Theatre where the address will be actually given. It is hoped that the Prince, at the conclusion of the business in the Sheldonian, will be able to visit the Town Hall, to which building his address will have been relayed. A further relay has been arranged to the debating hall of the Union Society, and in this way provision will have been secured for every one to hear the words of the president, and for nearly every one to see him.

The fact of the meeting taking place in Oxford will recall to the minds of many the records that exist of the famous meeting of 1860, which was especially signalised by the caustic reply of T. H. Huxley to the criticism passed by Samuel Wilberforce, then Bishop of Oxford, on the Darwinian theory of evolution—at that time a startling, and to the majority an unpleasant novelty. The scene of this memorable encounter was the northern section of the first-floor room in the front of the University Museum, part of which room is now occupied by the Hope Department of Entomology. To those who, like the present writer, heard the presidential address of the late Marquis of Salisbury at Oxford in 1894, there was something peculiarly impressive in the calm and measured language in which one of the former protagonists, Huxley himself, commented on an address which contained the words, "[Darwin] has, as a matter of fact, disposed of the doctrine of the immutability of species." The stage on which this latter development of the drama was played was the same as that which will witness the address of this year's president, namely, the Sheldonian Theatre. It was here, also, that the Marquis of Salisbury, on the occasion referred to, as Chancellor of the University, imparted a pleasantly light touch to the proceedings by introducing and welcoming himself as president of the British Association.

Oxford has, however, scientific associations of an earlier date. It will doubtless be remembered by many of the visitors that it was the scene in the thirteenth century of the labours and researches of Roger Bacon, the great Franciscan who, as the unflinching advocate of experimental science as against authority, was held by Humboldt to be "the most important phenomenon of the Middle Ages." Perhaps some of the members of the Association will be able to find time to visit the traditional site of Roger's workshop at Folly Bridge, and the memorial tablet lately affixed to the old City

¹ Nature, June 18, 1914, p. 405.

Wall in close proximity to the spot where he is known to have been buried.

In Sir Archibald Geikie's happy phrase, "if Oxford was not present at the birth of the Royal Society, it at anyrate rocked the cradle of the infant." In these words he was referring to the account published in 1667 by Dr. Thomas Spratt of the meetings held "in Dr. Wilkins his Lodgings, in Wadham College (1648-59), which was then the place of Resort for Vertuous, and Learned Men." These meetings, says Spratt, in his History of the Royal Society, "laid the foundation of all this that follow'd." "By this means," he adds, "there was a race of yong Men provided, against the next Age, whose minds receiving from them [i.e. the men who met under Wilkins's auspices], their first Impressions of sober and generous Knowledge, were invincibly arm'd against all the inchantments of Enthusiasm." ²

It need scarcely be said that the last word cited did not bear for the men of that time precisely the same meaning that belongs to it at the present day. Among the "principal and most constant of those who met at Wadham," Spratt enumerates the names of Seth Ward, the astronomer; Willis, the instructor of Lower and Mayow; Hooke, Robert Boyle, Sir William Petty, and "that miracle of a youth," as Evelyn calls him, Christopher Wren. The earliest experiments on transfusion were carried out in Oxford by Lower at the suggestion of Wren; and it is worthy of note that Sydenham, the great physician, and Mayow, the actual discoverer of oxygen and of the chemical and physiological explanation of combustion and bodily heat, were, besides Wren, all members of Wadham College, the institution presided over by the scientificallyminded brother-in-law of the Protector, spoken of by Evelyn as "that most obliging and universally-curious Dr. Wilkins."

The interest in 'natural knowledge' thus set going in the middle of the seventeenth century finds no abatement to-day; and those who will take the opportunity of the forthcoming meeting to make themselves acquainted with the scientific equipment and appliances now to be found in Oxford, will not fail to gain the impression that this ancient seat of learning is fully determined to take her proper part in the scientific progress of the present and future ages.

F. A. D.

The Ross Institute and Hospital.

OPENING BY THE PRINCE OF WALES.

No ceremony relating to the health and welfare of the British Empire has attracted so wide an interest as the opening of the Ross Institute and Hospital for Tropical Diseases by H.R.H. the Prince of Wales on July 15. It was the outward and visible sign of the initial success of a movement started more than three years ago to found a Ross Institute for Tropical Diseases which should include a Research Hospital. That movement had several objects in view, namely, to do honour to Ross while living for his epoch-making discovery of the method of transmission of malaria to human beings, to commemorate for all time his great achievement, to further the much-needed

work of research in the prevention and treatment of tropical and sub-tropical diseases, to create a more general professional and public interest in the prevention and treatment of tropical diseases throughout the vast possessions of Great Britain in the tropics, and to assist medical men to carry out research work.

It has long been the complaint of some of the most promising men in the tropics that there was no institute in London where they could have the facilities when at home for research work on any special subject that had interested them in the tropics, which they desired to pursue further in their leisure time. The Ross Institute will now help them. France has her Pasteur

² Italics and spelling preserved as in the original text.

