with fine sand from the Libyan Desert. Still more dreaded are the miasmatic exhalations caused by the glowing sun playing on stag­nant waters after the floods and giving rise to the “Sennar fever,” which drives the natives themselves from the plains to the southern uplands. The temperature, which rises at times to over 120° Fahr., is also very changeable, often sinking from 100° Fahr. during the day to under 60° Fahr. at night.

The soil, mainly alluvial, is naturally fertile, and wherever water and hands are available yields bounteous crops of maize, pulse, cotton, tobacco, sesame, and especially durra, of which as many as twenty varieties are said to be cultivated. The forest vegetation, mainly confined to the “Isle of Isles” and the southern uplands, includes the *Adansouia* (baobab), which in the Fazogl district attains gigantic proportions, the tamarind, of which bread is made, the deleb palm, several valuable gum trees (whence the term Sennári often applied in Egypt to gum arabic), some dyewoods, ebony, iron- wood, and many varieties of acacia. These forests are haunted by the two-horned rhinoceros, the elephant, lion, panther, numerous apes and antelopes, while the crocodile and hippopotamus frequent all the rivers. The chief domestic animals are the camel, horse, ass, ox, buffalo (used both as a beast of burden and for riding), sheep with a short silky fleece, the goat, cat, dog, and pig, which last here reaches its southernmost limit. The tsetse fly appears to be absent, but is replaced in some districts by a species of wasp, whose sting is said to be fatal to the camel in the rainy season.

The “African Mesopotamia” is occupied by a partly settled partly still nomad population of an extremely mixed character, including representatives of nearly all the chief ethnical divisions of the continent. But the great plain of Sennár is mainly occupied by Hassanieh Arabs in the north, by Abu-Rof (Rufaya) Hamites of Beja stock (Robert Hartmann) in the cast as far as Fazogl, and elsewhere by the Funj (Fung, Fungheh), traditionally from beyond the "White Nile, and affiliated by some to the Kordofán Nubas, by others more probably to the Nilotic Negro Shillúks. These Funj, who have been the dominant race since the 15th century, have become almost everywhere assimilated in speech, religion, and habits to the Arabs. Nevertheless on their sacred Mount Guleh the traveller Pruyssenaere found them still performing pagan rites, while according to Marno the Búrúns, the southernmost branch of the race between the Berta highlanders and the Nilotic Dcnkas, are addicted to cannibalism. The Berta highlanders themselves (Jebalain, as the Arabs collectively call them) are of more or less pure Negro stock and number about 80,000, grouped in several semi-independent principalities. The " no-man’s-land ” stretching north of Dar-Berta and east of the Tumat valley is also occupied by distinct nationalities, such as the Kadalos in the extreme north, the Sienetjos and Gumus in the east, here bordering on the Abys­sinian Agaws, the Jabus and Gánti in the south. Most of these appear to be of Negro or Negroid stock ; but the Sienetjos, said to he a surviving remnant of the primitive population of the whole country, are doubtless akin to the Sienetjos of Damot and Gojam in Abyssinia. They are certainly not blacks, and have a yellow or fair complexion, lighter than that of southern Europeans.

The Sennári people cultivate a few industries, such as cotton­weaving, pottery, gold, silver, and iron work, matting, and leather work (camel saddles, sandals, &c.), noted throughout Sudan. But their chief pursuits are stock-breeding, agriculture, and trade,— exporting to Egypt and Abyssinia gold, hides, durra, sesame, gums, ivory, horses, and slaves. The chief centres of population, all on the Bahr-el-Azrak, are Fazogl (Fazoklo), now replaced by Famaka, at the Tumat confluence ; Roséres, formerly capital of an inde­pendent state ; Sennár, also an old capital, which gives its name to the whole region; Wod-Medineh at the Rahad confluence; and Khartum, just above the junction of the two Niles. A few miles above Khartum are the extensive ruins of Soba, former capital of the Funj empire, which at one time stretched from Wady Haifa to Dar-Berta and from Suakin to beyond Kordofán, but which was overthrown by Ismail Pasha in the year 1822. (A. H. K.)

