school, for each attendance of *at least* an hour's duration on the part of a student who has given not less than ten such attendances during the session. The minimum grant specified will be allowed if the inspector of the department reports that the teaching and equipment of the school are satisfactory, and that the class or classes are not too large for instruction by the staff of teachers. But these grants may be increased in any subject for efficiency up to the maximum specified; the efficiency being determined by the inspector's report and the success of the class in that subject at the May examination. The grants for science will be:—2*d.* to 6*d.* for each attendance in a night science class in the elementary stage, and 4*d.* to 1*s.* 4*d.* in the advanced stage; and for each attendance of 1½ hours' duration given to practical work in chemistry, physics, metallurgy, or biology, in a properly equipped laboratory, 3*d.* to 9*d.* in the elementary stage, and 6*d.* to 1*s.* 4*d.* in the advanced stage. The payments for attendance in a day science class will be at half the above rates. No student may be registered in the advanced stage of any subject until he has passed the examination of the department in the elementary stage, or has passed some corresponding examination which is considered by the department to sufficiently meet the requirements of the case. No student may be registered for more than two years for attendances in either the elementary or the advanced stage of any one subject. The grants will only be made if the student is of the industrial class as defined by the Science and Art Directory, and if the attendances for which the grant is claimed are such as can be legitimately registered under the rules. Grants for honours in the science subjects of the Department of Science and Art will continue on the same scale as at present.

AN excellent survey of the systems of technical education in Austria, Germany, France, and Switzerland, compared with what is done in England and Ireland, is contained in a pamphlet entitled "Technical Education: a National Necessity, its Uses and Advantages," by Prof. Henry Corby, published by J. Mahony, Cork. Prof. Corby shows what technical education has accomplished on the continent, and points to the comparative neglect of it in England, the result being a loss of commercial supremacy. As to Ireland, technical education is almost unknown there. There is only one technical school of note, and that has been established within the past few years in Dublin. In Cork something has been done; but it is disjointed and fragmentary. However, it tends in the right direction, and we hope with Prof. Corby that it may yet prove to be the mosaic pavement on which will be raised a large and comprehensive technical school, which will be worthy of the commercial enterprise of the capital of the South of Ireland. It is suggested that good would come if Cork were raised to the dignity of a university city. Why not have a university for the South of Ireland in the capital of the South? At present, Prof. Corby points out, there are only two universities in Ireland, both located in Dublin, while Belgium, with a population almost exactly the same, has four universities; Scotland also has four, and in scientific Germany there are as many as thirty-one universities. To show what a thorough general and technical education can do for a country, it is only necessary to refer to Switzerland, which, though only about half the size of Ireland—and, as fully one-half of its soil is entirely unproductive, it may be regarded as only about one-fourth the size of Ireland—is able to maintain three million inhabitants, whilst the population of all Ireland is little more than four and a half millions. Prof. Corby describes what some continental nations have done for agriculture, and then he asks how can the smaller farmers of Ireland—many of them poor and half-educated—attempt to compete with such rivals? It has been urged that Ireland ought to have a Minister of Agriculture, but it is suggested that a Minister of General and Technical Education, who would give special attention to agriculture, would be better. If national teachers were trained at agricultural schools, and students were given practical instruction in agriculture, if chairs of Agriculture were established in all the higher colleges, and special lectures delivered in the auxiliary sciences, such as chemistry, zoology, botany, and mineralogy, then, thinks Prof. Corby, the hope might be entertained that the vast tracts of waste land in Ireland would be reclaimed, and a large scheme for reafforesting undertaken with every prospect of success. We trust that his admirable pamphlet will be the means of giving an impetus to the cause of technical education in Ireland.

SCIENTIFIC SERIALS.

The Reliquary and Illustrated Archæologist maintains its reputation for the beauty of its illustrations. In a late number (vol. ii. No. 2) an elegantly carved wooden Egyptian toilet-spoon of the eighteenth dynasty is reproduced in collotype.—The editor, J. Romilly Allen, has carefully studied the cup-and-ring sculptures of Ilkley in Yorkshire, and gives numerous illustrations of these still mysterious markings. All that we know about them is that they are religious symbols, and that they mostly belong to the Bronze Age, although cups only may possibly have been used at the end of the Neolithic period.—The much-discussed "Dwarfie Stone" of Hoy, Orkney, has been investigated by Mr. A. W. Johnston in a very thorough manner; he comes to the conclusion that it was originally a sepulchre with a stone door.

Internationales Archiv für Ethnographie (Heft 2, Bd. ix.)—The question of alleged native writing in Borneo is discussed by Mr. H. Ling Roth and Prof. H. Kern; inscriptions in one or two scripts are known, but there is no evidence that any form of writing was known to the Dyaks. Heer M. C. Schadee, in collaboration with Herr Schmeltz, has a communication on the ethnography of Western Borneo, which is illustrated in the characteristically excellent style of this journal. In the current number (Heft 3) Schmeltz continues his erudite notes on ethnographical objects from New Guinea. In a note entitled "Prudery in Scientific Matters," the same author states, on the authority of Prof. Brigham of Honolulu, that "the Government of New Zealand has not only prohibited the importation of the well-known phallic chalk idols from New Ireland, but in the Government Museum of Auckland all ithyphallic idols and figures have been castrated and mutilated." We hope that the Curator of the Museum will state how far this is or is not the case.

IN the second number of the useful *Centralblatt für Anthropologie Ethnologie*, &c., is an article on the Necropolis of Novilara near Pesaro. According to Dr. P. Orsi the civilisation of Novilara was partly similar to and synchronous with that of Villanova. Three different culture streams have overlaid themselves, as it were, on the local substratum, and have contributed to give the Picinian culture its final form. One stream came from the north and west over the Apennines. The second came from the south, bringing with it the geometric vessels, which are wanting at Villanova, but appear in Istria; later this culture stream, which may be called the Greek one, brought Tarentinian silver coins and vases painted with black figures. The third stream is the Phœnician (partially also archaistic Greek) associated with figures of Astarte, glass beads and sepulchral steles with representations of naval war. The Necropolis belongs to the ninth to the seventh century B.C.

Bulletin de la Société des Naturalistes de Moscou, 1895, No. 4.—On adhesion of different metals to glass and other substances, by J. Weinberg, second article, in German.—On the winter flora of Nice, note by H. Trautschold.—Report on herborisation in the government of Smolensk, by A. Jaczewski.—The primary skeleton of the ventral fins of the Teleostei, by N. K. Kolzoff, in German, with illustrations; based on the study of thirty-six species.

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, June 4.—"The Hysteresis of Iron in a Rotating Magnetic Field." By Francis G. Baily.

By deduction from the Weber-Maxwell-Ewing theory it has been surmised that the hysteresis in magnetic metals under the influence of a constant rotary magnetic field will be less than that in an alternating field in which the magnetising force passes through a zero value. It is supposed that residual magnetism is due to the combination of molecular magnets in stable magnetic arrangements, and that the energy dissipated in any magnetic change corresponds to the work done in breaking up these arrangements. Hence any movement of the molecular magnets during which the formation of new combinations is checked or prevented will take place with considerable reduction in the energy loss due to this cause. Such a condition is realised when the magnetic substance is subjected to a rotary magnetic