal, while in archæology and history they bear a direct relation to the numbers and civilisation of the human dwellers in the same region. Besides the foregoing, his published works include two fascinating books, "Cave-Hunting" (1874) and "Early Man in Britain" (1880). The former treated of the formation of caves and of the light thrown by their contents on the sojourn of man in Europe, and on the changes in climate and geography. Of similar significance was his co-operation in the exploration of the hyæna den of Wookey Hole, near Wells. Sir William is Hon. D.Sc. (Oxon), and he has received from the Geological Society the Lyell and Prestwich medals. He was president of Section C (Geology) at the British Association's meeting at Bath in 1888.

THE centenary of the death of William Hyde Wollaston-a contemporary of Davy and Dalton-falls on Dec. 22. Wollaston was born in 1766 at East Dereham, Norfolk, the birthplace also of George Borrow. Although endowed with the cautious judgment of a true natural philosopher, and the manipulative skill of a wizard, he yet just missed that lofty eminence in the world of science which some of his associates attained. His interests lay mainly in the infinitely little; in a microcosm of his own making. After being educated at Charterhouse and Cambridge, Wollaston set up in practice as a doctor at Bury St. Edmunds. However, on account of his shyness and sympathy with physical suffering, he realised his unfitness for a medical practitioner. Luckily he came into a comfortable fortune, and was able to abandon medicine and devote his talents to applied science, when still as a young man he was trying to establish himself as a physician in the metropolis. In 1793 he was elected a fellow of the Royal Society -his father at one time was on its council-and throughout the rest of his life he worthily upheld the honour of that distinguished body, as a constant contributor to its publications, as a secretary, and in 1820 as interim president; he having been elected to succeed Sir Joseph Banks, but knowing Davy's ambition, he vacated the chair a few months later.

Wollaston's remarkable acuteness of vision was often a topic of conversation among his intimate friends. On horseback he could detect small plants that others

could only see when dismounted and close to the hedgerows. He discovered several dark lines in the solar spectrum with his naked eyes. This attentiveness to minute things is exemplified in the construction of his well-known gossamer threads of platinum wire, and in the making of a voltaic cell in a tailor's thimble, powerful enough to raise those fine strands to incandescence. Sometimes at house parties he surreptitiously tested the range of audibility of the guests by blowing a shrill pocket whistle. His discovery of the rare metals palladium and rhodium was a direct result of superfine chemical analysis of the discarded remnants of platina residues. So extensive and generally so infallible was his knowledge of scientific matters that he was familiarly called the 'Pope.' To many of his inventions and discoveries Wollaston gave a practical and marketable form, and his periscopic spectacles, camera lucida, and reflecting goniometer found a ready sale; while his rediscovery of the art of cutting diamonds and of rendering platinum malleable greatly increased his income. He bequeathed funds and presents to the Royal Society, the Royal Astronomical Society, and the Geological Society, the Wollaston medal of which is named after him.

On the same day that Wollaston died, Robert Blair, the first professor of practical astronomy in the University of Edinburgh, passed away at Westloch, Berwickshire, having held his post since 1785. Blair had been a naval surgeon, and was present at the action of April 12, 1782, when Rodney beat the Comte de Grasse in the West Indies, and he attended Capt. Lord Robert Manners, who was mortally wounded. The noble family to which Manners belonged, in gratitude to Blair, solicited the Crown to found a chair for him, and thus Blair became a professor at Edinburgh. The post, however, was a sinecure, with a salary of £120. The writer Doran, some years ago, said: "If Blair was not a practical astronomer he was an experimental philosopher of great repute, and his experiments and observations on the refrangibility of light excited considerable interest in his own day, and may be read with profit even now, when philosophers and experiments have equally increased." Unfortunately, few details are known of Blair's life.

AT a recent meeting of the Council of the National Museum of Wales, a letter was received from H.M. Treasury intimating that the Government is prepared to make grants from the National Exchequer, amounting to £50,000, towards the cost of erecting the second section of the National Museum of Wales. This section will include the East Gallery and the lecture theatre, and will provide six additional exhibition rooms. The total cost of this further building is estimated to be £150,000. Of this sum about £50,000 is in hand, and the Treasury grant is made on the condition that the further £50,000 required will be raised locally. The Government has been induced to make this special grant with the view of affording relief to the exceptional amount of unemployment prevalent in the South Wales area, and on the understanding that the contracts will be so placed as to

employ South Wales labour, directly or indirectly, to the utmost possible extent. In spite of the acute depression in the South Wales area, it is expected that the sum required will be subscribed in a short time and so enable the offer of the Government to be redeemed. Plans, specifications, and bills of quantities for part of the work being already prepared, the Council is in a position to accept tenders for part of the contemplated building at once, and it is hoped that work will begin early in the New Year. The completion of the new wing will take about three years, but when it is erected Wales will have in its National Museum one of the finest and most up-to-date museum buildings in the world.

