appearance in plant form. There were no less than 628 species of fungi which flourished in excrement, and of these no less than 402 were peculiar to certain animals. There could be no doubt the excrement often contained the organisms which led to its dissolution and circulation.

The proper course to pursue with organic matter was to place it near to the surface of well-tilled ground, and such a course seemed to be both profitable and safe. By mixing it with water we had all the evils of putrefaction, while our capital was thrown into the sea, and our water-supplies were poisoned by leakage. Our methods of sanitation inevitably lead to overcrowding, and farmers were often taxed to provide expensive apparatus, which merely deprived them of organic matter which otherwise might fertilise the land instead of involving them in a ruinous expense.

## UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

Cambridge.—Some friends of the late Prof. Sir T. F. Wade have offered to the University, by way of memorial, a sum of  $\pounds$  too for the construction of a catalogue of the Chinese books in the University Library. These books were his own gift, and during his lifetime he held the post of Honorary Curator of the collection.

Mr. J. E. Gray, and Mr. S. D. Scott, of King's College, have been appointed to work at the University's table in the Zoo-

logical Station of Naples and Plymouth respectively.

Sir Walter Gilbey has offered to the University a fund sufficient to provide an income of £25 a year for twenty-one years as an endowment for a Lecturer in the History and Economics of Agriculture. The Council of the Senate recommend that the benefaction should be gratefully accepted, and propose suitable regulations for the foundation of a "Gilbey Lectureship."

The Library Syndicate propose that the new class of "Advanced Students" should have the same privileges as Bachelors of Arts in respect of borrowing books from the Library.

The discussion by the Senate of the proposal to expend £27,000 in acquiring sites adjoining the congested area occupied by the New Museums was unusually full and detailed. The price is generally held to be high, but the importance of the ground in question for the extension of the scientific and other departments was strongly urged. The question is to be decided by a vote to-day.

In the Mathematical Tripos, Part I., all but one of the candidates have obtained honours. Fourteen women are among the successful. The class list will be published on June 16.

The Deputy-Professor of Pathology, Dr. A. A. Kanthack, announces four courses of instruction in different branches of his subject, including bacteriology, during the ensuing Long Vacation (July and August).

Honorary degrees are to be conferred on June 18 on a number of foreign men of letters, and upon Prof. Carl Gegenbaur, of Heidelberg, Prof. Felix Klein, of Göttingen, and Prof. Simon Newcomb, of Johns Hopkins University, Baltimore.

Newcomb, of Johns Hopkins University, Baltimore.
Mr. Charles Smith, Master of Sidney Sussex College, has been re-elected Vice-Chancellor.

"The College of New Jersey," universally known as "Princeton," has just changed its corporate name to Princeton University. An attempt will be made to raise 2,000,000 dols. in connection with its approaching sesqui-centennial celebration this fall. John I. Blair has contributed 150,000 dols. for a dormitory to be known as Blair's Hall, and another friend has contributed 100,000 dols.

THE Council of Firth College and the Committees of the Medical School and Technical School, Sheffield, have each passed resolutions in favour of a joint application for a charter of incorporation with the Victoria University, Manchester. A meeting of representatives from these educational establishments has been held, at which the form of the proposed charter was finally agreed upon, and a small Committee appointed to bring it before the proper authorities.

A RESOLUTION was moved at the last meeting of the Technical Instruction Committee of the Glamorganshire County Council

to the effect that funds should be allocated to the establishment of five musical scholarships, each of the value of £40 per annum, tenable at the University College, Cardiff. The resolution was not seconded. It was decided to defer the matter until the next meeting. The two issues which are here raised, (1) whether the funds for technical instruction can rightly be devoted to musical education, and (2) whether it is desirable to encourage such instruction at a University College, certainly require some time for consideration.

## SCIENTIFIC SERIALS.

The Quarterly Journal of Microscopical Science for May 1896 (vol. xxxix. part 1) contains:—On the blood of Magelona, by Dr. W. Blaxland Benham (pl. 1). The blood of Magelona papillicornis is totally different in structure from that of any other known Chætopod, in that it consists mainly of very small madder rose-coloured, non-nucleated globules, embedded (rather than floating) in a very small amount of colourless plasma; amongst the corpuscles occur isolated nuclei. It was originally demonstrated by Lankester that nuclei occur in the red fluid of the common earthworm, and this observation has been extended to sundry other Annelids by various observers. In these cases, as in Megalona, the nucleus is surrounded by very little, if any, protoplasm, and floats freely in the perfectly liquid plasma, which is coloured red by hæmoglobin, or in a few cases green by chlorocruorin or chlorochromin; while in some Oligochætes the plasma is colourless. The so-called "corpuscles" or coloured globules of Magelona differ from those observed in other Annelids, not only in position, viz. within blood-vessels instead of in the coelom, but also in structure and in their behaviour to chemicals. These globules "stand, as it were, midway between the coloured liquid plasma of Annelids generally and the coloured corpuscles of mammalian blood." The colouring matter showed no absorption bands, when spectroscopically analysed.—Fission in Nemertines, by Dr. W. Blaxland Benham (pls. 2 and 3). The fact that many Nemertines break up into pieces when irritated is well known, but the phenomenon has received but little attention, nor does it seem to have been definitely ascertained whether it is a normal occurrence. From these researches it seems, however, proved that these pieces are gonads, thrown off from the male and female worms, about the time the sexual elements are mature. The species examined belonged to the genus Carinella, and was probably *C. linearis*, Montagu.—Studies on the nervous system of Crustacea, by Edgar J. Allen (pl. 4). IV. Further observations on the nerve elements of the embryonic lobster.—Notes on Oligochætes, with the description of a new species, by Edwin S. Goodrich (pls. 5 and 6). The author first describes a new species of Enchytræus, found in a garden at Weymouth, also near Oxford and London (E. hortensis); it is, when full grown, about 15 mm. in length, and milky white in colour, the anterior end being sometimes The chetæ are in bundles of from three to four, yellowish. generally three in the dorsal and four in the ventral bundle; they have a straight shaft and a hooked inner end; a small dorsal head-pore is found between the pro-stomium and the first segment. In a favourable light the cuticle is seen to be covered throughout with fine hair-like processes, similar to those described by the author in Vermiculus pilosus. Three kinds of coelomic corpuscles are described as very characteristic of this worm: (a) amœboid; (b) oval corpuscles of the type so frequently met with in the Enchytræidæ, nearly twice as large as the amœboid, flattened oval in form, and filled with refringent granules; and (c) a third type of a discoid form, but the refringent granules, when they escape by rupture of the corpuscle wall, form a long thread of transparent homogeneous substance, closely coiled. These threads are possibly of an albuminoid nature.—On the development of *Lichenopora verrucaria*, Fabr., by Sidney F. Harmer (pls. 7-10). The author in a previous volume of this journal, from a study of Crisia, had suggested that embryonic fission would be found to be characteristic of the whole group of cyclostomatous Polyzoa. A chance discovery of large numbers of the colonies of *Lichenopora verrucaria*, Fabr., in all stages of development, has enabled him not only to show that this fission occurs here in an equally marked manner as in Crisia, but to discover some previously unsuspected phenomena in the life-history of *Lichenopora verrucaria*. Among these is the restriction of the production of an embryo to one or two of the oldest Zoœcia in the normal development.