some cases specially well attended even by any standard. It is a fair inference that many of the absentees were such as do not usually attend the section, preferring the lighter entertainments of the meeting. At Newcastle there were no general excursions, though the anthropologists made a sectional excursion to the Roman Wall; and there were no entertainments beyond a thoroughly enjoyable reception by the Lord Mayor on one evening, and a very pleasant garden party given by Miss Noble and Mrs. Cochrane. There is no need to determine now whether the severe economy in general gatherings need be permanent: in our present mood we naturally regard their more frivolous characteristics with disfavor. But such general gatherings, where those usually separated in calling and locality may meet for interchange of ideas, have an undoubted value which may be trusted to reassert itself when the time comes. At present we have neither much inclination nor much time for them, seeing that the whole meetings have been reduced in length.

Further, in estimating the success of the meeting, we must remember the actual difficulties to be overcome, especially by the city of Newcastle, and all who worked so devotedly in its interests. The invitation was given before the war, and it would have been quite reasonable to withdraw it under the entirely unforeseen conditions, even in the interests of the guests themselves, who might not have cared to visit an east coast "fortified town" just now. But in March last, after the necessary limitations and modifications had been frankly stated, and a courteous enquiry had been made and answered, the invitation was cordially confirmed; and from that moment no more was said of the heavy load of anxiety which those responsible for the success of the meeting must have carried with them continuously until the concluding words were spoken. —From an Oxford Note-book in *The Observatory*.

THE STATE COLLEGE OF AGRICULTURE AT CORNELL UNIVERSITY

THAT the State College of Agriculture at Cornell University is successfully solving the great problem of agricultural education is visibly evident from the fact that in a dozen years the enrollment of students in the college has increased ten-fold. Already the college of agriculture is the largest college in Cornell University, and the authorities and friends of the university share the hopes of the faculty of agriculture for a continued increase in the attendance and steady improvement and growing success in its work.

The motive force behind this great movement for a more satisfying country life and a better agriculture is the conviction that properly trained men and women must be placed on the farms and in the rural communities. Education and science are the hope of the farmers as they have already proved the boon of manufacturers and transporters. Men and women of vision and well-disciplined minds are the prime agents in accomplishing progress in every field of human activity whether intellectual, economic or material.

Under the terms of the Smith-Lever Bill New York state will in 1923, and annually thereafter, when the appropriations provided for will have reached their maximum, receive from the federal government $170,000 on condition that the state of New York provide an equal amount for cooperative extension work among the farmers of the state. Cornell University being the federal land grant college of New York is the agent by which this extension work is to be carried on.

While the federal government has thus generously encouraged education and investigation in agriculture and the extension of the results of scientific investigation to farmers on their own farms, many of the state governments have shown no less zeal for the betterment of the farmers and the improvement of conditions of farming within their own borders. Among these states New York stands conspicuous. The State College of Agriculture and Veterinary Medicine at Cornell University as well as the state experiment station at Geneva are visible evidences of the wisdom with which, in this respect, the state has been governed.

Briefly and broadly expressed, the State

College of Agriculture at Cornell University exists for the benefit of the farmers. It is a college of *agriculture,* it is not an institution of general education.

The New York State College of Agriculture has stood in the forefront among the agricultural colleges of America. Its work, however, has only just begun and vast possibilities are opening up for the future. The extent to which the college can realize these possibilities and the rate at which it can continue to progress will depend largely on how adequately its growing needs are met by appropriations from the state of New York.—President J. G. Schurman in his Annual Report.

SCIENTIFIC BOOKS

Catalogue of the Fresh-water Fishes of Africa in the British Museum. Vol. IV. By G. A. Boulenger. London, British Museum (Natural History).

The fourth volume completes the account of the fresh-water fishes of Africa, based on a collection of over 15,000 specimens, and including 1,425 species. In addition to the enormous collection of the British Museum, on which the work is primarily based, the author examined many specimens belonging to other museums, and did everything possible to make a complete survey of the subject on the lines laid down. Like other British Museum "Catalogues," this is in reality a monographic revision of the whole group of animals discussed.

When noticing a former volume, we had occasion to refer to the magnitude and importance of Mr. Boulenger's labors in this field. It may perhaps be opportune to call attention to the extraordinary value of such a worker to any museum or country. We are not only amazed at the amount of work which may be accomplished by a single man, but we observe how he secures the cooperation of collectors, men who can not themselves do technical work in zoology, but are more than glad to furnish materials to those who can make such good use of them. Collecting in tropical Africa is always difficult and often hazardous, but many enthusiasts have searched the rivers and lakes of that continent for Mr. Boulenger, proud to be partners in so great an undertaking. The aid thus rendered has been fully and exactly recognized in publication, following the excellent methods long ago established by the British Museum. In our own National Museum the staff in certain departments has always been inadequate, while the possibilities of development have never been appreciated by Congress. Curatorial work on the collections is, of course, the first necessity; but it is not realized that it would be a splendid investment to secure experts to take charge of those divisions of zoology and botany which have been least developed, and which superficially appear to stand least in need of attention. The Museum, employing one man, really secures the services of many, who become collaborators and contributors of specimens from all over the world. In 1870, only 255 species of fresh-water fishes were known from Africa; who could have guessed what intensive work would bring forth? The materials gathered together can not be sold; it is impossible to accurately define their value in money, but it ought to be sufficiently apparent that the work pays, whether we regard the tangible or intangible results.

The volume under review begins with the Carangidæ, and includes the more specialized or higher families of fishes. More than half, however, is occupied with "Addenda," descriptions of the numerous species discovered during the publication of the work. The additional species belong mainly to the Cyprinidæ, Siluridæ and Characinidæ, as might have been expected. The already enormous genus *Barbus* receives very many additions. The plan of the work does not permit any reference to the proposals by C. Tate Regan and others to break up the so-called family Characinidæ; nor does it allow the inclusion of those illuminating discussions of the geographical distribution of the various families which the author himself has published elsewhere. Although scales are used continually in the keys and descriptions, there is no reference to the microscopical characters they present and no word or line indicates that they have ever received anything but the most superficial at-