## THE BRITISH AFRICAN EXPEDITION.

Major Festing, her Majesty's commissioner to Almami Samodu, on January 18 started from Freetown, Sierra Leone, on the expedition ordered by the imperial government, accompanied by a retinue of about one hundred persons. He would reach Rotombo, on the Sierra Leone River, the same evening, and would continue his journey by water to Port Loko, whence he would begin his long march into the interior, to the Sofa country, a land as yet unknown to the white man. The first important halt would be made at Bumban, distantabout eighty miles from Port Loko, which is forty miles by water from Sierra Leone. Much confidence is felt in the success of this expedition, under so able and experienced an officer.

Almami Sanankoroh, otherwise called Almami Samodu, a powerful native ruler, is the son of Lamfia Ture, and was born in Sanankoroh, the capital of the Koniah district of West Africa, situated in a tract of country lying between latitude 9 degrees and 10 degrees N. and longitude 9 degrees and 10 degrees W. He is a Mandingo, and about forty years of age, and his family is superior to most of the families in his country. He visited Sierra Leone as a trader some years ago. Being of a studious and inquiring nature, takes place in the broad and open waters.

[NATURE.]

Scientific American.

## The Cultivation of Oysters.

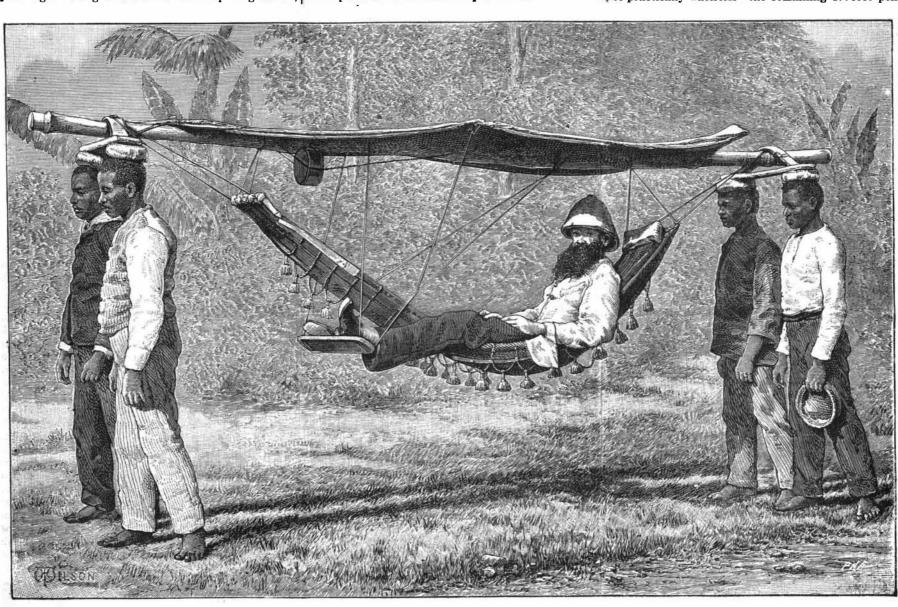
A report from the British consul at Baltimore on the oyster fisheries of Maryland, which has just been laid before Parliament, contains much interesting information respecting the cultivation of oysters. The method of farming most successful in America consists in depositing clean oyster shells upon the bottom, just before the spawning season, to which the young attach themselves, and then placing among the shells a few mature oysters to furnish eggs and young. As soon as the young oysters caught in this manner are large enough to handle, they are distributed over the bottom.

Another system is by artificial propagation, properly so called-that is, by producing the seed oyster itself, or procuring it by methods less simple than the shellsowing process. This method is due to a discovery by Dr. W. K. Brooks that the Ostrea virginiana, or American'ovster, is not, like the Ostrea edulis, or ovster of Northern Europe, hermaphrodite, but is exclusively male or exclusively female. The eggs of the European oyster are fertilized within the valves of the parent, while in the case of the American oyster fertilization

has been invented of tying them with stout wire, which can be done with great rapidity, and now arrangements are being made for dispatching American oysters in their natural condition all over the civilized world.

