

the red end of the spectrum: in a few cases the resemblance between the derivatives is less close. Even when the protein part of the molecule has been removed, leaving the hæmatin derivative, the two hæmatins are not the same, so that although each consists of porphyrin + iron, the method of combination must be different. Further divergence occurs when the protein is added to the iron-containing part of the molecule.

The chemical similarity between chlorocruorin and hæmoglobin suggests a similarity of function also. Indeed the author shows that chlorocruorin can act as a respiratory pigment, in that the oxidised form can be reduced by exposure to a vacuum or by living tissues. The amount of oxygen in the blood of *Spirographis* appears to be about one-third of that found in a similar quantity of human blood. The function, however, of this pigment in the economy of the worm is uncertain, since the blood does not undergo a complete circulation. Although it may not convey oxygen from the surrounding medium to the body tissues as hæmoglobin does, yet it may permit of a more active gas exchange and perhaps, at times, make the worm less dependent on the oxygen in the surrounding water. Chlorocruorin thus appears to be "a unique case of the parallel evolution of a substance resembling hæmoglobin."

University and Educational Intelligence.

ABERDEEN.—Applications are invited from graduates of the University of Aberdeen for the Wilson Travelling Fellowship, which is for archæological and anthropological research in the near East, including the Balkan Peninsula, Asia Minor, Palestine, Egypt, and Mesopotamia. The fellowship is of the annual value of 300*l.*, with a possible increase, and is tenable for two years. Applications must be received before August 1 by Mr. A. Martineau, 1 Golden Square, Aberdeen.

BELFAST.—At the Summer Graduation Ceremony of the Queen's University, held on Friday, July 10, Prof. F. G. Donnan of University College, London, received the degree of D.Sc. *honoris causa*. After a very distinguished career as an undergraduate of Queen's College, Belfast, Prof. Donnan obtained his degree with the highest honours in the late Royal University; and as professor of chemistry in the University of Liverpool and in University College, London, he has done work which has gained for him a foremost position amongst chemists. The degree of D.Sc. *honoris causa* was also conferred upon Prof. E. W. MacBride, professor of zoology of the Imperial College of Science and Technology, London. Prof. MacBride was a student and scholar of Queen's College, Belfast. He entered St. John's College, Cambridge, of which he became a fellow, and he also graduated with the highest honours in the University of London. His work as a zoologist at McGill University, Montreal, and the Imperial College, London, is well known.

BIRMINGHAM.—Sir Oliver Lodge has been appointed Huxley lecturer for session 1925–26, the subject of his lecture being "Difficulties of the Ether."

Dr. G. F. Still has been appointed Ingleby lecturer for 1926, and Dr. Leonard G. Parsons for 1927.

Prof. Leonard Gamgee has presented to the University a sum sufficient to provide a gold medal to be awarded annually to the candidate who passes the summer final examination for the M.B., Ch.B. degree and who gains the highest marks for surgery. The medal is to be called the Sampson Gamgee medal and is in memory of Prof. Gamgee's father, who worked for many years in the Birmingham Medical School.

Prof. T. Turner has been elected Dean of the

faculty of science in succession to Prof. F. W. Burstall, his term of office beginning on September 1.

At the recent degree congregation there were conferred, among others, the following degrees:—D.Sc., 3; Ph.D., 5; M.Sc., 11; B.Sc. with Honours, 80; B.Sc. (Ordinary), 58.

EDINBURGH.—Prof. Shield Nicholson has resigned the chair of political economy, to which he was appointed in 1880.

The University Court at its meeting on June 15 approved the terms of an ordinance for the foundation of the Abercromby chair of archæology.

The resignation of Mr. J. F. Rees, reader in economic history, was received and was accepted with regret. The University Court congratulated Mr. Rees on his appointment to the chair of commerce in the University of Birmingham, recently vacated by Sir William Ashley.

Intimation was received of a legacy by Miss Catherine S. Howden of 5000*l.* to found a scholarship for research work, preferably in the domain of nervous diseases, and of a gift of 50*l.* by Mrs. John Harrison, to be applied in assisting the printing of research papers by members of the University.