In engineering industry there are unfortunately some who have initiated inventions which have proved of great commercial value, and yet have reaped little or nothing from their invention. A few take this in a philosophic spirit and are not embittered by seeing others being honoured for having taken some slight part in the development of their ideas. Occasionally we find one who takes a pride in his obscurity. He knows that he deserves well of his fellow-men. He is not blind to his own merits, and he resents being patronised by governments, societies, or individuals who know little of his work. Outsiders regard him as a hermit, or possibly a misanthrope. Luckily, however, he generally has a few friends whose appreciation he values. Such a one was Oliver Heaviside, whose life history as a pioneer has been well written by Mr. Rollo Appleyard in Electrical Communication for October. His invention of the distortionless circuit in telephony and the great commercial developments to which this gave rise are now well known. Many of his discoveries, however, are not so well known, the reason being partly due to a stubborn clinging to his own methods and symbols, which puts difficulties in the way of everyone who has not studied his writings closely. Some of his friends-Heinrich Hertz, for example-were well aware of this. We notice that in a letter written to him by Hertz from Bonn in 1890, he is told that it is a false pride which prevents him from explaining to others more fully how his results are arrived at. It is ancient wisdom "that the many will expect you to come to them and not come up to you, be your merits ever so great." Thus it was not for lack of good worldly advice that Heaviside preferred to travel by the difficult path he chose.

At a general meeting of the Society for the Preservation of the Fauna of the Empire which was held in the lecture hall of the Zoological Society, Regent's Park, on Dec. 10, Dr. J. M. Derscheid, of the International Informatory Office for the Protection of Nature, Brussels, introduced the late Mr. Carl Akeley's film taken in the Kivu Parc National Albert, Belgian Congo, which has never been exhibited in public. This film shows interesting scenes in the life of the mountain gorilla, and a wonderful presentment of the live volcanoes and lava lakes of the Kivu area. The Belgian Ambassador, H. E. Baron de Cartier de Marchienne, afterwards gave an address on the Kivu

national park, and expressed the hope that the British administration of the adjoining area of Uganda would declare the gorilla country on its side of the border also a sanctuary for the animals. Mr. J. Smit, High Commissioner for the Union of South Africa, described what is being done in respect of declaring game reserves and national parks in South Africa. Many farmers there are now sparing baboons, for they do so much good by destroying harmful insects among the crops, that they much more than make up thereby for the grain that they consume themselves. The meeting passed a resolution that "the Society has heard with concern and regret that an English party has left for Africa on an aeroplane alleged to be equipped for the pursuit of wild animals from the air."

The twenty-fifth anniversary of the first controlled flight in a power-driven aeroplane, made at Kitty Hawk, North Carolina, on Dec. 17, 1903, by the Wright brothers, was celebrated at a dinner held at the Science Museum, South Kensington, on Monday last. The dinner was held under the auspices of the Royal Aeronautical Society and, most appropriately, in the gallery of the Museum where the original Wright machine hangs. Mr. Griffith Brewer, who was the first Englishman to fly with the Wright brothers and has been closely associated with them, gave a short address on their work, in the course of which he said that the Wrights, having considered fully the work of their predecessors in attempts at human flight, decided that the main problem was equilibrium rather than the application of power to wings. They built a glider, which was balanced by changing the angle of the wing tips. A long series of measurements of the lift and drag of the machine were made, in the light of which other gliders were built and tested, a wind tunnel having been constructed meanwhile in order to examine the effects of wind pressure on surfaces at various angles. Finally, the first power-driven machine was designed and built, even to the engine and propellers, and successful flight was accomplished on Dec. 17, 1903. Four flights were made before a gust of wind tipped the machine over and wrecked it, but it has recently been restored by Mr. Orville Wright, and now hangs in the Science Museum. The anniversary was celebrated at Kitty Hawk in the presence of Mr. Orville Wright and representatives of the U.S. Government and various aeronautical organisations, by the unveiling of a granite boulder bearing a memorial tablet.

