He further gives the averages for 47 years, to which I have added those for Greenwich for 49 years.

	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.	
C. (47 y.)	33	63	29	27	28	91	59	35	—	days.
G. (49 y.)	40	45	27	22	35	106	46	22	22	days.

The Greenwich values are determined from numbers derived from the records of the self-registering Osler anemometer of the Royal Observatory as given in the annual Greenwich volumes. The preponderance of south-west wind over north-east seems to have been, throughout, less at Crowborough than at Greenwich. But it is only in recent years that the difference has become so pronounced, the Crowborough numbers for each year 1885 to 1889 being largely in excess for north-east wind, whilst the Greenwich numbers are greatly in excess for south-west, as in former years. At Greenwich during the first 24 years of the 49 years series, the average number of days of north-east wind was 46, of south-west wind 107; during the last 25 years, of north-east wind 44, of south-west wind 106.

It would be very interesting if a similar comparison could be made with some other station in the south of England.

Greenwich, April 16.

WILLIAM ELLIS.

Science at Eton.

IN the *Illustrated London News* for March 29 I find an account (with illustration) of an astronomical lecture at Eton. It appears that the scholars "were allowed" to listen the other day, in the new lecture-room, to a lecture by Major-General A. W. Drayson, R.A., on the second rotation of the earth and its effects.

General Drayson has written some books on this subject which possibly no one has answered, for the simple reason that they answer themselves; but it seems now, that he is permitted, under the auspices of their teachers, to urge his paradoxes on the students of our largest public school.

Is Eton without any science teacher? or is the so-called teacher incapable of preventing absurdities being put forward with authority? Are the lecture-rooms of Eton College open to "Parallax" and the circle-squarers?

J. F. TENNANT.

MODIGLIANI'S EXPLORATION OF NIAS ISLAND.

ABOUT two years ago, on his return to Florence, I gave a brief account of Dr. Elio Modigliani's very successful and interesting exploration of Pulo Nias (*NATURE*, vol. xxxv. p. 342). We have now before us the general results of that exploration, embodied in a portly volume most elegantly got up, rich in maps and illustrations, and, what is better, full of interesting facts, carefully collated notices, and well pondered and carefully drawn deductions; in short, one of the best books of its kind.¹

Judging from what he has done, Dr. Modigliani is evidently made of the stuff which produces the best explorers. Resolute and persevering, moved by what we in Italy call *il fuoco sacro*, ever ready to put up with privations of all kinds, although accustomed to a very different sort of life, a quick and keen observer, he has indeed done wonders; and considering that he has not had the advantage of any special training in natural science, he has shown himself to be a good geographer and ethnologist, and a clever naturalist.

Dr. Modigliani's choice of the island of Nias as the field of his explorations was a singularly happy one, in which he was guided by no less a man than Odoardo Beccari. Few indeed of the hundreds of islands of that wonderland, the Malayan Archipelago, present such an accumulation of interesting problems as Nias. Lying off the ocean seaboard of Sumatra, and partaking naturally of the characteristic features of its big neighbour, it has a flora and fauna with a remarkable number of special

characteristics, whilst its human inhabitants show strange affinities with people of other races and of distant lands.

I shall now endeavour to give a concise account of Dr. Modigliani's exploration of Nias, and of the results he obtained, as given in his book. Dr. Modigliani left Italy at the end of 1885; he paid a rapid visit to India, crossing overland from Bombay to Calcutta, *via* Delhi and Agra, and visiting Darjiling; he touched at Rangoon, and after a short stay at Singapore and a lengthened one in Java, where at Batavia and Buitenzorg he prepared his local equipment, and engaged Javanese hunters and collectors, he reached Siboga, Sumatra, early in spring, 1886. Thence he started for Gunong Sitoli, the only civilized port of Nias, on one of the Dutch Government *Kruis* boats on April 14. Dr. Modigliani spent five months on the island, which he left in the middle of September. On his way back to Italy he completed the tour of Sumatra, touching at Kota Rajah and Olelek (Acheen), visited Singapore again, touched at Colombo, and crossed India a second time from Madras to Calicut, visiting the Todas and some of the hill tribes of Southern India, which had a special interest for him in his researches on the origin and affinities of the people of Nias. Dr. Modigliani brought back with him from Nias extensive and important collections—ethnological, zoological, and botanical—and whilst these were being studied by specialists, he actively set to work arranging and sorting his notes and the material for his book. Undertaking to deal with all the ethnological part himself, he visited the more important ethnographical museums of Europe, and even the minor ones where he knew that specimens from Nias were to be seen. To complete his historical and geographical researches regarding Nias, Dr. Modigliani paid a lengthy visit to Holland, working in the Libraries and Government Archives at the Hague and Leyden. I, who have had many opportunities of observing and admiring his untiring energy and activity, could hardly feel surprised, on reading his book, to find it so full of information and so excellently well done.

Dr. Modigliani has divided his work on Nias into two parts. The first contains three chapters, and is entirely introductory and historical; the second, in twenty-three chapters, with appendices and bibliography, contains the narrative of his sojourn in Nias, and his own personal observations and studies on men and things in that island. I have little to say on the first part of Dr. Modigliani's book except that it embodies the results of much erudition and careful and patient collation. From the earliest semi-fabulous notices of Al-Neyan, El-binan, Neya, Niha, Nia, in ancient Arabic and Persian manuscripts, we are brought to European intercourse with Tano Niha, as the natives call their island, and thence on through the modern vicissitudes of Dutch domination, which to this day is little more than nominal, except at Gunong Sitoli and in the northern portion of the island, where, however, German missionaries appear to have done more to spread the influence of civilization than the colonial authorities.

Part II. occupies by far the greater portion of Modigliani's bulky volume. After telling us how he travelled to Nias from Siboga—an adventurous crossing with a Malayan crew, a bad boat, and dirty weather—Dr. Modigliani devotes a chapter to the geography, meteorology, and geology of Nias. The island is hilly, but can hardly be called mountainous. A notable feature is the frequency of earthquakes, easily explained by the proximity of the volcanic chain of Sumatra. Rivers and watercourses are numerous, but few are of notable size. Geologically, Nias is evidently of recent formation; a collection of rock samples brought together by Dr. Modigliani might have shed much light on this interesting subject, but it was unfortunately lost. Madreporic limestone and clams (*Tridacna*) were noted on the hill-tops; true lignite has, however, been found in various parts. The Dutch colonial authorities deserve much praise for their

¹ Elio Modigliani, "Un Viaggio a Nias." Illustrato da 195 incisioni, 26 tavole tirate a parte e 4 carte geografiche. Pp. xv.-726. (Milano: Fratelli Treves, 1890.)