

sider what should be their attitude towards the new body. Accordingly, at a very full meeting of convocation (as the general body of graduates above a certain standing is termed) last summer, the whole subject was referred to a special committee of forty (of which the present writer was a member), to consider and report. This committee appointed Lord Justice Fry its chairman, and a scheme was by it prepared for the re-organization of the existing university from the points of view of the new association, — a task the more easy, as several gentlemen were members of both bodies. At an adjourned meeting of 'convocation' held on Dec. 8, this scheme was rejected, and, as the former committee refused to act, another committee of twenty-five was appointed to modify it in the sense indicated by convocation.

The year which is now drawing to a close has been marked by greater losses to English biology than any since 1882, which witnessed the deaths of Mr. Darwin, Prof. Francis Balfour, and Sir Wyville Thomson. Prof. Morrison Watson was a well-known anatomist of hardly more than middle age; while Drs. W. B. Carpenter, J. Gwyn Jeffreys, and T. Davidson were almost the last of that older school of zoölogists who are too often looked down upon by the younger generation which has been trained to minute histological work. Dr. Davidson had the happiness of completing the work to which he had devoted the labors of a long life; but his two old friends have left much material behind them, the working-out of which must be completed by other hands. Dr. Carpenter's loss will be severely felt by those who believe in the organic nature of *cozoon*. He had accumulated a very great amount of material, which was regarded by all to whom he had shown it as proving his case in the most satisfactory manner possible.

An important reform has just been carried out at Oxford. Honor candidates in law, history, and science, will henceforth be excused from the classical examination at the end of their first, or the beginning of their second, year, which is known as 'moderations.' The preliminary examination 'responsions' can be passed before residence begins, either in the leaving examination of a public school or at the university itself; and men can therefore specialize during the whole of their university course, instead of having their attention distracted from physics, chemistry, or biology by the necessity of getting through 'mods.' This has long been the case at Cambridge, and is one of the reasons for the overflowing state of its medical school.

The old public schools are also beginning formally to recognize that there are other branches

of education besides the classics. Rugby is about to institute a modern side; and changes in the same direction are being gradually introduced at Eton, her great rival, Harrow having long had something of the kind. The committee of the city and guilds of London institute for the advancement of technical education have offered free studentships of the annual value of thirty pounds, tenable for three years at the central institution, to be awarded by the head master of each of the principal public schools. It will be a matter of some interest to see what proportion of boys will avail themselves of these opportunities for obtaining the higher technical education.

W.

London, Dec. 17.

LETTERS TO THE EDITOR.

***, Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

The moon's atmosphere.

My friend, Professor Langley of Allegheny, has recommended to me to give you an account of a phenomenon twice observed by me on the occasion of two occultations of Jupiter. At the moment of contact, the planet, instead of passing behind the moon, appeared to be projected upon the moon's edge, until nearly or quite one-half of the disk of the planet was visible on the moon's surface. Then suddenly the whole planet disappeared behind the moon. As this phenomenon must be due to refraction, it would indicate a lunar atmosphere. The instrument with which I observed the occultation was a telescope made for me by Alvan Clark, with a four-and-a-half inch aperture.

JAMES FREEMAN CLARKE.

Jamaica Plain, Mass., Dec. 31.

Demand for good maps.

Your comments in the number for Dec. 18, on the character of our small maps, are to me very welcome, and I hope you will follow the subject up till some decided impression is made on the minds of the publishers. The maps in our school geographies are, to me as a teacher, a constant source of vexation. Indistinct, incomplete, inaccurate, they baffle attempts at close work, and so compel, if solely depended upon, a very elementary grade of work. The small *school-atlas* that a German boy buys for twenty-five cents is worth ten times as much as our best geography maps.

You spoke of old plates. I have seen within two years a wall-map of North America in which the Yukon River had not been drawn. Said map was shown as a sample in the office of one of our largest publishing-houses.

When the German publishers bring out their work so perfect, it seems as if the material was provided for American geography-makers. Is the reason they do not use it because, with German lettering, the maps cannot be reproduced by the photographic process and be available? Or are they afraid of repeating the mistake of one of our atlas-makers, who produced a town in Africa called *Elfenbein*?

However it may be, we do need better school-maps.