As honorary president of the Edinburgh University Forestry Society, Col. F. R. S. Balfour, of Dawyck, delivered his presidential address to the Society at the University on Dec. 7. His subject was "The Trees of the North Pacific Coast of America," illustrated by a fine series of slides from photographs taken by himself. Col. Balfour pointed out that the arborescent species on the west and east of the main Continental Divide of the Rockies differ entirely; owing to a similarity of climate many of the conifers on the west do well in Great Britain, whereas the reverse is the case with the many fine hardwoods—

oaks, hickories, maples, etc.—growing to the east. Many slides were shown depicting, in their natural surroundings, exotics now well known in Great Britain, such as Douglas, hemlock, several silver firs, spruces, sequoias, and pines. Col. Balfour recalled the fact that the first knowledge in Europe of these species was due to Archibald Menzies, who was doctor on board of Vancouver's ship the *Discovery* and collected species in 1792. Thirty years later David Douglas was sent out by the Royal Horticultural Society and was the first to send home seed of Pacific coast conifers.

In speaking to the toast of "Forestry" at the Edinburgh University Forestry Society's annual dinner on Dec. 7, Prof. E. P. Stebbing dealt with the possibilities which the Benmore estate in Argyllshire, presented by Mr. Harry Younger to Government in 1925, offers as a practical training centre and research station for forestry educational centres in Great Britain. Including two neighbouring estates purchased by the Forestry Commission, the area extends to some 8000 acres, with a number of plantations of different types, forest nurseries, an arboretum, and a mansionhouse capable of providing quarters and other facilities for visiting students. It is also intended to have a botanical garden at the centre, which is receiving consideration from the professors of botany of Edinburgh and Glasgow. After pointing out that many Continental European forestry schools have areas of woods attached to them for educational and research purposes, Prof. Stebbing said that it might be possible for the appropriate Government department and the heads of university schools interested to work together to develop the possibilities of Benmore. In speaking to later toasts, both Prof. Wright Smith and Dr. J. D. Sutherland, of the Forestry Commission, referred to Benmore. Prof. Wright Smith said they could not have fallen upon a happier spot in the Western Highlands, and the prospects are peculiarly attractive. There are many problems, and it is early yet to say on what lines they will develop. Dr. Sutherland said that it is the wish of the Forestry Commission that Benmore shall be made use of in every possible way for forestry and botany, and he is satisfied that those responsible will call in and be guided by those who can tender valuable advice.

The second International Conference on Bituminous Coal began at Pittsburgh on Nov. 17. Dr. T. S. Baker, in opening it, visualised a time when the pipe for liquid and gaseous fuel and the cable for power, all obtained from coal, would displace the coal truck. He urged the endowment of research to develop coal, the "most useful raw material with which man is endowed." Many nations were represented and some interesting announcements were made. Thus Dr. C. Krauch described the results obtained by the I.G. on the hydrogenation of solid fuel. Germany has become independent of many imported raw materials -fuel oils, lubricants, fats-edible and otherwise. Thus at Leuna the annual output of synthetic motor spirit will by the end of 1929 have reached 250,000 tons. Hydrogenation has proved to be a means of desulphurising mineral oil, and by arrangement with the Standard Oil Co., this is to be introduced into American refinery practice. At some future date such a process might be of decisive importance in refining oil from English shales rich in sulphur. Dr. Krauch advances a new theory that petroleum results from the hydrogenation of vegetable remains.

M. G. CLAUDE gave an account at the Second International Conference on Bituminous Coal of his proposals for generating power by utilising the difference of temperatures found at the surface and the sea bottom. He has constructed a model installation to show how water vapour at the surface can be expanded through a turbine and then condensed to a vacuum at the low temperature of the sea floor. Such an invention would seem to lack urgency until the world's coal resources near depletion. A. T. Stuart of Toronto returned to the advocacy of production of hydrogen and oxygen by the electrolysis of water, by off-peak current of hydro-electric stations. The hydrogen could be made available for chemical synthesis and the oxygen for other purposes, among others for the gasification of fuel. He visualises a condition where the oxygen might be had almost cost free. This suggestion is interesting, because the use of oxygen in gas-making has been repeatedly considered, but the price of oxygen has hitherto been a stumbling-block.

THE Laboratory of the Division of Animal Nutrition. the first building to be completed by the Commonwealth Council for Scientific and Industrial Research, was officially opened in the grounds of the University of Adelaide, by the Prime Minister of Australia, on Oct. 22. In this laboratory there will be carried out, under the direction of Prof. T. Brailsford Robertson, all the fundamental biochemical work upon which he proposes to base his studies of nutrition of stock, and particularly of sheep. The cost of the laboratory is approximately £14,000, and it is of two stories. On the ground floor there are a general office, recording and computing department, drawing office, dark room, centrifuge room, office and laboratory of the Chief of the Division, three laboratories for chemists. and caretaker's and store rooms. The first floor is divided into two similar portions, each containing an office for a technician and preparation room, an animal room (for mice on one side and rats on the other), kitchen, sterilising and washing rooms, and food bins. In addition to the work going on in this building, field work on sheep is in progress at the Waite Institute and also at four field stations which have been established, one some 200 miles north of Port Augusta (South Australia), another near Beaufort (Victoria), a third at Moree (New South Wales), and quite recently a fourth at Springsure (Central Queensland).

