granting of honorary degrees by our colleges to men outside of academic life has any reason to be, and surely it has, it is because such academic recognition is an expression of appreciation on the part of the personnel of the college of the things in which alone the results of their labors take on the garb of reality. As an expression of this kind of appreciation the function of the college in the granting of honorary degrees contributes vastly more to the credit of the college when wisely performed than to the sum of honor that rests upon those who do the world's work and carry its heavy dignities.

Quite the most absurd notion respecting this conferring of honorary degrees is the more or less confused idea of many a circumscribed academician that it is the making rather than the marking of a distinction; and growing out of this pitifully foolish idea is the exaggerated dread of the prostitution of this really vital function of our academic institutions.

Let one read the words of President Van Hise (SCIENCE, July 15, p. 92) and consider whether anything could be more stimulating to a group of young graduates at a time when everything conspires to awake in them the most serious emotions. If the granting of honorary degrees is not a vital function it may easily be made such, and as such its greatest, perhaps its only benefit would accrue to the institution performing it.

It is a general impression, and perhaps it is true, that the number of engineers is disproportionately small among those who at each commencement season receive honorary degrees. If it is true, it is to be hoped that some of our larger schools of engineering may consider it. In any case it would be appropriate for our Society for the Promotion of Engineering Education to look into the matter. W.

'PTERIDOSPERMAPHYTA.'

TO THE EDITOR OF SCIENCE: In proposing the name 'Pteridospermaphyta' (SCIENCE for July 1, 1904, p. 25), Professor Lester F. Ward does not seem to have noticed that Oliver and Scott have published 'Pteridospermæ' as the name of the group, in a paper presented to the Royal Society, January 21, 1904, entitled 'On the Structure of the Paleozoic Seed *Lagenostoma Lomaxi*, with a Statement of the Evidence upon which it is Referred to *Lyginodendron*.' Abstract preprints of this paper were distributed early in the year, were published prominently in *Nature*, 69: 334, February 4, 1904, and reviewed in the *Botanical Gazette*, 37: 237, March, 1904. The name was further established by Oliver in a paper entitled 'A New Pteridosperm,' published in the *New Phytologist*, 4: 32, January, 1904, and also reviewed in the *Botanical Gazette* (*l. c.*).

It was proposed by Oliver and Scott to establish 'a distinct class,' under the name Pteridospermæ, to 'embrace those paleozoic plants with the habit and much of the internal organization of ferns, which were reproduced by means of seeds.' JOHN M. COULTER.

SPECIAL ARTICLES.

AUTOTOMY, REGENERATION AND NATURAL SELECTION.

HISTORY warns us that it is the customary fate of new truths to begin as heresies and to end as superstitions; and as matters now stand it is hardly rash to anticipate that in another twenty years the new generation, educated under the influences of the present day, will be in danger of accepting the main doctrines of the 'Origin of Species' with as little reflection and it may be with as little justification as so many of our contemporaries twenty years ago rejected them. —Huxley, 1880.

Huxley's prophecy has not been quite fulfilled, for the fate of natural selection as a scientific account of organic adaptations still depends on the testimony of witnesses. Nevertheless, the warning of 1880 is a wholesome stimulant to take before considering some recent objections that selection accounts neither for the process of self-mutilation, so common among the crustacea, nor for the ability of living things in general to repair injuries by the restoration of lost parts.

These two processes, autotomy and regeneration, have been studied by those who consider