son. He learned Russian in order to read the Russian chemical and other journals. But his vocation was commanding, persistent, unrelenting.

The great and lasting results Morley achieved arose from several causes and conditions. Among them were his intellectual alertness, his comprehensiveness, his patience, his laboriousness, and, be it added, his skill in manipulation. His reasoning seemed to be a series of intuitions. Conclusions followed swiftly on insight. Yet, though being the master of immediate intellectual processes, he was also patient. He revised and re-revised his methods, measures and movements; tested and retested his conclusions. Like Pasteur, he examined all hypotheses contrary or similar. All possibilities of error, either personal or of conditions, he sought to remove. More strongly than many scientists he was able to say, "This is the truth: I can no other." It was also well that Morley's power was not simply of intellect and of will: he had great skill with his hands. In the poverty of the college he was largely his own assistant, and the maker of his own apparatus. He was, for instance, a skilled glass-blower, a skill of the utmost value in his long experimenting process in determining atomic weights. Gifted with all these powers he used them to the utmost. He was among the hardest of all workers ever known to me. He gave full service as a teacher till the trustees of the college offered him complete liberty respecting his interpretation of his duties, a liberty of which he did not fully avail himself. Fourteen hours a day was a minimum of the time spent at his tasks. He toiled to the limits of strength. His wife has said to me that it was not unusual for her at the close of the day to watch for him coming home, questioning whether he might not have fainted on the way. A speedometer which he sometimes used proved that in his walking to and fro, up and down, in the building wherein were his rooms, he frequently walked in a single day no less than twenty miles. Scientists are indeed hard workers, some would say the hardest; and no one of them was a harder worker than Morley.

As a scientist Morley's place is secure. It is by common consent among the highest. In the unique worth of this service I of all men should not pass over his worth as a teacher. For hundreds if not thousands of students rise up to bless him. Formally he taught chemistry, but he also taught every other subject. He especially taught English, and the oral use of our English speech. Precise himself in language, he demanded correctness and precision of all students. Oral slovenliness he abominated. Many a student have I heard say, "Morley taught me English as no English teacher." Devoted to the students in ways both specific and general, he required of them an equal devotion to the subject of study. No tolerance had he for the shirker. Faithlessness easily stirred his indignation. He was profane without words. He could not suffer fools, either intellectual or moral. They quickened his abhorrence. But to the student highest, earnest, alert, laborious, he was devoted. His devotion to truth, as I have intimated, was no less intense. From these two foci of devotion to truth and of laboriousness are swiftly and easily drawn the ellipse of his achieving life and rich character.

I can not compare Morley to Pasteur in respect to the directness and beneficences of his service to humanity; but I can compare him to Pasteur in respect to the fundamental elements of scientific research. I can not compare him to Darwin, for Darwin was not a teacher; but I can compare him to Darwin in respect to the intuitive vision, the comprehensiveness of understanding, the persistent patience, the humility of spirit, the prolonged and sober enthusiasm in which he pursued his researches.

OBITUARY

RECENT DEATHS

DR. GEORGE P. DREYER, professor and head of the department of physiology in the College of Medicine of the University of Illinois, Chicago, since 1900, died on February 27, at the age of sixty-five years. Professor Dreyer is known for the discovery of the secretory nerves of the suprarenal glands, and for his work on blood proteids and differential respiration.

CHARLES GLASER, well known for his researches in analytical and technological chemistry, died on February 17, in Baltimore, at the age of seventy-six years.

DR. EARL DOUGLASS, geologist and paleontologist, in charge of the dinosaur collections of the University of Utah, died on January 14, at the age of sixty-nine years.

SIR RICHARD CARNAC TEMPLE, Orientalist, died in Switzerland on March 6, at the age of eighty years. He was a former president of the anthropological section of the British Association for the Advancement of Science and had written many works on the East. Sir Richard was a member of numerous British and American scientific groups, including the Smithsonian Institution in Washington, the American Geographical Society, the American Philosophical Society and the Numismatic Society of Philadelphia.