AMERICAN scientific institutions have the knack of making their annual reports interesting to a wide field of readers. This is mainly because they are engaged in a variety of exploration work and do not hesitate to describe in vivid language the adventures of their explorers in their collecting grounds, instead of simply

cataloguing the trophies of the trip. The Year Book of the Academy of Natural Sciences in Philadelphia for 1927 keeps up the tradition. Wharton Huber describes his observations on the habits of the birds in the Bear River region of the Great Salt Lake, where he made good use of the 'alkali poisoning' which has destroyed thousands of ducks there, by collecting from the dead and dving complete plumage series of six species of ducks which breed in the area. Clement B. Newbold clearly enjoyed his experiences in hunting Stone's sheep and the mountain goat of British Columbia for two museum life-groups. It is interesting to note that the progress of the exhibits in the museum is entirely due to the generosity of members and friends of the institution, since most of the endowment funds are restricted to the maintenance of the building, the scientific staff and the research work being conducted by them. The accounts reveal that these special donations amounted to more than £3000; the total expenditure for the year was about £18,000. Four hundred and four new members were elected during the year.

The 'Before Easter' lectures at the Royal Institution will commence on Tuesday, Jan. 15, at 5.15 P.M., when Dr. F. A. Freeth begins a course of two lectures on critical phenomena in saturated solutions. On Tuesday, Jan. 29, Prof. J. S. Huxley delivers the first of six lectures on evolution and the problem of species; on the following Tuesdays there will be two lectures by Dr. S. W. Kemp on Antarctic whaling investigations. On Thursdays there are to be two lectures by Major Gordon Home on Roman London; three by Sir William Bragg on the early history of X-rays; and two by Prof. A. O. Rankine on physics in relation to oil finding. The Saturday afternoon lectures include four by Sir Ernest Rutherford on molecular motions in rarefied gases. The Friday evening meetings will commence on Jan. 18, when Sir William Bragg will deliver a discourse on further progress in crystal analysis. Succeeding discourses will probably be delivered by Prof. A. C. Seward, Prof. J. L. Myres, Mr. C. E. R. Sherrington, Dr. E. K. Rideal, Dr. F. A. Bather, Sir Robert Robertson, Prof. T. F. Tout, Prof. V. M. Goldschmidt, and Sir Ernest Rutherford.

Prof. G. Kænigs, professor of physical and experimental mechanics at the Sorbonne, Paris, has been elected an associate of the Royal Academy of Belgium.

Prof. Edmund B. Wilson, of Columbia University, New York, has been awarded the Daniel Giraud Elliott medal of the U.S. National Academy of Sciences, for the "most meritorious work in zoology or paleontology" for the third edition of his "The Cell in Development and Heredity."

THE council of the Royal Anthropological Institute has awarded Rivers' Memorial Medals for 1928 to Mr. Sidney H. Ray and Mr. E. Torday. These medals are given for work in anthropology in the field of outstanding merit. The award to Mr. Ray is in recognition of his research in the linguistics of Papua and Melanesia, a subject on which his knowledge is

certainly unique. Mr. Ray was a member of the Cambridge Anthropological Expedition to the Torres Straits in 1899, of which Dr. A. C. Haddon was the leader. Mr. E. Torday receives the medal in recognition of his work in the Belgian Congo, where he conducted an expedition which collected a mass of information relating to the social organisation and religious beliefs of the tribes and brought back a remarkable collection of ethnographical objects, some of which revolutionised previous ideas of the capabilities of the African as an artist.

RECENT appointments to scientific and technical departments made by the Secretary of State for the Colonies include three assistant conservators of forests: Mr. R. V. H. Porter to Nigeria, Mr. A. K. Gibbon to Tanganyika Territory, and Mr. F. S. Walker to the Federated Malay States. Mr. C. B. Taylor has been appointed a superintendent, Agricultural Department, Nigeria, and Mr. R. H. Cowan, produce inspector in the same Department. Mr. R. M. Maynard has been appointed district agricultural officer, Tanganyika Territory. Among recent transfers and promotions notified are the following: Mr. H. A. Tempany (director of agriculture, Mauritius) to be director of agriculture in Malaya; Mr. H. B. Waters (deputy assistant director of agriculture, Nigeria) to be deputy director of agriculture, Gold Coast; Mr. G. N. A. Hall (veterinary pathologist, Uganda) to be veterinary pathologist, Nigeria. Mr. W. Allan has been appointed assistant research officer, Northern Rhodesia.