Institute in memory of her great man of science and to carry on his work. America has her Gorgas Institute at Panama, Japan has her Kitasato Institute, London has now her Ross Institute and Hospital for Tropical Diseases, the president of which is the Duchess of Portland, the chairman, Sir Charles McLeod, Bart., and the vice-chairman, Mr. Walter Shakespeare. There is a strong executive committee and council. The present medical officers are Sir Ronald Ross, director-in-chief, Dr. Castellani, director of tropical medicine and dermatology, and Sir William Simpson, director of tropical hygiene. Sir Ronald is still hale and hearty, and it must have been a source of gratification to him that, twenty-nine years after his famous discovery, and when the application of it is universally acknowledged to have resulted in the saving of an enormous number of lives and made some formerly uninhabitable places habitable, to have this Institute bearing his name opened by the Prince of Wales, who was the first to give a lead to the appeal for the necessary funds which was made in the Times of June 23, 1923.

The building, which contains two hospital wards, three laboratories, a library, and nurses' quarters, is not large, but it is on a healthy site facing Putney Heath, and the grounds are sufficiently extensive to allow of

great additions in the future.

The Prince on his arrival at the Institute was received by the president, the Duchess of Portland, and the chairman, Sir Charles McLeod. A number of presentations were made to His Royal Highness, who afterwards inspected the wards, laboratories, and library, and then proceeded to the dais reserved for him and facing a pavilion in which more than six hundred guests were assembled. Here the chairman, Sir Charles McLeod, presented an address to the Prince in which he mentioned that His Royal Highness on his visits through different parts of the Empire and in foreign countries had landed on many tropical shores, and that his interest and sympathy cannot but have been aroused by the record of the decimating scourge of diseases incidental to these latitudes. Many of these diseases still hold the field but, thanks to Sir Ronald Ross, in honour of whose discoveries this Institute was founded, one of the greatest of them-malaria-has been or can be practically overcome. Sir Charles described the objects of the Institute, the chief of which is by research into causes of diseases to lessen the burden which weighs so heavily on labour and industry, and still more terribly on human life, in tropical and sub-tropical lands. Great strides in the knowledge of tropical diseases have been made during the last quarter of a century, and there is every hope and encouragement that in the quest and exploration of still unknown regions in medicine it will be possible to add to the stores of that science which aims only at conferring benefits on all human beings. The Prince was then presented by Sir Charles with a golden key, on which was a colour impression of the Ross Institute, and asked to declare the Institute open.

The Prince of Wales in rising to speak was received with great enthusiasm, and said:

"The opening of this Institute, which I am very glad to perform, commemorates a definite achieve-

ment in the work which the British Empire has done for civilisation. Not the least important obligation which the development of that Empire has laid on the members of our race is the constant struggle against disease in all the varied forms it can assume in different climates and in different latitudes. The struggle is always fiercest in the tropics, where man, and especially the white man, is the continual prey of diseases from which we in this country are, comparatively speaking, protected by a more temperate climate; and perhaps the saddest page in the whole history of our Empire is that which tells of the terrible toll taken by plague and by fever of those who helped to build it.

to build it.
"Of all these tropical enemies, malaria has probably been the most deadly and elusive. But now, thanks to the achievement of one man, whose name we are perpetuating in this Ross Institute, its ultimate defeat is certain. Only a few months ago I was able to see in the Sir Alfred Jones Laboratory in Sierra Leone not only the vital need for a campaign against malaria, but also the remarkable progress which has already been made in it. Perhaps I am biassed by many visits to tropical and sub-tropical parts of the world where malaria is rife, and by having talked with so many men and women whose health has been shattered by a life's work in such districts, but I can think of no other single discovery in recent times which will earn the deep gratitude of so many thousands of human beings of all nationalities as the discovery made in India by Major Ronald Ross—as he was then—on August 20, 1897. The story of its he was then—on August 20, 1897. The story of its subsequent development and of what it has led to is well known to you all. I need only summarise it in the words of a famous writer: 'It is not too much to say that Sir Ronald Ross has made one-third of

the world inhabitable.'
"Over a quarter of a century has elapsed since that epoch-making discovery, and this institute and hospital now stands as a memorial to the life-work of Sir Ronald and his colleagues. But it is not merely a passive memorial to work accomplished in the past; it is also, as Sir Charles McLeod has reminded us, a very active centre for work to be done in the future. All who have any experience of the tropics will know that there is still a vast field for scientific medical research, and here, with all the resources that modern science can provide, such research can be effectively carried out, provided adequate funds are forthcoming. From this building may issue results which will bring back health to thousands who have lost it, or safeguard the lives of countless others threatened by unseen dangers in tropical lands. More than that, it may open out for the use and benefit of mankind as a whole, huge districts which are at present denied

to civilisation.

"It is not surprising, therefore, that, when the scheme for founding this Institute was first put forward, it immediately received widespread public support. That support happily made its inception possible, and once the first financial obstacle was surmounted, its promoters lost no time in making it a reality. To the president, the Duchess of Portland, to Sir Charles McLeod and Mr. Shakespeare, and to Sir Ronald and his two co-directors, Sir William Simpson and Dr. Castellani, the gratitude of all of us is specially due for the time and energy they have devoted to its execution. They and their fellow-officers of the Institute may well feel proud of the result of their labours and of the knowledge that they have called into being something which cannot fail to be of incalculable benefit to many generations.

