

observed a dead gull, lying in a grass field in front of the window, which, she is convinced, was not there before.

Those who picked the bird up report it as still warm, and it is said that it smelt villanously of "brimstone." I should like to know whether a bird *not perched* can be killed by lightning, and, if so, whether instances are common. SKELFO.

The Early Return of Birds.

THE remarkably early appearance of some of our migratory birds this season is worthy of note. On Wednesday, April 4, while crossing some fields south of Ashted Station, a solitary chimney swallow (*Hirundo rustica*) passed close to me, flying near to the ground.

On the following Saturday (7th inst.), when strolling through the woods on the Common, I heard two cuckoos, getting quite near them to prevent mistake. They have been heard in the neighbourhood each day since. ROBERT M. PRIDEAUX.

Ashted, Surrey.

The Foundations of Dynamics.

IF no one else cares to raise the question, may I ask Mr. Bassett how he fixes the foundations of his dynamics, viz., the axes of reference to which the positions and velocities of his particles are referred? There are other questions, of more or less metaphysical interest (such as the nature of "Force"), which his paper does not touch; but this one is of importance to the most practical view of the subject; and only an elementary text-book for schoolboys can afford to beg it, while treating of the Foundations of Dynamics. EDWARD T. DIXON.

Cambridge, April 13.

THE ELEVENTH INTERNATIONAL MEDICAL CONGRESS.

LAST autumn, when the public health of Europe was in an unsatisfactory condition, it was thought that it would be wise to postpone the Medical Congress until this spring, though it was feared by everyone that such a determination would be fatal to the efforts of the Congress. The votes of the majority and of the most influential members of the Executive Committee, however, impressed upon Prof. Baccelli the necessity of postponement. It was also thought that the visitors would prefer to enjoy the attractions of the city in the spring rather than in the autumn. No one in Rome expected such a numerous concourse of savants, doctors, and others, as assembled on this occasion. At such an extraordinary meeting we must not only consider the characteristic note of the congress and the certainty of its success, but also ascertain the causes of various inconveniences which members of the congress have had to submit to, and of which complaint has been made.

The object of a congress is to afford an opportunity to its members to make new personal acquaintances and to renew old ones with the view of exchanging ideas between men who live at great distances from each other, and to ventilate their arguments.

A congress provides also a means of estimating the scientific condition of a country, which it is impossible to do through correspondence or through the public press.

The ordinary channel of particularity was abandoned at the Congress, and it will have been seen from the speeches that more general and comprehensive ideas were evolved than is possible through ordinary scientific literature.

Considered in this sense, the Congress at Rome has been a great success, and it has been easy to see that visitors have a growing sense of admiration for medical science in Italy, and especially for the younger branches

of the profession. Italy, however, has been regarded from other points of view. Its reputation led many persons to expect a spectacle of misery, but they, on the contrary, have been agreeably surprised at the enlightened aspect, comforts, and welfare of the land. This has shown visitors that they had formed a wrong impression, and the critical condition has proved only a temporary difficulty; for the original foundation still exists unchanged.

The best proofs of scientific progress were seen while travelling through the Mont Cenis Tunnel and visiting Turin. Passengers found there many large edifices destined shortly to be utilised as scientific institutions.

Only one of the four blocks is entirely finished and one almost furnished. On one side is the Department of General Pathology (Prof. Bizzozero), and that of Experimental Pharmacy in Medicine (Prof. Giacosa). On the other side, Physiology (Prof. Mosso).

Prof. Mosso has distributed to his colleagues of the section of physiology a pamphlet containing the description and drawings of his institute. Everyone has admired the beauty of the new laboratory. The University of Turin is the second in rank in Italy for the number of students it will accommodate.

The Congress was divided into several sections. The conferences were held in the central part of Rome, in a building very badly selected, but which had the advantage of being near the building where the International Exhibition was held. The meetings of the sections were held in the Policlinic buildings, outside of the Porta Pia, at a convenient distance from the centre of the town, but in a quarter very difficult of access.

