

Mr. H. C. Sorby, F.R.S., the Secretary, Mr. R. P. Grey, F.G.S., and the Council is composed of men whose names are well-known in science.

THE head of the publishing firm of Didot, died a few days ago at the age of eighty-six. The deceased was a member of the Academy of Inscriptions, and under his direction the firm published a number of valuable scientific books. The Didot firm hold the office of printers to the French Institute, M. Gauthier Villars being only printer to the Academy of Science.

THE second annual meeting of the members of the Scientific Club was held at the Club House, Savile Row, on Thursday, the 17th Feb. Major F. Duncan, D.C.L., Chairman of the Committee, presided. The Report of the Committee, showing the rapid progress the Club had made during the past year, was unanimously adopted.

WE are asked to state that supplemental meetings for the reading and discussion of papers by students of the Institution of Civil Engineers have been appointed for the following Friday evenings:—February 25, March 3, 10, 17, 24, and 31. The chair will be taken at 7 o'clock on each evening, and successively by Dr. Pole, F.R.S., Sir W. G. Armstrong, C.B., F.R.S., Mr. H. Hayter, Mr. Woods, Mr. Brunlees, and Mr. Berkley, Members of Council.

AMONG the papers in the published "Proceedings" of the Belfast Natural History and Philosophical Society for 1874-75 are the following:—Presidential Address on atoms and automata, by Joseph J. Murphy, F.G.S.; On some Irish Palæozoic fossils, by Rev. John Grainger, D.D.; On the water-bearing strata between Moira and Lurgan, by Robert Young, C.E.; On the geographical distribution of mammals, by R. O. Cunningham, M.D., Professor of Natural History, Queen's College, Belfast; A suggestion on chemical notation, by the president, Joseph John Murphy, F.G.S.; Further notes on some of the swimming birds frequenting Belfast Lough, with special reference to the Great Northern Diver, by R. Lloyd Patterson.

THE additions to the Zoological Society's Gardens during the past week include a Virginian Eagle Owl (*Bubo virginianus*) from N. America, presented by Mr. H. Knight; two Widgeons (*Mareca penelope*), a Common Wild Duck (*Anas boschas*), a Lesser Black-backed Gull (*Larus fuscus*), three Herring Gulls (*Larus argentatus*), two Common Gulls (*Larus canus*), three Black-headed Gulls (*Larus ridibundus*), European, presented by Mr. C. Clifton; a Common Otter (*Lutra vulgaris*), European, received in exchange; a Darwin's Pucras (*Pucrasia darwini*) from China, a Rose-crested Cockatoo (*Cacatua moluccensis*) from Moluccas, deposited; a Zebu (*Bos indicus*) born in the Gardens.

### SCIENTIFIC SERIALS

THE *American Naturalist* has changed its form this year. In future it is to be published by Messrs. H. O. Houghton and Co., Cambridge, Mass., under the editorship of Dr. A. S. Packard, jun. The amount of matter is increased, and the articles will be of a more popular nature than previously. A department of Geography and Travel is added, and Dr. R. H. Ward, of Troy, N.Y., will superintend the Microscopy. There seems to be considerable difficulty in the production of a science journal in America, and we think that there is still room for improvement. The first paper in the January number is on "Burs in the Borage family," by Prof. Asa Gray, in which a new form, named *Harpagonella*, is described, having been obtained by Dr. E. Palmer, from Guadalupe Island, off Lower California.—The Rev. S. Lockwood describes the habits of the "Florida Chameleon" (*Anolis principalis*).—Mr. David Scott writes on the proper specific name of the Song Sparrow, *Melospiza fasciata* (Gondin), not *M. melodia* (Wilson).—Mr. J. C. Russell shows of what great value the New Zealand Flax (*Phormium tenax*) would be if a method of cleaning it could be discovered.—Mr. J. A. Allen discusses the availability of certain Bartramian names in ornith-

ology, and opposing Dr. Coues' desire to establish some of them. A list is given of those of Bartram's names which Dr. Coues wishes to re-establish.—Prof. N. S. Shaler describes the first session of the Harvard Summer School of Geology.—Ancient ruins in S.W. Colorado are illustrated and described from photographs taken by Mr. W. H. Jackson, the photographer to Prof. Hayden's United States Geological Survey of the Territories, including a house, a round tower, and a square one of Indian construction.—Reviews of Sach's "Botany" (English translation) and Caton's "Summer in Norway," with badly-engraved drawings, are given, together with notes, &c., which conclude the number.

*Poggendorff's Annalen der Physik und Chemie*, No. 11, 1875.—The tuning-fork has become an important instrument in physical observations, and this number of the *Annalen* begins with a description of experiments by Dr. Ettingshausen, with a stroboscopic tuning-fork apparatus, in which the motion of an electromagnetically excited fork is observed through slits arranged in connection with another fork of nearly the same pitch placed near it. The following are some of his results:—Compared with pendulum motion, that of tuning-forks is somewhat retarded in the inward course, and accelerated in the outward. The vibration time considerably increases with increase of the time of closure of the circuit. The electro-magnetically excited fork vibrates (where the divergences are not too great) more quickly than if the vibrations were caused by elasticity alone. With equal amplitude the duration of vibrations increases slightly with the time the apparatus has been in action; and it decreases with increasing density of the surrounding air.—Electric phenomena occupy a large share of attention in this number, especially various actions of the spark. M. Peters, extending the researches begun by M. Antolik on "gliding" electric sparks, describes effects obtained by letting the spark glide on smoked paper brought near the machine on a glass table. The trace of the flash showed three different parts, each about a third of the whole length. In the *positive third* were numerous branchings outwards from a middle part, which consisted of a succession of parallel dark and bright strips (the darkest in the middle); the *negative third* showed no branchings, and the parallel strips were in reverse order; the *middle third* was distinguished by a greater width and brightness. M. Peters seeks to account for these phenomena. In another note he points out some differences between spark-forms from large inductors and those from the Holtz machine.—A paper by MM. Mach and Wosyka, also suggested by Antolik's experiments, furnishes reason for thinking that the soot figures produced are due to air motions, and especially sound motions.—Again, M. Riess gives an account of the phenomenon of weak electric sparks (as he called them), which differ from the ordinary strong sparks in form, light, sound, and other properties. A mode of producing them was formerly described. He observes that the greater length of the negative electrode has no essential connection with their production, and that, in regard not only to length, but to light and sound, they are independent of the composition of the circuit in which they occur.—Some striking new light phenomena of electricity are also described by M. Holtz.—In a note on the dielectric constants of liquids, M. Silow furnishes experimental proof of a proposition of Helmholtz with regard to attraction of two electric masses situated in an insulating medium, and a valuable paper by M. Herwig treats of the magnetisability of cylindrical iron pipes in different directions; he considers that in addition to the forces hitherto taken into account, there are further molecular magnetic forces which are of the greatest importance. These act within a magnetic line in the direction of the entire magnetisation, and in interrupted portions of a magnetic line in the contrary direction.—MM. Hildebrand and Norton endeavour to fill up some gaps in our knowledge of the properties of metallic cerium, lanthanum, and didymium; having obtained these elements by the help of the electric current, according to Bunsen's method, in quantities of nearly fifty grammes.—A note on impact machines is contributed by M. Sedlaczek.

### SOCIETIES AND ACADEMIES

LONDON

Geological Society, Feb. 18.—Annual General Meeting.—John Evans, F.R.S., president, in the chair.—The Secretary read the reports of the Council and of the Library and Museum Committee for the year 1875. The position of the Society was