

man, but was content to work on, happy if his discoveries contributed to the advancement of science. It is to the labours of such men that the progress of the world, both scientific and industrial, is due; for the methods which he introduced have led, not merely to a knowledge of the structure of many compounds which would otherwise have remained unknown, but have also had a profound influence on chemical theory, and have led to many discoveries of the utmost practical utility. He lived a happy and contented life, and even in his death his desire was satisfied; for in his discourse at the grave of his predecessor in the office of dean of the Faculty of Science at Grenoble, Lory, he gave utterance to the words:—"Puisque la mort est inévitable, ne vaut-il pas mieux tomber ainsi tout entier, que de sentir la diminution lente et progressive de ses forces et de son intelligence?" Raoult died, after a few days' illness, without pain.

W. R.

DR. A. HIRSCH.

INFORMATION has reached us from the president of the Council of State for the Republic and Canton of Neuchâtel of the death, at Neuchâtel on April 18, of Dr. Adolph Hirsch, aged 71, the director of the observatory at Neuchâtel since its foundation in 1859. Dr. Hirsch was also secretary to the International Committee of Weights and Measures, established at Paris under the Metric Convention of 1875.

Dr. Hirsch contributed largely to our knowledge astronomy and meteorology, his earlier papers on the former subject having appeared in Berlin and Vienna, and his later papers, particularly with reference to the establishment and position of the new observatory in the Neuchâtel *Bulletin*. ("Établissement de l'Observatoire à Neuchâtel," *Bul.* v. 1859-1861; "Recherches sur des Pendules Astronomiques," *Bul.* v. 1859-1861; "Découverte de deux nouvelles petites planètes," *Bul.* v. 1859-1861; "Relation des phénomènes météorologique avec la marche, des instruments magnétiques," *Bul.* vi.; "Influence des taches du Soleil sur la température de la Terre," 1877; Sur le passage de Venus," 1883, etc.). In more recent years Dr. Hirsch has been closely identified with the introduction of the metric system of weights and measures as an international system. He was a member of the original Commission International du Metre of 1872, of which the present eminent director of the Imperial Observatory, Dr. W. Foerster, and Dr. Von Lang, of the University of Vienna, were also members. On the establishment of the new International Committee of Weights and Measures in 1875, Dr. Hirsch became its secretary, a position which he filled until his death. A master in metrological science and a prince of secretaries, his loss will be deeply deplored by all whose opportunity it was to seek his valuable advice and to be guided by his profound experience.

NOTES.

THE gentlemen's soiree of the Royal Society will be held next Wednesday, May 8. The ladies' conversazione will not be held this year, in consequence of the death of Queen Victoria.

THE position of affairs at Coopers Hill College is most unsatisfactory. We understand that the Members of Parliament who are interested in the higher education of the country had obtained permission to move the adjournment of the House in order to discuss the latest report on the management of this institution laid before Parliament by Lord George Hamilton, but that some M.P., presumably at the instigation of the India Office, which shuns inquiry, has "blocked" this permission. This proceeding, which, unfortunately, the rules of the House allows,

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is but another instance of the diminishing power of the private member and the increasing domination of the Government. Lord George Hamilton stated last week that he had asked the Universities of Oxford, Cambridge and London to nominate representatives on the Board of Visitors. When reconstituted the Board is to appoint a committee to hold an inquiry into the whole working of the College. This committee can do nothing to lessen the gravity of the recent action of the Board of Visitors in the matter of the dismissed teachers. They may, however, be able to secure some sort of recognition of the professoriate in the management and policy of the College, and some diminution of the absolute power of one individual, which has recently wrought such harm both at Coopers Hill in England and at the Leland Stanford University in America.

THE reality of the connection between rats and plague is prominently brought into notice by the issue of a circular by the Local Government Board, instructing the sanitary authorities of seaports to take precautions against the entrance of plague-infected rats into this country. On the arrival in port of a vessel upon which, during the voyage, plague or sickness suspected to be plague has occurred, measures are to be taken to secure the destruction of the rats on board the vessel, and to prevent them from reaching the shore. In the case of vessels that have come from places infected with plague, strict inquiry is to be made on their arrival in port as to mortality or sickness among rats during the voyage. In the event of rats on board any ship being found to be infected with plague, all parts of the vessel frequented by those animals are, so far as possible, to be disinfected. The authorities of seaport towns invaded by plague are advised to endeavour to secure the destruction of the rats in the town, not least those inhabiting the docks and quayside warehouses. In connection with these instructions, it is worth while to bear in mind that plague is not usually transmitted by the bite of a diseased rat, but by fleas living on such rats. Experiments have shown that a healthy rat will quickly contract plague if caged with a diseased rat infested with fleas, but will not do so if the diseased rat is free from fleas. Perfectly healthy rats harbour very few fleas and are very expert in removing them, but these insects are abundant on sick rats. After death, as the body becomes cold, the fleas leave the rat, and if they reach another rat or human being they may inoculate their new host with the bacilli of plague.

PROF. BROUARDEL, Dean of the Paris Faculty of Medicine, has announced that at the end of his present term of office—namely, in February 1902—he will not accept re-appointment.

THE Rev. James Chalmers, who is reported to have been murdered in New Guinea, with the Rev. O. F. Tomkins and twelve students, was known to many anthropologists, and made some noteworthy contributions to our knowledge of the natives of New Guinea, where he passed twenty-three years of his life. His death has often been reported before now, and there is always a possibility that rumours from New Guinea will prove to be untrue; but we fear that in this case the news will be confirmed.

THE founders' medal of the Royal Geographical Society has been awarded to the Duke of the Abruzzi for his expedition to Mount St. Elias and for Arctic exploration. Dr. A. Donaldson Smith has been awarded the patrons' medal for his African expeditions and the important scientific observations made in connection with them. Awards have also been made to Mr. Louis Bernacchi and Captain Colbech for their aid in the *Southern Cross* Antarctic expedition, and to Captain Cagni for his journey to 86° 33' N., on the Duke of the Abruzzi's expedition.