SEPTEMBER 7, 1911]

Rudolf—though it has so many affinities with the Sūk in regard to head-dress, costume, and customs, is far more nearly related to the Masai-Bari group in language. In fact, this book supplies a good deal of evidence which would show that Nandi and Sūk and the allied languages, though they must be classed in the same group with the Nilotic and Masai tongues, nevertheless stand very much apart from their congeners, and no doubt include a considerable element of pre-existing tongues quite unrelated to those sexdenoting languages which sprang into existence in the Nile Valley, influenced, it may be, in a slight degree by the Hamitic tongues of invading White men.

In a general way it may be said that the Masai-Bari-Turkana section of these Nilotic tongues is sexdenoting, and that the other groups (Shiluk-Dinka-Jaluo and Nandi-Sūk) are not; or, at least, that the principle of indicating the female sex in pronouns and prefixes has very much weakened. In reference to this argument may be mentioned the tendency on the part of certain German and English writers on African languages in recent times to persist in classing the Nilotic languages or members of the Nilotic family as "Hamitic," because they, like the totally unrelated Bongo language group of the western Egyptian Sudan, are sex-denoting. This idea in the syntax may have been inspired originally by invading Caucasians of Hamitic speech, but the result is attained, not-as in the case of Hausa and Musga-by the deliberate adoption of Hamitic feminine particles, but by the use of Negro vocables common also to the Bantu languages to indicate sex, such as ol or lu for the masculine (Bantu, lume), and na or nya (a word originally meaning "mother ") for the feminine.

A great many interesting points in connection with African philology are indicated or are explained in this valuable little book, which may be finally commended for its lightness in the hand and for the mass of first-rate information which is packed into a small compass.

H. H. JOHNSTON.

WESTLAND—A NEW ZEALAND PROVINCE.¹

WESTLAND is the province on the western coast of the South Island of New Zealand. Its name brings back a vision of a land

covered by forests of tropical luxuriance, rising from a blue sea fringed by a white line of surf to blue mountains capped with fields of snow, of clean glaciers flowing steeply down into glades of tree ferns, and of a succession of pictures so varied and all so perfect in composition that we regard Westland as the most beautiful country it has been our privilege to see.

Miss M. Moreland tells in this volume the story of a ride through this district; and though she gives singularly little information, her book conveys a pleasing

¹ "Through South Westland : a Journey to the Haast and Mount Aspiring, New Zealand." By A. Maud Moreland. Pp. xviii+221. (London: Witherby and Co., 1911.) Price 78. 6d. net. impression of her keen enjoyment of the scenery, and her enthusiastic admiration of the people. She dedicates her book to the New Zealanders who taught her to love their land. She rode from the Canterbury Plains across the Southern Alps to the western coast, and then down Westland, and back by the southern road to the eastern side of the New Zealand Alps. The book is illustrated by forty-eight excellent photographs and two maps. The author is not a geographer, and it was apparently only the special charm of the New Zealand flora that has roused her interest in botany; she was startled to find that the New Zealand lily is a tree, the Cordvline, that the pines equally exceed the



The Minarets : from the Tasman Glacier. From "Through South Westland."

stunted pines of Scotland, and that the flax, the name of which she always spells Formium, has a much longer and stronger fibre than the European flax. She expresses her great indebtedness for her knowledge of the plants to the work of Laing and Blackwell.

the plants to the work of Laing and Blackwell. While in Westland she visited a survey camp, and one of its members talked to her so enthusiastically about the silver cone of "Mount Aspiring" that she resolved to visit it, and after sundry misadventures reached the valley at its foot. She did not climb it. The first ascent was reserved for Captain Head. "For us," she says, "it is enough to have seen the great Silver Cone against the blue; we come no more." This

©1911 Nature Publishing Group

remark expresses the nature of the book. The author is satisfied with seeing; she has made no new routes and collected no new information, and some of her statements, such as that the egg of the Kiwi is as large as the adult bird, are untrustworthy; but she will doubtless feel repaid if her book leads others to visit Westland, and share her keen enjoyment of that beautiful land.

THE REV. F. J. JERVIS-SMITH, F.R.S.

BY the death of the Rev. Frederick Jervis-Smith on August 23, at sixty-three years of age, the world of science has lost an original and acute thinker and a man who had a genius for designing and constructing instruments of delicacy and precision. Trained as a mechanical engineer, he gave up the calling of his choice, went to Oxford and entered the Church for family reasons. The only son of the Rev. Prebendary Frederick Smith, of Taunton, he became the patron of the living of St. John's, Taunton, and was vicar for a few years. But he recognised that his real gifts were for science, and he took his workshop to Oxford, where he became Millard lecturer in experimental mechanics at Trinity College.

