

laboratory in India to see readily the arrangements which have commended themselves in Germany, and the report directs attention to the modifications which will be needed to adapt them to Indian conditions.

Perhaps the details which strike an English student most are the number and size of the lecture-rooms, the accommodation provided for the museum, and the absence of rooms specially designed for elementary classes of large numbers.

The Director-General deserves the gratitude of all interested in the organisation of the teaching of physics for having initiated this work, and Prof. K uchler is to be congratulated on the manner he has carried out his task. Still, a companion volume is needed.

British physical laboratories of to-day have many admirable points. A book that described

#### THE ESSEX FIELD CLUB.<sup>1</sup>

IN order to mark the completion of a quarter of a century's scientific work in the county of Essex, the above society has published the first issue of a "Yearbook and Calendar" which will be found of interest to all who follow the work of our local scientific societies. This extremely active association was founded in 1880 by Mr. William Cole, the first president being Prof. Meldola. The work of the club has been noticed from time to time in our columns, and the present "Yearbook" contains, as an appropriate opening chapter, a history of the society by Mr. Miller Christy, who is now president. That the club has carried out the objects for which it was founded, and that it has more than justified its existence, is made perfectly clear in this introductory

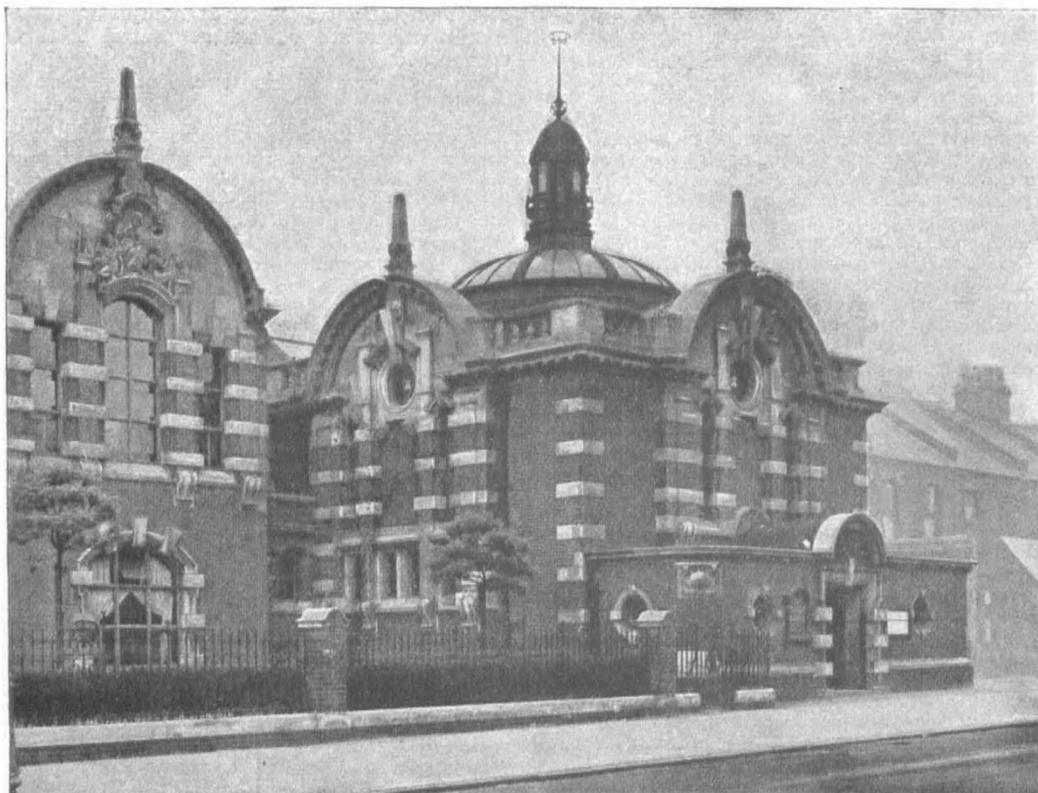


FIG. 1.—The Essex Museum of Natural History, Romford Road, Stratford, Essex.

the new laboratories at Liverpool, Manchester, the Royal College of Science, and the McGill University at Montreal, to say nothing of the historic laboratories in our two ancient universities, would contain much to interest those inhabitants of India to whom Prof. K uchler's report appeals, while in many respects, specially, perhaps, in the organisation of the practical work for large classes, the arrangements in the English laboratories seem to have the advantage.

In dealing with the last part of his subject, the construction and standardisation of instruments, Prof. K uchler again rightly directs attention to the important services rendered to German industry by the Reichsanstalt and the disadvantages under which English manufacturers find themselves from the incomplete equipment of the National Physical Laboratory.

chapter. As the author says, "there is in Essex no other organised scientific body having the same or similar aims."

The actual scientific achievements of the club were fully set forth in an address delivered by Prof. Meldola at the annual meeting in 1901.<sup>2</sup> As regards publications, the output has been not only large in quantity, but, what is more to the point, excellent in quality and strictly appropriate to the functions of a local society. Five volumes of *Transactions and Proceedings* were published down to 1887, after which the official publication was named the *Essex Naturalist*. The fourteenth volume of the latter is

<sup>1</sup> "Yearbook and Calendar for 1905-6." Edited by William Cole. (The Club's Headquarters, and Simpkin, Marshall, Hamilton, Kent and Co., Ltd.) Price 1s.

