

shields. The chief point is that *certain shields are squeezed out, or suppressed by their enlarging neighbors*. The ultimate result is the formation of fewer but larger shields.⁸

Can these words be intended figuratively, the reference being to phylogenetic development, not to 'orthogenetic variation,' with all that that term, as defined by Gadow, implies? If so, the cross reference on a later page is certainly misleading: for in his discussion of the variations of *Thalassochelys caretta*, he says:

The interesting fact in connection with these variations is, moreover, that some of the shields are much smaller than the others, sometimes *mere vestiges in all stages of gradual suppression*, and that the *abnormalities are much more common in babies and small specimens than in adults*. The importance of these 'orthogenetic variations' has been discussed on p. 326.⁹

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November 28, 1905.

ON THE GRANTING OF THE M.D. DEGREE.

A SHORT time ago I received a letter from a member of a state board of medical examiners which touches upon a matter of present interest.

The letter, from which I shall quote, was in reply to one giving information respecting courses in this college designed for students who have the study of medicine in view.

After remarking that in his state the medical examiners had decided to give one year's credit to graduates of colleges, provided certain subjects in biology, chemistry and physics had been pursued in the college course, he proceeds as follows:

The fact is that many of the colleges teach these branches better than the average medical school. Any ordinary high school boy can enter the medical department of the university. Yet, they are not willing to give a year's credit to men who take four years beyond their entrance requirement. The confederation of state medical boards is divided on the question. So long as the average medical school admits high school graduates, I shall stand for giving one year's time to men who

take a college course. Or, in other words, seven years for the combined medical and college course. Not six years as proposed by Michigan, provided men take both courses at Ann Arbor. The seven years seem to me to be only fair play as an encouragement to the higher education.

What I wish to write you about in particular, is this: The present regulation is not to give the college men any time credit. The plan originates with medical schools in universities where they have also an arts department. They do allow the medical and college course to be completed in six years instead of eight, but it requires men to go to their college department. Now there are several medical schools requiring a straight B.S. or A.B. degree for entrance, such as Johns Hopkins, Harvard, and Rush in 1907. If men going from colleges * * * will all go to schools requiring the A.B. or B.S. entrance requirement, it will do more to help us to bring the medical schools into line than anything I know of at present. It seems to me the professors in these colleges should bring every pressure to bear on their prospective medical students to get them to go to the medical schools only that require degrees for entrance.

Upon the question of requiring either the B.A. or the B.S. degree as a preliminary to a medical course it is not my purpose to speak further than to say that I do not think the time has come in this country to make such requirement, unless upon the completion of such course the degree M.D. is to be given.

President Hadley has this to say on the general subject of requirements for admission to the professional schools of Yale:

However convenient it might be to insist on the possession of a bachelor's degree by all pupils in the schools of law or medicine, I feel that it would be a violation of our duty to these professions to hedge ourselves about by any such artificial limitations. We should make the standard of admission to our law and medical schools higher than it is at present; but we should base it upon qualifications for professional study which we could test by an examination, rather than upon previous residence at an institution entitled to give a bachelor's degree. If a man is really fit to study law or medicine we should encourage him to study law or medicine with us, without making arbitrary restrictions.

No one will be likely to question the wisdom of President Hadley's remarks, provided the

⁸ *Loc. cit.*, p. 326.

⁹ *Loc. cit.*, p. 388.

degree to be given at the end of the course in law or medicine is the bachelor's degree.

If, however, the doctor's degree is to be given at the end of the course in law or medicine, then an entirely reasonable prerequisite, a prerequisite which is justified by the generally approved custom in the case of the Ph.D. degree, would be to require the possession of a bachelor's degree.

Certain of the smaller colleges that still occasionally give the degree of Ph.D., without requiring residence study, have had the enormity of their educational transgressions pointed out to them by those interested in university work.

Of course, the practise of giving the Ph.D. degree as an honorary degree is not to be defended and would receive no encouragement if the conferring of the degree were referred to the teaching force of our colleges, instead of being kept as a prerogative of boards of trustees.

But there are other offenders against good taste in the matter of conferring degrees beside the small colleges; and one is tempted to remark that the practise of certain universities of offering as inducements to students to come to them, the opportunity of shortening their combined undergraduate and professional course, smacks somewhat of the bargain counter.

Any institution which makes such offer of course pays the price for any advantage which it may gain in increased attendance, in the lower place which it thereby takes in the estimation of a critical public as compared with institutions which do not resort to such devices to lure students to their halls.

The one point, however, which I wish to emphasize in the present communication is this: The doctor's degree should be a second degree and should not be given, unless as an honorary title, to any one who has not earned a bachelor's degree.

This proposition will not be dissented from by any university when the degree of Ph.D. is in question. Why should there be any hesitation then in requiring a bachelor's degree as a prerequisite to the M.D. degree?

At many universities two boys, presenting themselves with the same preparation, may enter on the same date; the one registering in the undergraduate department, the other in the medical school. At the end of four years the one receives the bachelor's degree, the other the doctor's degree. Such anomalous conditions can not be justified on educational grounds.

It follows that the doctor's degree from a school of medicine which does not make the possession of a bachelor's degree an entrance requirement is, judged by educational standards, on a par with the bachelor's degree. Graduates of such schools, therefore, should be given the degree of bachelor of medicine instead of doctor of medicine.

I am not arguing that a bachelor's degree in arts or science should be required of every one who proposes to practise medicine. I am not discussing the question of the desirability of having the practitioner a broadly educated man. Neither do I propose to discuss the claims made in behalf of certain medical schools that they turn out better trained practitioners without requiring a bachelor's degree for entrance than is done by schools which require a bachelor's degree for entrance. Claims of this sort are easily made. The discriminating public will judge the institution by what the graduates prove to be rather than by what they are said to be.

While I do not think we are ready in this country to say that no one should be permitted to practise medicine until he has gained the degree of M.D., we may and should insist that he be a graduate of a reputable medical school, and that he pass successfully the examination set by the state board of medical examiners.

It is, perhaps, not too late to insist that the degree M.D. be put on a par with the degree Ph.D., instead of ranking, as it does now, except as it comes from a very small number of medical schools, with the bachelor's degree.

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WASHINGTON AND JEFFERSON COLLEGE,
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