CATALOGUE No. 510 of Messrs. Francis Edwards, Ltd., 83 High Street, Marylebone, W.1, is of bibliographic interest, being devoted to early newspapers, magazines, periodicals, and journals of learned societies. A few of the items relate to scientific publications.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned :-- A principal of York Technical Institute-The Secretary, Education Offices, York (Dec. 29). Two junior research assistants in the High-Pressure Gas Research Laboratories of the Department of Chemical Technology of the Imperial College of Science and Technology—The Registrar, Imperial College of Science and Technology, South Kensington, S.W.7 (Dec. 30). A junior lecturer in metallurgy in the University of the Witwatersrand, Johannesburg—The Secretary, Office of the High Commissioner for the Union of South Africa, South Africa House, Trafalgar Square, W.C.2 (Jan. 15). A principal of the School of Science, Technology, Commerce, etc., of the Bournemouth Municipal College—The Director of Education, Town Hall, Bournemouth (Jan. 19). A secretary of the North-Western Polytechnic-The Clerk to the Governors, North-Western Polytechnic, 3 Temple Gardens, E.C.4. A junior assistant under the Directorate of Radiological Research, Research Department, Woolwich-The Chief Superintendent, Research Department, Woolwich, S.E.18. A temporary librarian at the Leicester College of Technology-The Registrar, Colleges of Art and Technology, Leicester.

Our Astronomical Column.

CHARACTER FIGURES OF SOLAR PHENOMENA.—The first number of a Bulletin for Character Figures of Solar Phenomena has just been issued from Zurich under the auspices of the International Astronomical Union. It was resolved at the Leyden meeting of the I.A.U. to publish a quarterly bulletin of solar data, so that investigators might, with as little delay as possible, be provided with daily index figures of solar activity, much in the same way that the De Bilt

figures furnish magnetic data.

The first bulletin, covering the period January-March 1928, contains for each day, whenever possible (1) the relative spot numbers for the whole disc and for a central zone between the meridians 30° east and west of the sun's central meridian; (2) a measure of the intensity of the sun's ultra-violet radiation; (3) character figures expressing the area and intensity of calcium flocculi in the central zone of the disc; (4) and (5) similar character figures for bright Ha flocculi and dark Ha flocculi respectively. There are a number of contributing observatories, and the bulletin is compiled by Prof. W. Brunner, of the Federal Observa-tory, Zurich. Those engaged in tracing solar-terrestrial relationships will have a useful source of current solar data provided quarterly by these bulletins.

MATHEMATICAL TABLES.—The Handbook of the British Astronomical Association for 1929 contains a list of tables by Dr. L. J. Comrie, chief assistant at the Nautical Almanac Office, together with notes and comments on the special features of each. He is such an expert in the use of tables that his experience is of great value. He himself, in conjunction with Prof. Milne-Thomson, is bringing out a volume of 4-figure tables which will be more extensive than any existing 4-figure tables and will include hyperbolic and inverse trigonometrical functions.

The increasing use of calculating machines has once more brought natural functions into importance; Brandenburg, Gifford, and Hayashi have all brought out tables of this kind; the last two extend to 8 decimals. The increase of accuracy in some fields of astronomy makes this degree of accuracy advisable. Bauschinger and Peters brought out logarithm tables to 8 decimals several years ago; Dr. Comrie informs us that Peters has also prepared an 8-figure table of sum-and-difference logarithms, but this is held up for want of means of publication. The publication of the present list may be useful in such respects as this by helping to put prospective purchasers in touch with the publishers.

CAPE CATALOGUE OF 4569 STARS.—This catalogue is based on observations made with the reversible transit circle at the Cape between 1918 and 1925. Observations of the sun, Mercury, and Venus indicate a correction of about -0.05 sec. to Newcomb's equinox. Similar corrections have been found at other observatories; it is not applied in this catalogue, which is still based on Newcomb's value. The stars in this catalogue are all contained in Boss's preliminary general catalogue. They show a close agreement with Eichelberger's fundamental catalogue; this is to be expected owing to the high weight given by Eichelberger to the Cape observations; many of those in the present catalogue had been used by him. The correction found to Boss's declinations between 10° and 30° north decl. is 0.44″, in fair agreement with 0.51″ given by the recent Greenwich Altazimuth catalogue.