Dr. J. M. Woodburn Morison of Manchester has taken up the duties of lecturer in electrical therapeutics and radiology, which is part of a new course in clinical pathology.

LONDON.—Prof. E. A. Gardner has been re-elected Vice-Chancellor for the year 1925–26.

The title of professor of mycology in the University has been conferred on Mr. E. S. Salmon in respect of the post held by him at the South-Eastern Agricultural College. The title of reader in mycology in the University was conferred on Mr. Salmon in 1912, and since that date he has published numerous papers on fungous diseases of plants and on fungicides.

The title of emeritus professor of hygiene and public health in the University has been conferred on Sir William J. R. Simpson, as from the end of the present session, on his retirement from King's College, after twenty-seven years' service, on the closing of the Department of Bacteriology and Public Health.

ST. ANDREWS.—M. Étienne Gilson, Professor of the Philosophy of the Middle Ages at the Sorbonne, Paris, has just published a text of René Descartes' "Discours de la Méthode" with a commentary. The volume is dedicated to the University of St. Andrews, which has recently bestowed the degree of LL.D. upon M. Gilson.

We learn from *Science* that Mr. G. E. Merrick has given 160 acres of land and a sum of 5,000,000 dollars towards the establishment of a university in Miami, Florida. The university, which was granted a charter on April 5, will be non-sectarian and co-educational.

APPLICATIONS are invited by the Royal College of Physicians for the Streatfeild Research Scholarship in medicine and surgery, the annual value of which will probably be 250*l.* and the tenure three years. Applications must reach the Registrar of the College, Pall Mall East, S.W.1, not later than October 1.

THE Dickinson Travelling Research Scholarship in medicine, which is open to students of the University and Infirmary, Manchester, has been awarded by the Trustees of the Manchester Royal Infirmary to Dr. Raymond Williamson and to Mr. Leslie J. Witts.

THE London School of Hygiene and Tropical Medicine is prepared to consider from qualified medical practitioners applications for four research

studentships in tropical medicine and hygiene. The studentships are each of the value of 250*l.* yearly and will normally be for two years. The latest date for the receipt of applications, which should be sent to the Secretary of the School, 23 Endsleigh Gardens, N.W.1, is August 31.

APPLICATIONS are invited by the council of the University College of the South-West of England, Exeter, for the Andrews Simons research studentship, value 120*l.*, for the furtherance of experimental research in physics, chemistry, or other branch of science. The applications must be received by the Registrar not later than August 1.

THE Royal Commissioners for the Exhibition of 1851 have made the following appointments to Senior Studentships and Overseas Scholarships for 1925:—*Senior Studentships*: Mr. O. M. B. Bulman, Imperial College of Science and Technology (Geology); Mr. P. A. M. Dirac, Cambridge (Mathematical physics); Mr. I. R. McHaffie, University College, London (Physical chemistry); Mr. H. W. B. Skinner, Cambridge (Physics); and Mr. D. L. Thomson, University of Aberdeen (Bio-chemistry). *Overseas Scholarships*: Mr. C. L. Huskins, Alberta (Cytology); Mr. A. R. Fee, British Columbia (Biology); Mr. C. S. Hanes, Toronto (Biology); Mr. J. G. Wood, Adelaide (Botany); Mr. V. M. Trikojus, Sydney (Organic chemistry); Mr. S. W. Watson, South Africa (Physics); Mr. R. S. Allan, New Zealand (Geology); and Mr. J. J. Lennon, University College, Dublin (Organic chemistry).