"It is with the sincere hope that further public

support for the necessary endowment may be forthcoming, and that the labours of those who will work here may be blessed with every success, that I now declare the Ross Institute and Hospital open."

After the Bishop of Southwark offered a dedicatory prayer, a vote of thanks to the Prince was proposed by the Duchess of Portland, and seconded by Sir Ronald Ross, who expressed his grateful thanks to the Prince for the kind manner in which His Royal Highness had referred to his work. He also thanked all the contributors for the honour they had done him in naming the Institute after him. The Prince replied to the vote of thanks, and after his departure the Institute was opened to the inspection of the guests.

News and Views.

On July 14, in the House of Lords, the Duke of Northumberland directed attention to the alteration in the status of the engineer officers of the Royal Navy brought about by the Admiralty Fleet Order 3241/25 issued last November. This matter has already been referred to in these columns on several occasions. In his remarks the Duke of Northumberland said that the Order abolished the last vestige of the improved status of the engineer officer under the 1902 scheme for the amalgamation of the engineering branch with the deck officers. Not only did it relegate the engineer officer to the non-executive branch of the Navy, but it also emphasised the distinction between the deck officer and the engineer officer by re-imposing the wearing of the purple stripe. The Duke of Northumberland was supported by Viscount Chelmsford and the Earl of Selborne, the latter remarking that the point of view of the engineer officers had been recapitulated by Engineer Rear-Admiral Sheen in a letter in the Times of June 1, and to that he had seen no answer. Moreover, the Order might do great harm and could do no possible good. Viscount Chelmsford said that the question had arisen when he was First Lord and he had left a personal note for his successor, Mr. Bridgeman, to the effect that there had been no acute demand for the change, and that the system as it then stood was working well. Duke of Montrose also spoke. He seemed to think that because purple had been worn by emperors, engineers should not object to it. The answer to that is, of course, that it is the way it has been imposed and what it signifies that renders it so distasteful. With his suggestions that engineer officers should have executive command of certain establishments ashore and that an engineer officer should be appointed a Sea Lord of the Admiralty a good many will agree.

THE reply for the Admiralty was made by Earl Stanhope, who repeated Mr. Bridgeman's assurance that the Order did not affect the ranks, titles, and powers of engineer officers. That, however, is not correct, for the Order does undoubtedly take away the power of engineer officers to rise to certain high appointments which they could have reached as executive officers. Earl Stanhope said that the Order was designed to sweep away an anomalous position, and divided all officers into categories according to their duties. He did not say, however, why there should be three categories of engineer officers-one for the main machinery, one for the gun machinery, and one for the electrical machinery, while navigating, gunnery, and torpedo officers all remained in one category. Such a reply will give no satisfaction in engineering circles, and does nothing towards removing that sense of injustice from which engineer officers are suffering. In view of the apparent determination of the Admiralty to stand by this Order and to impose the purple stripe, we think the Joint Committee of the Engineering Institutions, of which Sir William Ellis is chairman, would do well to issue a short plain statement of the matter as it now stands. The excellent memorandum issued some months back was too long for general distribution, and in the highest interests of Great Britain this is a matter for the widest publicity.

On July 22 the centenary occurred of the death of Guiseppe Piazzi, the discoverer of the first of the minor planets. Piazzi was born in the north of Italy in 1746, and came under some of the most distinguished teachers of his day. He then entered the monastic order of the Theatines. A professor first at Genoa and then in Malta, in 1780 he was appointed to a chair of mathematics at Palermo. His efforts to found an observatory there were seconded by the Viceroy of Sicily, Prince Caramanico, and the observatory was opened in 1791. Piazzi meanwhile had studied Lalande's methods in Paris and Maskelyne's at Greenwich, and when he returned to Palermo in 1789 he had among his instruments a 5 ft. vertical circle by Ramsden. He devoted himself to the preparation of star catalogues, and it was while pursuing this work that in January 1, 1801, he discovered Ceres, named thus in allusion to the titular goddess of Sicily. He communicated his discovery in the first place to Oriani, who calculated the elements of its orbit, and then to Bode. Piazzi's star catalogues were published in 1803, 1807 and 1814, the latter containing 7646 stars. He served for some time as president of the Academy of Sciences of Naples, and was elected a foreign member of the Royal Society of London. By his will he bequeathed his library and instruments to the observatory at Palermo, and left an annuity for educating students in astronomical science.

The news of the impending retirement of Prof. J. A. Fleming from the chair of electrical engineering at University College, London, a position which he has occupied since its foundation in 1885, will be received with regret by the large number of friends and students who have come under his influence. His tenure of office has been practically co-extensive with the growth of modern electrical engineering, a development in which he has taken a great part. So early as 1879 he was the scientific adviser of the original Edison Telephone Company of London, and in 1882 he was appointed to a similar position with