The Policlinic is a very large institute, built by Prof. Baccelli. It is not yet finished, a small portion only being complete. The essential and historical elements of the eternal city are equally represented in this institute, which has evidently been built regardless of cost in its external appearance and its maintenance hereafter. The Policlinic was built for the accommodation of the clinics. It is arranged not only for the welfare of the sick, but also in the interests of students.

It is interesting to note that the man who has built two edifices for the clinics in the Policlinic has totally overlooked the tuition. The complete buildings are five in number, connected by a passage which in the future will be turned into a portico.

The central building, which is also the largest, has a large marble staircase, which called forth the admiration of more than one of the congressists; it contained the offices of the presidency, secretary, and accommodation for the press, post, and strangers' committee.

The meetings were held from the 30th March to the 5th of April, from 9 a.m. until 3 p.m. At 4 in the afternoon addresses were given, which constituted a most interesting part of the programme. Among these addresses we must mention those of Prof. Virchow, of Bizzozero, growth and regeneration in the organism; Cajal, morphology of nervous cells; Danilewsky, protoplasm and its modifications by life; Foster, the organisation of science. Other addresses were given by Profs. Brouardel, Babes, Nothnagel, Laache, Kocher, Jacoby, and Stockvis.

In some sections the debates were carried on with difficulty. The most rational method has not been always observed, many meetings therefore have left a certain impression of confusion. Certainly for a future congress it will be necessary to make some definite rule on the matter; that is to say, to indicate the special theme and argument, which will conduct the discussion in a more useful manner between competent men, who are always to be found in such a congress. It is a cause of complaint that in such an assembly those who wished

to speak on the arguments and questions interesting to science have been obliged to keep silence, and interesting debates, which would have lost nothing by insertion in the public press, did not take place.

A very good example was given by the Section of General Pathology, one day being dedicated to the discussion of cancer. On this day, many ideas were exchanged between the partisans and adversaries of the parasitical theory of this disease. Prof. Foà (Turin) gave his experiences, which led him to admit the existence of the parasite in cancer, and to his observations M. Cornil and many others replied. Nothing leads more to new researches and helps towards the discovery of the truth than such discussions.

In the Pharmacy Section, Stokvis (whose address we print elsewhere), Lauder Brunton, Fraser, and in the Italian ranks. Colasanti, Fubini, Gaglio, Giacosa, Mosso, and others have made some very interesting suggestions. In the same section, on the proposition of Prof. Giacosa, an order of the day was voted, asserting that the study of the alterations produced in the living body through the absorption of chemical substances constitutes a branch of biological science, having a definite aim, and that it is necessary to give to pharmacological laboratories grants equal to those of physiology and pathology. Many Italian universities have pharmacological laboratories insufficiently equipped, and in many countries pharmacology is taught only as a subsidiary question to therapeutics, which is not a science, but a rational application, and very often empirical.

Physiologists occupied themselves, naturally, with the questions interesting the cerebral function. Prof. Mosso, who brought with him many instruments and animals to serve at his demonstration, showed some of them for the purpose of taking the measurement of the pressure of the blood on the pulse of the patient. The questions of the temperature of the organs were also discussed.

In Surgery many very animated and useful discussions took place.

The principal question which has been discussed was the cure of hernia, ascertaining the large tendency to adopt in every case the most painful process of operation. Jean and Lucas took up the question in opposition to Paci. The surgery of the nervous system was discussed by MacEwan; while D'Antona, of Naples, spoke on the cause of the functional disturbances which follow bone diseases. On this subject a very interesting suggestion was made by Ollier, who is an authority upon it.

Tuberculosis and pneumonia and their therapeutics, and subjects relative to anæmia, with the transfusion of the ferruginous preparations or with organic substances, and malaria, were also the subject of some discussion.