The teaching laboratory in Trinity fitted up by Jervis-Smith was worked in connection with the chemical laboratory in Balliol, and afterwards with the laboratory in St. John's, fitted up by Bosanquet, the three laboratories being close together. The passage opened between Trinity and Balliol in 1879 was known as "the scientific frontier."

In the Millard Laboratory Jervis-Smith constructed many of his well-known instruments, among which special mention must be made of his electric chronograph. Instead of the ordinary device of a heavy pendulum or rod falling under the accelerating force of gravity, Jervis-Smith made a carriage to run down rails so inclined that the velocity became constant after a certain travel. This carriage carried a smoked surface on which electromagnetic styli made their trace, as well as a vibrating tuning-fork. This uniformity of movement greatly simplified the conversion of the distance between the marks of the styli into time. The styli and the electromagnets were very small, and the retardation of the release on breaking the circuits was made by an ingenious system of winding the coils, both very small and nearly uniform.

Jervis-Smith had intended to use his chronograph in the investigation of the changes of velocity in the propagation of the flame in the explosion of gases; and, indeed, he made several sets of experiments on the propagation of the explosion of electrolytic gas under pressure in steel pipes, but he returned to the improvement of the instrument. Prof. H. B. Dixon carried out all his later researches on the velocity of the explosion-wave in gases with the help of electromagnetic styli constructed by Jervis-Smith. This chronograph has been largely used for measuring the flight of projectiles. Of his other instruments, the best known are the dynamometer and the integrator, but many of his ideas have been adopted in other measuring and recording instruments.

Jervis-Smith was endeared to his friends by his simple character, his dry humour, and the kindness of his heart. He would put himself to endless trouble to help a friend in any experimental problem, and he always managed to convey the idea that one was doing him a service by asking for his help. His skill and courage in saving life on the river at Oxford were recognised by the award to him of the Royal Humane Society's medal. He married Miss Annie Eyton Taylor, and leaves her and one son to mourn his loss.

NO. 2184, VOL. 87

THE BRITISH ASSOCIATION AT PORTSMOUTH.

THE week's meeting of the British Association at Portsmouth has now drawn to a close, and some general impressions of the gathering may not be out of place. In the first place, the weather conditions in Portsmouth, as in most other parts of the United Kingdom, have been exceptional as regards absence of rain and high thermometric readings. Only on one day has rain fallen during the whole of the week, which, speaking off-hand, has probably been a very rare occurrence even during the eighty odd years of the association's existence.

The attendance has been low, which is to be deplored, as on the whole the standard of the scientific work has been high. The address of the president (reported in full in our last number) was delivered in the Town Hall. The attendance at the sections, which began their work on Thursday morning, was not large, but the presidential addresses were of great interest and value. The largest number of members seems of recent years to be attracted to the sections dealing with the subjects which come into everyday life, and of which the "man in the street" is conscious. Thus in the economic and the education sections the speakers had fair audiences. Agriculture (Sub-section K) also appealed to a good many members.

With the fine weather, naturally the garden-parties were much appreciated, and on Saturday the all-day excursions were practically all up to the limit as regards numbers. One party was conducted over Goodwood House, and entertained at tea by Mr. Hussey Freke, the agent to the Duke of Richmond; another was the guest of the Duke of Norfolk at Arundel Castle. Other excursions were in the Isle of Wight and to the New Forest. It conduced much to the pleasantness of each excursion that certain gentlemen gave their local knowledge and services to act as guides to the several parties.

There were, as usual, two evening lectures—the first, on "The Physiology of Submarine Work," by Dr. Leonard Hill, attracting a fair audience; the second was by Prof. A. C. Seward on "Links with the Past in the Plant World."

During the meeting various lectures of considerable interest were arranged, and it seemed a pity that they were not more widely advertised. Mr. F. Enock lectured on "Fairy-flies," and Dr. Francis Darwin on "The Balance-sheet of a Plant."

There was a great demand for tickets for the naval display on Monday afternoon, which gave the visitors an insight into the mass of detail and training required by naval commanders of the present day. The party was taken on board the battleship *Revenge*, and watched an attack by torpedo-boat destroyers and four or five submarines specially told off for the occasion.

Most sections finished their work on Tuesday, but a few energetic ones had material to keep them going until Wednesday.

The meeting next year is to be held at Dundee, beginning on September 4, and the president will be Prof. E. A. Schäfer, F.R.S. The invitation of the City and University of Birmingham to meet there in 1913 was unanimously accepted at the council meeting on September 1. The council also resolved by a majority to recommend that agriculture be constituted a separate section of the association, and this recommendation has been adopted by the General Committee and the Committee of Recommendations, so that there will be twelve sections in future, agriculture being Section M.