

Messrs. Randall-Maciver and Wilkin think that the burial practice of the Libyans links them to the early European races and to the Amorites of Syria; but it isolates them completely from the inhabitants of Egypt of any period, whether early or late. Moreover, they assert, as the result of their craniological investigations, that connection of culture gives little or no ground for inferring identity of race between the Egyptians and Libyans; and although they admit that the prehistoric Egyptians—by which they mean the Egyptians of the first three dynasties!—were a mixed race, they declare in no uncertain voice that this mixed race as a whole was not Berber. This conclusion is based on the difference between the cephalic index of the Egyptians and that of the Berbers, and is supported by a number of carefully constructed tablets drawn up on a system which we think is new. The supporters of the theory that the Egyptians were of Libyan origin will be somewhat disturbed by such deductions, but the last word on the subject has not yet been spoken, and it must be frankly admitted that such ingenious arguments and speculations as those set forth by such industrious writers as Messrs. Randall-Maciver and Wilkin only serve in the end to show the general reader how very little is really known about such remote times as those to which they relate.

"Libyan Notes" is an interesting book, not so much for the conclusions arrived at by the authors as for the facts and references to the works of older writers, and the plates contained in it. The "notes" are brightly written, and, as we should expect from Oxford men, some attention has been paid to the style of the English used in their composition. Unfortunately, they do not advance our knowledge of the difficult subjects discussed, and it is hard not to feel that the writers have unconsciously tried to make their facts "square" with too many theories about the origins of civilisation in Southern Europe and Northern Africa. A little more attention might have been given with advantage to the Arabic words and names, especially if quantities are marked; spelling like Hâjji (p. 7), Djemâa (pp. 18, 19), Oukil (p. 20), Zaouia (p. 21), &c., disfigure the book.

OLD WEATHER RECORDS.

Meteorologische Beobachtungen vom xiv. bis xvii. Jahrhundert. Mit einer Einleitung. Herausgegeben von Prof. Dr. G. Hellmann. Pp. 127. 4to. (Berlin: A. Asher and Co.)

THIS volume is the thirteenth of the series of reprints of texts and charts concerning meteorology and terrestrial magnetism published in Berlin under the editorship of Dr. Hellmann. The editor's previous achievements in the bibliography of meteorology are so conspicuous that it will not surprise any one to find that he has selected and arranged extracts from the earliest regular meteorological records in such a way as to produce a most interesting volume. His investigations have incidentally led to considerable additions to our store of knowledge of the meteorology of Europe during the centuries referred to, for inquiry among the libraries has proved the existence of a number of useful weather registers in the margins of old calendars. These doubtless owe their origin, as Dr. Hellmann suggests, to the

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curious combination of the dearness of paper and the prevalence of the notion of referring weather changes to astronomical causes not exclusively solar, a notion not even yet quite extinct. The index of meteorological observations in the fifteenth, sixteenth and seventeenth centuries accordingly occupies as much as twenty-six pages and becomes an important work of reference for the study of secular changes of climate.

The selection of extracts is thoroughly cosmopolitan. By the exercise of a little ingenuity Dr. Hellmann manages to include with the extracts from observations made in all parts of Europe, in America and on the seas, some information about the meteorological observations of the Chaldeans lately brought to light by Mr. R. Campbell Thompson's publication of the reports of the magicians and astrologers of Nineveh and Babylon. He has something to say too about Theophrastus' book of the winds, which has been translated by Mr. J. G. Wood, and also about some early rainfall measurements in Palestine on the authority of the Mishnah.

The extracts themselves begin with a weather journal for 1343, written in Latin by William Merle, of Driby (Lincolnshire), preserved in the Bodleian Library, and end with observations made in a voyage to China, A.D. 1700, by Mr. James Cunningham, F.R.S., a ship's log originally printed in the *Philosophical Transactions*. Among the names of other observers are Martin Biem, of Krakau (1502); Aventin, of Munich (1511); Pietramellara, of Bologna (1524); Palomino, of Jodar, Spain (1556); Tycho Brahe (1582); Kepler (1623); Marggraf, Brazil (1640); Campanius, of New Sweden, N. America (1644); the Florentine observers (1655); John Locke, of Oxford (1666); and Robert Plot, of Oxford (1684), who gives the earliest extant diagram of barometric changes. Among the early marine observers are Columbus (1535); John Davis (1506); Francis Drake (1596); Henry Hudson (1608); Abel Janszoon Tasman (1642); Friedrich Martens, an arctic traveller (1671); and Edmund Halley (1699), the first 'modern' writer on the general circulation of the atmosphere, whose observations were made on a special voyage of investigation of the ocean winds in the *Paramour Pink*, a vessel placed at his disposal by King William III.

The book is full of interest not merely historical. In view of the difficulty of consulting the originals for the purposes of inquiry into such questions as the periodicity of weather changes, it seems a pity that the material is not reprinted in full instead of by extract. But such a reprint would form an entirely different kind of book.

The volume, like its predecessors in the same series, is a sort of *édition de luxe*; it is beautifully printed on hand-made paper and the facsimile reproductions are excellent.

OUR BOOK SHELF.

Le Coton. By Prof. H. Lecomte. Pp. viii + 494. (Paris: Carré and Naud, 1900.)

THIS is largely a work of compilation, and not the result of original research or experiment. In the first part, the methods of cotton culture and the chemical composition and physical structure of the fibres are dealt with. Comparisons are also made between the properties of different cottons and the uses and applications of the by-products, such as cotton-seed oil and its manufacture. The extent