Nature reports the death of Professor J. S. Dun-

kerly, Beyer professor of zoology in the University of Manchester, known especially for his researches on the Protozoa, on February 11, aged forty-nine years; of the Honorable Sir Charles Parsons, whose name is associated particularly with the development of the steam turbine, on February 12, and of Mr. W. G. Robson, lecturer in natural philosophy in the University of St. Andrews, on February 16.

MEMORIALS

THE centenary of the Harveian Society of London is to be celebrated in June. According to the program, as printed in *The British Medical Journal*, the opening meeting, at which an oration will be delivered by Dr. Raymond Crawfurd, will be held on June 11 at St. Bartholomew's Hospital, with Sir Thomas Horder, Bt., in the chair. It is proposed to ask delegates from all the medical societies in London and the surrounding districts; after the oration tea will be served and an exhibition of Harvey relics opened. On June 12 the Buckston Browne dinner will be held at the Grocers' Hall, with H. R. H. Prince Arthur of Connaught as the principal guest. On June 13 there will be a pilgrimage to Hempstead Church, Essex, where William Harvey is buried. A short service, conducted by the Bishop of Colchester, is to be held at 12 noon, and on the return journey it is proposed to visit Rolls Park, Chigwell, where Harvey lived at one time. The present owner, Lady Lloyd, has very kindly consented to entertain any members and friends of the society. After tea Sir D'Arcy Power will give a short address on William Harvey's association with Rolls Park.

SCIENTIFIC EVENTS

THE CONSTITUTION OF THE ROYAL COLLEGE OF SURGEONS

AN article in the *Journal* of the American Medical Association states that there are about 2,000 fellows of the Royal College of Surgeons and 18,000 members. The fellows pass a higher examination in surgery and are designated F.R.C.S. They are surgeons in the full sense of the term and generally are members of hospital staffs. Many of them practice only surgery or one of its special branches. They include all who are eminent in English surgery. The members pass a lower examination, devised for those who will engage in general practice, and are designated M.R.C.S. They usually practice surgery only in a minor form, their working being mainly medical. The college is governed by the council, which is elected from and by the fellows. The only occasion on which the members have an opportunity to say anything as to the government of the college is the annual meeting of members and fellows, when they can bring forward resolutions, which are submitted to the council. At this meeting they have for forty-two years passed a resolution that the members should be given the power to elect representatives on the council. This the council has always refused. At the 1929 meeting the members were twitted by the president, Lord Moynihan, with the fact that the number who attended was small (about fifty) and that he always saw the same faces. There was therefore no evidence that representation was desired by the members at large. At the 1930 meeting, which recently took place, the members demanding representation replied by bringing forward the result of a poll taken by postcard in Great Britain and the Irish Free State. This showed that for 12,766 cards sent out 6,832 votes were received in favor of representation and only 156 against. At the meeting, much was made of this; the argument was the "justice" of the claim for representation of nine tenths of the college roll and the need to protect the members against unqualified practitioners. When a vote was taken, the request for representation was carried by 43 votes to 1. The president said in reply that the question of representation of the members had always been regarded by the council as of the gravest importance and that a special meeting would be held to consider the resolution. At this meeting the council adopted the following resolution:

> The main functions of the college are to promote and encourage the art and science of surgery for the common weal, and for this purpose to conduct the examinations of the college and to maintain the great museum and library placed under its care. In carrying out these functions the council organizes lectures and demonstrations, provides facilities for and encourages research, fosters social intercourse and the amenities of the profession, and in every way possible renders the college an instrument for the advancement of surgery in its widest sense, not only for the benefit of the members and fellows, but the whole profession throughout the empire. In the opinion of the council these functions are well carried out under the present constitution; after further and prolonged deliberation the council has therefore decided that it is not desirable to alter the constitution of the college by providing for the direct and separate representation of members of the college upon the council. The decision of the council is in conformity with the opinion expressed three years ago by the body of fellows of the college who are the electorate.

THE STATE PARKS AND FORESTS OF NEW JERSEY

IN a report submitted to the New Jersey Legislature on March 2 and reported in the New York *Times*,