SÉNANCOUR, Étienne Pivert de (1770-1846), French man-of-letters, was born at Paris in November 1770. His family was noble and not poor, but its fortunes were ruined by the Revolution. Before that event, how­ever, Sénancour had met with mishap. He was a sickly youth and was destined for the church, but ran away from home and established himself in Switzerland. Here he married and spent some years ; his wife died, and he re­turned to Paris about the end of the century. In 1804 he published the singular book entitled *Obermann,* which has continued to be in a fashion popular to the present day, and the next year a treatise *De l' Amour,* which had even more vogue at first, but is now little read. *Obermann,* which is to a great extent inspired by Rousseau, which attracted the admiration of George Sand, and which had

a considerable influence over the last generation in France and England, is a series of letters supposed to be written by a solitary and melancholy person, whose headquarters were in a valley of the Jura, but who writes also from divers other places. The style is meritorious, the descrip­tive power very considerable, the thought sometimes ori­ginal, and the expression of a certain form of the *maladie du siècle* effective and striking. But, viewed from the strictly critical point of view, there is perhaps a certain unreality about the book. Its idiosyncrasy in the large class of Wertherian-Byronic literature has justly enough been said to be that the hero, instead of feeling the vanity of things, recognizes his own inability to be and do what he wishes. Sénancour is tinged to some extent with the older *philosophe* form of freethinking, and expresses less revolt from the 18th century than Chateaubriand. Having no resources but his pen, Sénancour during the half-century which elapsed between his return to France and his death at St Cloud in February 1846 was driven to literary hack work, and even his more independent productions have none of the attraction of *Obermann.* When George Sand and Sainte-Beuve revived interest in this latter, Thiers and Villemain successively obtained for the author from Louis Philippe pensions which enabled him to pass his last days in comfort. He committed the usual mistake of writing late in life a continuation to *Obermann,* entitled *Isabelle* (1833), but it has been wisely forgotten.

SENEBIER, Jean (1742-1809), a Swiss pastor and voluminous writer on vegetable physiology, was born at Geneva on 6th May 1742. He is remembered on account of his contributions to our knowledge of the influence of light on vegetation. Though Malpighi and Hales had shown that a great part of the substance of plants must be obtained from the atmosphere, no progress was made until more than a century later, when Bonnet observed on leaves plunged in aerated water bubbles of gas, which Priestley recognized as oxygen. Ingenhousz proved the contemporaneous disappearance of carbonic acid; but it was Senebier who clearly showed that this activity was confined to the green parts, and to these only in sunlight, and first gave a connected view of the whole process of vegetable nutrition in strictly chemical terms, so prepar­ing the way for the quantitative researches of N. T. de Saussure. Senebier died at Geneva on 22d July 1809.

See Sachs, *Geschichte d. Botanik,* and *Arbeiten,* vol. ii.

SENECA, Lucius Annæus (c. 3 b.c.-65 a.d.), the most brilliant figure of his time, was the second son of the rhe­torician Marcus Annæus Seneca, and, like him, a native of Corduba in Hispania. From his infancy of a delicate con­stitution, he devoted himself with intense ardour to rhetor­ical and philosophical studies and early won a reputation at the bar. Caligula threatened his life, and under Claudius his political career received a sudden check, for the influ­ence of Messalina having effected the ruin of Julia, the youngest daughter of Germanicus, Seneca, who was com­promised by her downfall, was banished to Corsica, 41 a.d. There eight weary years of waiting were relieved by study and authorship, with occasional attempts to procure his return by such gross flattery of Claudius as is found in the work *Ad Polybium de Consolatione* or the panegyric on Messalina which he afterwards suppressed. At length the tide turned ; the next empress, Agrippina, had him recalled, appointed prætor, and entrusted with the education of her son Nero, then (48) eleven years old. Seneca became in fact Agrippina’s confidential adviser; and his pupil’s acces­sion increased his power. He was consul in 57, and during the first bright years of the new reign, the incomparable *quinquennium Neronis,* he shared the actual administration of affairs with the worthy Burrus, the prætorian præfect. The government in the hands of these men of remarkable