THE Ramsay Memorial Fellowships for chemical research are administered under a scheme framed on an international basis, the participating countries being Great Britain and Ireland, Canada, Denmark, France, Greece, Italy, Japan, the Netherlands, Norway, Spain, Sweden, and Switzerland. The fellowships, sixteen in number, are tenable in any university or other place in the United Kingdom possessed of the requisite facilities for research. In a speech made in response to the toast of the trustees of the Ramsay Memorial Fellowships proposed by Sir William Bragg at a dinner given at University College, London, on July 3, Sir Robert Hadfield expressed the opinion that the bringing into our midst of young chemists selected from other countries to undertake research work has been a great success in promoting friendly relations and mutual understanding between men of science of different countries. He quoted with approval a suggestion made by a former fellowship holder, Prof. Henri Weiss of the University of Strasbourg, that the fellowships should be extended and young British skilled research workers should be sent to foreign universities. This theme—the rôle of the *savant* abroad as not only purveyor of light but as promoter of peace and goodwill—is one on which quite a number of public pronouncements have been made in Great Britain during the past six months by eminent men of science, and it was discussed at length at the annual conference of the Universities of Great Britain and Ireland on May 9. In the United States likewise it has been much discussed and large sums of money have been appropriated to translating aspirations into actualities, such as the John Simon Guggenheim Memorial Foundation, to which a "preliminary" gift of 3 million dollars has been made, to provide annually from forty to fifty fellowships for "advanced study abroad." The American Council on Education has published in the *Educational Record* for April a list of seventy-six organisations interested in such relations, and proposes to invite them all to a conference to be held at Washington in the autumn.

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Early Science at Oxford.

July 21, 1685. Mr. President being in the Chair acquainted the Society that in Northamptonshire about two or three miles from Astrop, there is dug a heavy black earth, which being calcined comes to a black sand, some of which he was pleased to shew us, almost as heavy as ye earth: A Magnet being applied to this sand, was seen to attract it.

A letter of Mr. Leewenhoeck's concerning ye Generation of man &c: from an insect was read.

Dr. Bernard presented some papers of Mr. Greaves giving an account of some experiments made at Woolwich in ye year 1651 for ye triall of great guns.—The Doctor also presented ye Society with a *Cornu Ammonis*, some *Belemnites*, *Lignum fossile*, *Ostracites*, all which were dug out of a well on a hill near Faringdon.

A Letter from Mr. Aston dated July 15 was read; it affirms ye true Zaffer is nothing but Kobalt calcined, ye comon Zaffer being adulterated with pebbles.

Dr. Plot presented a Persian wood, which was observed to sink in water; and a Hen's egge sent him from out of Yorkshire, having a round hole at one end of about half an inch diameter: this hole was exactly fitted by a little cap of ye same matter with ye rest of ye shell, but more protuberant, than ye end of an Egg-shell is naturally, and full of wrinkles; the Cap is said not to have been continued to ye main body of ye shell, but sticking close by its inner side to ye membrane, was by these meanes kept as a cover on ye hole.

A letter from Mr. Cole of Bristoll, dated July 16th, was communicated by Dr. Plot and read.

July 22, 1684. Two Letters from Mr. Aston, one dated July ye 10, ye other 17, were read: An Abstract of a Letter from Dr. Huntingdon sayes, that Mr. Tennant, a gentleman in Ireland, has lately invented an Engin for ye throwing of water, far exceeding that of Sir Samuel Moreland.

Some of ye curiosities lately presented to ye University by Mr. Cole of Bristol, were communicated to ye Society by Dr. Plot; as first, Sal Gemmæ from St. John de Port Rico, one of ye Leeward Islands near Jamaica. It breaks generally into squares; is transparent near four inches thick, so that at that thickness ye motion of a finger, playing up and down, may easily be discerned. Secondly, Silk Grass of three yards long found in ye swamps, or moorish grounds, in Virginia, growing upon a tall plant from which it is strip't like Hemp. Thirdly Neopolitan black writing sand, which applied to ye Magnet in great quantitys, and much more readily than ye *ferrum Noricum*, or any other ore we have yet seen. Some of this sand being calcined by Dr. Plot, ran into a mass, which, when cold, was very brittle. Other experiments will be tried on this sand by ye Doctor, of which we are promised an account.

Mr. Conningham affirms, that Sal Gemmæ is commonly thrown up by ye Lammas floods within six miles of St. Andrews, and used by ye poor people instead of common salt.

A letter from Mr. Flamsteed to Mr. Caswell, concerning ye late eclipse of ye Sun, and ye *Maculæ Solis* observed by him, was read. This great Astronomer does, in this letter, seem to question, whether these spots, seen by him, were not two differing spots, rather than revolutions of ye same spot; altho ye manner of their course along ye disc of ye Sun, seems to be much alike, and therefore argues ye latter.