second paper Mr. Harmer discussed the meteorological conditions of North-western Europe during the Pliocene and Glacial periods, finding in the early glaciation of Scandinavia, and the consequent establishment of anticyclonic conditions over that area, a probable solution of the change in the direction of the prevalent winds which he believes to be necessary to account for the accumulation of the crag-deposits on our eastern coast.

the accumulation of the crag-deposits on our eastern coast. A short paper by Rev. J. M. Mello on some palaeolithic implements of North Kent, and the exhibition on behalf of Mr. B. Harrison of a collection of "eoliths" from the neighbourhood of Ightham, led to a brisk discussion, in which Sir John Evans, Prof. Boyd Dawkins and other speakers denied that the socalled "eolithic implements" showed proof of human workmanship, while Prof. T. Rupert Jones stated Mr. Harrison's view of the case and was supported by Mr. Allen Brown.

ship, while Prof. T. Rupert Jones showed pholof of human workmanship, while Prof. T. Rupert Jones stated Mr. Harrison's view of the case and was supported by Mr. Allen Brown. The chief paper of the final session on Wednesday was that of Mrs. M. M. (Ogilvie) Gordon on sigmoidal curves in the earth's crust. This admirably rendered discourse was supplementary to the work recently published by Mrs. Gordon in the *Quarterly Journal of the Geological Society* and in NATURE, and had for its object the general statement of the phenomena which are presented when rock-folds in two directions intersect each other and produce "crust-torsion," with particular reference to the earth-forms which have been thus produced in the Alpine mountain-system. The complexity of the subject seemed to daunt most of the speakers in the discussion; but Prof. Lapworth pointed out how well the results of Mrs. Gordon's field-work agreed with the theoretical deductions to be drawn from the study of intercrossing earth-waves.

As usual, some of the most solid work of the Section was embodied in the reports of the committees of research which were presented during the meeting, but of which lack of space forbids more than the bare mention. Among these were the reports presented by Prof. A. P. Coleman on Interglacial Beds in Canada; by Mr. P. M. C. Kermode on the Deposits containing Elk remains in the Isle of Man; by Prof. P. F. Kendall on Erratic Blocks; by Rev. G. C. H. Pollen on the Ty Newydd Caves; by Mr. H. Bolton on the Uphill Caves; and by Prof. W. W. Watts on Geological Photographs. Short afternoon excursions, which have become an established

Short afternoon excursions, which have become an established feature of the Section's arrangements, were made during the week to the Ropersole Coal Boring, to the colliery works under Shakespeare Cliff, to the East Cliff and St. Margaret Bay, and to the Warren at Folkestone.

and to the Warren at Folkestone. To sum up the proceedings of the week—the sessions of the Section were well attended throughout, and the papers, though without any especially salient features, maintained a good average both in numbers and quality. Some palæontological papers which might have found place in the Section were taken in Sections D and K, and this branch of geological science was in consequence scantily represented in the list.

## UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

CAMBRIDGE.—Mr. W. L. H. Duckworth has been appointed to the University lectureship in physical anthropology.

Mr. R. G. K. Lempfert has been appointed Assistant Demonstrator in Experimental Physics.

It is proposed that McGill University, Montreal, be adopted as an institution affiliated to the University.

A NEW technical institute is to be erected, at a cost of 8450*l*., in Carisbrooke Road, Liverpool.

THE sum of 25,000 dollars has been promised to Vassar College towards a biological laboratory on condition that an equal amount be raised for the same purpose by other means.

THE foundation-stone of a new technical college for Sunderland has just been laid. The college is to cost 25,000*l*, and will, it is hoped, eventually be affiliated to Durham University.

DR. C. B. DAVENPORT, of Harvard University, has been appointed professor of zoology at the University of Chicago, in the place of Prof. Wheeler, who has gone to the University of Texas.

MR. H. B. KNOWLES has been appointed principal of the Swindon and North Wilts Technical School. Hitherto he has been teacher of physics and electrical engineering at the Bradford Technical School.

NO. 1564, VOL. 60]

THE Technical Instruction Committee of the West Riding (Yorks.) County Council have consented to financially assist the managers of the district technical schools in forming reference libraries on the subjects of local instruction.

MR. EMERSON E. MCMILLIN has given the Ohio Academy of Science 250 dollars with which to carry on scientific investigations, and declared his intention of giving a similar amount annually if the money is wisely expended.

DARTMOUTH (U.S.A.) COLLEGE has recently received from Mr. E. Tuck, of New York, 300,000 dollars, to be used for the purposes of instruction, and Tuft's College has had bequeathed to it the sum of 60,000 dollars by the late Mrs. M. D. Goddard, of Newton, Mass.

THE regents of the University of California have accepted the plans designed by M. Bénard, of Paris, for their new university buildings, and some of the buildings will, it is stated, be begun next spring. The movement, as will be remembered, is mainly due to the generosity of Mrs. Pheebe A. Hearst.

AT a meeting held at Newcastle on Monday last, it was decided to make an effort to raise funds for the completion of the buildings in connection with the Durham University College of Science. Subscriptions amounting to 9500%, were promised at the meeting, and the sum of 100,000% will, it is hoped, be raised by the end of the year.

In connection with the Liverpool University College, Mr. W. Rathbone has made provision for the award annually of a Rathbone medal to the most distinguished third-year student. Mrs. George Holt and Miss Emma Holt (to whom the College has on more than one former occasion been much indebted) have each given the sum of 5000*l* towards the physical laboratories of the institution.

AMONG recent appointments abroad we notice the following :--Dr. S. Avery to be professor of chemistry in the University of Idaho; Mr. H. B. Ward to be professor of zoology at Nebraska University; Mr. P. Field to be professor of mathematics in Carthage College; Dr. E. O. Sisson to be director of the histological laboratory in the recently consolidated medical schools of Keoduk, Iowa.

WITH reference to a recent note in this column respecting the admission of women students to the course of study at the Owens College which would qualify them for medical degrees and practice, we are requested to state that the resolution in favour of the course adopted was carried by a majority of nineteen, the voting being twenty-one for the resolution and two against it.

THE promoters of the Birmingham University scheme have recently received the munificent donation of 20,000*l*. from Mr. Charles Holcroft, and a number of large sums from other gentlemen, which bring the total amount promised to upwards of 315,400*l*. The total of over 300,000*l*. having been reached, the committee have secured the last 12,500*l*. which was offered by the friend of Mr. Joseph Chamberlain who prefers to remain anonymous.

## SCIENTIFIC SERIAL.

American Journal of Science, October.—Explosive effect of electrical discharges, by J. Trowbridge, T. C. McKay, and J. C. Howe. The authors investigated the sudden increase of pressure in the gas, through which the discharge passes, by means of a vacuum tube provided with a manometer gauge. When spark-gaps up to 50 cm. were employed, with a maximum difference of potential of three million volts, they found that the explosive effect increased closely in proportion to the length of the spark, and began to diminish when the spark was longer than 50 cm. The air itself then becomes a fairly good conductor, and is strongly ionised.—Colour vision and the flicker photometer, by O. N. Rood. The author's flicker photometer reveals the fact that the curve of colour vision is not the same in any two persons supposed to have normal sight. Among five persons capable of sustaining Holmgren's worsted test, differences of colour values ranging from I to I4 per cent. were found.—Iodometric determination of gold, by F. A. Gooch and F. H. Morley. The authors investigate the effect upon the immediate evolution of iodine brought about by adding varying amounts of water to the gold solution before introducing the