The sudden death of Brown-Séquard was the subject of solemn commemoration in the Medical Section (Prof. Cardarelli) and in the Physiological Section (Prof. Richet).

Altogether the debates raised 2700 questions, and if some were not settled, many others were adjourned which were not included in the orders of the day.

The Medical Exhibition, arranged by Prof. Pagliani, was one of the most complete ever witnessed, and without doubt the most interesting and original part was that relating to the history of medicine by the exhibition of fragments of anatomic models of the Roman epoch; of Egyptian, Greek, Roman surgical instruments of the earliest date; by the illuminated manuscript and by the Greek, Roman, and Arabic classical authors relative to the first works on surgery; by the diplomas and the cards of the old universities; by the manuscripts, pocket-books, drawings of the celebrated anatomists and physiologists of the sixteenth, seventeenth, and eighteenth centuries. All these documents, extracted from the

archives of libraries and museums, were shown to a public competent to appreciate them.

It would be unfortunate if all those riches were dispersed again, and with the view of keeping them together, the Pathological section of the Congress has invited the Minister of Public Instruction to compile a catalogue.

It would be difficult to assert that every one was pleased with the fêtes; but even if the organisation of all the services was not the acme of perfection, there was the beautiful and grand city, its animated streets, its incomparable monuments, its enchanting landscape, and specially its sun. It rained one day, but with the return of the sun the visitors found themselves in the royal garden of the Quirinal, dominant over the town, and with the eternal lines of the landscape coloured by the setting sun. We must mention also the lunch at the Thermal Baths of Caracalla. It is very difficult to say whether the food and drink were distributed equally among the guests, and if some people went away hungry while others went away with their handkerchief full; but I am sure no one will ever forget those grandeurs and immense drawing-rooms, those splendid tables around which thousands of people were delighted, those quiet corners under the shadow of the trees, the bands, and especially the heavens, so beautiful that it caused one cold Teutonic to dance on the old mosaic floor of the Imperial Bath.

PIERO GIACOSA.

THE ROYAL METEOROLOGICAL SOCIETY'S EXHIBITION.

THE Royal Meteorological Society's fourteenth exhibition of instruments was opened on Tuesday, the 10th instant, in the rooms of the Institution of Civil Engineers, Great George Street, Westminster. Each annual exhibition has been devoted to the illustration of some branch of meteorology, the object being to show the progress that has been made in each particular department. The subject chosen for the present exhibition is "Clouds: their Representation and Measurement." From this title it will be readily understood that this is largely a pictorial exhibition, although it includes a considerable number of instruments.

Luke Howard, F.R.S., was practically the first person to carefully study the clouds and to classify them; and in 1803 he published a memoir "On the Modifications of Clouds, &c.," setting forth his classification, which is that in general use at the present time. A fine crayon portrait of Howard occupies a prominent place in the exhibition, as well as two original sketches by him showing clouds gathering for a thunderstorm, and also the commencement of a stratus. The first and third editions of Howard's memoir are shown, while alongside of them is a reprint of the first edition, with facsimiles of the plates, which has just been published under the direction of Dr. Hellmann, of Berlin.

Since Howard's time many attempts have been made to amend or improve his classification of clouds; most of the various nomenclatures which have been proposed are illustrated in the exhibition, such as those recommended by Admiral FitzRoy, M. A. Poey, Rev. W. Clement Ley, Dr. H. H. Hildebrandsson, and the Hon. Ralph Abercromby.

A most interesting and valuable collection of photographs, showing the various forms and modifications of clouds, is arranged around the walls of the rooms. Among the photographs of cirrus and cirro-cumulus, the highest forms of clouds, are specimens taken by M. P. Garnier, at Boulogne-sur-Seine; by M. A. Angot, at Paris; by Prof. A. Riggenbach, at the Säntis Observatory, Switzerland; and by Signor Mannucci, at the