<sup>2</sup> "The Coming of Age of the Essex Field Club" (1901). Copies can be obtained on application to the Hon. Librarian, Mr. T. W. Reader, Essex Museum, Romford Road, Stratford, Essex.

now in course of publication. In addition to the above periodicals, three "special memoirs" have also been issued, and it is hoped that others will be added from time to time. In 1885 appeared Prof. Meldola's and Mr. White's "Report on the East Anglian Earthquake of 1884," in 1890 Mr. Miller Christy's "Birds of Essex," and in 1898 Mr. Henry Laver's "Mammals, Reptiles and Fishes of Essex." All these works were noticed in our pages at the time of publication. Four "museum handbooks" must also be credited to the club.

Not the least important part of the results achieved since 1880 is the establishment and maintenance of two museums, one of a strictly local character for the Epping Forest district at Queen Elizabeth's Lodge, Chingford, and the other of a county and educational character at West Ham in connection with, and attached to, the Municipal Technical Institute (see illustration). The first of these is carried on under an agreement with the Corporation of London, as conservators of Epping Forest. The other (county) museum was founded for the club by Mr. Passmore Edwards, and is maintained by the Borough Council of West Ham and the Essex Field Club, the library and headquarters of which are now in this same building. The *personnel* of the club as narrated by Mr. Christy is also of interest. The presidency has been held in succession by Prof. Meldola, Prof. Boulger, Mr. T. V. Holmes, Mr. E. A. Fitch, Mr. H. Laver, Mr. F. Chancellor, Mr. David Howard, Prof. Meldola, Mr. F. W. Rudler, and Mr. Miller Christy. All these are still living and active supporters of the club, while Mr. William Cole has acted as hon. secretary, editor of the publications, and curator of the museums during the whole twenty-five years of the society's existence.

There are few, if any, local societies in this country which can show such a good record. The Essex Field Club has earned the gratitude, not only of its own county, but of the world of field naturalists generally for the splendid example which it has set in showing how such organisations can keep alive the spirit of scientific research in the rural districts. In congratulating the club on its past achievements, we feel sure that the wish that its future work may be carried on with equal success will be cordially endorsed by all readers of NATURE.

#### THE MOSQUITOES OF PARÁ.<sup>1</sup>

IN 1859, when H. W. Bates returned from Pará, the town, though rapidly improving even then, was still a little-known Brazilian port, and Bates embarked on a North American trading vessel, "the United States route being the quickest as well as the pleasantest way of reaching England." At present, however, Pará is a very important place, and well up to date in scientific matters—if we may judge by the handsome publication before us, on one of the more recent branches of scientific inquiry—the transmission of yellow fever and other diseases by means of mosquitoes.

Four essays are included in the present volume, the first dealing with the mosquitoes of Pará regarded as a public calamity. This section is devoted to an historical sketch of the subject, the biology of mosquitoes, the views of various writers on the sanitary importance of the subject, and on the urgent need of practical efforts to abate the evil.

<sup>1</sup> "Memorias do Museu Goeldi (Museu Paraense) de Historia Natural e Ethnographia." IV. Os Mosquitos no Pará. Reunião de quatro trabalhos sobre os Mosquitos indigenas, principalmente as especies que molesta o homem. By Prof. Dr. Emilio Augusto Goeldi. With 100 figures in text and 5 chromo-lithographic plates. Pp. 154. (Pará, Brazil: C. Wiegandt, 1905)

The second essay contains an abstract of the results of experiments undertaken in 1903, with special reference to *Stegomyia fasciata* and *Culex fatigans*, regarded from a sanitary point of view.

The third essay is devoted to biological details chiefly relating to the development of the principal indigenous species.

The fourth essay consists of a report on *Stegomyia*

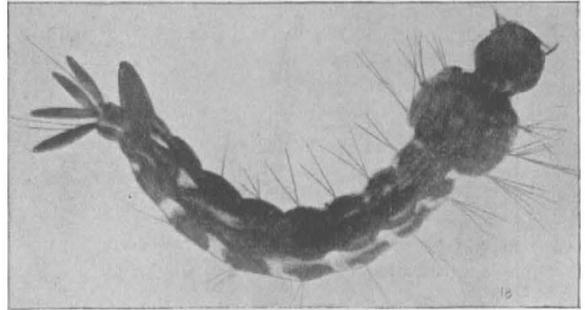


FIG. 1.—Larva of *Stegomyia fasciata*.

*fasciata* and its connection with the transmission of yellow fever. This was presented to the International Zoological Congress at Berne in August, 1904.

The book appears to be an extremely careful and valuable piece of work, and the paper, printing, and illustrations leave little or nothing to be desired. It must not be overlooked by any worker who is interested in mosquitoes either from a scientific or



FIG. 2.—*Stegomyia fasciata* ♀ at rest.

from a medical point of view. Several new forms are described; and on p. 73 even the musical note of *Stegomyia fasciata* is discussed—a slight but significant illustration of the intimate connection and interdependence of all branches of human knowledge.

The figures which we have selected for reproduction represent the larva and imago of *Stegomyia fasciata*.  
W. F. K.

#### NOTES.

IN connection with the Conservatoire des Arts et Métiers, a museum of industrial hygiene will be opened this month at Paris by the President of the Republic.

PRINCE SERGE TROUBETZKOI, Rector of the University of Moscow, and professor of philosophy in that university, died at St. Petersburg on October 12.

THE death is announced of Mr. A. C. Pass, one of the early and most enthusiastic members of the Bristol Naturalists' Society, and for many years president of the geological section of the society.