## An Interesting Artesian Boring.

An artesian tube well, 1,106 feet deep, has recently been completed at Messrs. F. Everitt & Co.'s, near Birmingham, by Messrs. Le Grand & Sutcliff, of London. Hitherto very deep borings in search of water have not always resulted in attaining the end in view; but in the present instance, complete success has rewarded the enterprise and perseverance of Messrs. Everitt in prosecuting the costly work in the face of many adverse opinions as to the hopeless prospect of finding water, previous attempts to penetrate through the keuper marl formation in this district having failed. The depth of the keuper series had been variously estimated at from 400 to 500 feet thick; but according to Professor Lapworth, who has reported on this boring, after passing through 56 feet of drift, the marl and gypsum beds proved to be no less than 547 feet thick. The next 326 feet passed through the water stones or keuper sandstone series, which were found to be practically waterless—the remaining 177 feet pene-



MODE OF TRAVELING IN SIERRA LEONE.

he became a pupil of some of the learned priests of the Mohammedan religion in his native place, and fertilization could be procured, and the next great afterward in Kankan, in the Bate district. Acquiring some knowledge of Arabic and of the Koran, he gathered around him many followers, and called on the pagans in his own country, and among the surrounding tribes, to renounce their ways and adopt his religion. He grew too powerful for the king, Almami Ibrahima Sisi, whom he defeated and took pris deposed him, 1878, King Samodu has made extensive conquests, and has enlarged his dominions on all sides, annexing the territories of Trong, to the west, Kolonkala or Kolakonta. to the north, Bate, Sankaran, Baleya, Madina, Bambara, Wassulu, Sulimah, and the remaining parts of Mandingoland, including Boure, a small province to the east, which is rich in gold. He has repeatedly been invited to lend his aid to one or another party in the civil wars of those provinces, which have usually ended in establishing his own sovereignty over them. Hislatest exploit, in 1885, was to march on Samayah, the capital of Tambaka, and to chastise the marauders who were frequently attacking and plundering traders on their way to the sea coast. It is evident that Sa modu is apparenly a man of no common ability. Toward the colony of Sierra Leone he entertains peaceful intentions, for he is desirous of cementing his friendship with the English, and of opening up trade thus keep in good condition for a considerable time. with his country.—Illustrated London News.

By experiment Dr. Brooks discovered how artificial step of finding a simple and practical method of rearing the young oysters which have been hatched artificially was the work of M. Bouchon Brandsle, the French naturalist, who experimented with Portuguese oysters, which, like the American variety, are of distinct sexes. He succeeded in rearing many seed oysters fit for planting.

ing up in the United States, and which also owes its existence to a careful study of the habits of the bivalve, is that of "muzzling" oysters, by which they can be sent long distances in their shells with perfect safety. Until recently, the general practice was to pack the raw oysters in ice, but a sudden rise of temperature is liable to render a whole week's supply useless. Oysters feed twice a day, and always at the still moment preceding the turn of the tide, and at no other time, except when feeding, do they open their shells. When taken out of their natural element, they attempt to feed at regular intervals, and so soon as the shells open, the liquor they contain is all lost, the air takes its place, and the oyster is covered with a thick coating of slime, which is the first stage of decomposition. As long as the shells are closed, the oyster is fit to eat; it feeds on the liquor in the shell, and will

trating into the upper variegated sandstone; and it is from the last 100 feet of these beds that an excellent supply of water of unusual purity has been obtained. An interesting operation, upon the completion of the boring, consisted of cutting off the innermost lining tube, 4 inches in diameter, at a depth of 427 feet below the surface. So effective was the appliance devised for this purpose, that the cutting tool was fixed, the pipe cut, and the tool taken out in the short space of two hours; and the end of the pipe, when withdraw presented a perfectly even appearance, as though it had been cut off in the lathe.

## Therapeutical Value of the Passion Flower.

According to Dr. G. W. Winterburn, in American Homeopath, great virtues are attributed to this flower. He says the therapeutic uses of the white passion flower resemble the bromides on one hand and gelsemium on the other. It is one of our best hypnotics, producing a quiet, pleasant sleep-altogether different from the comatose stupor of morphia—from which the patient may be aroused at any moment. It may be given in doses of two or three drops of the tincture or low dilution. Even in the worst form of sleeplessness, that associated with suicidal mania, this drug will produce quiet sleep, from which the patient awakes with clear mind and rational thoughts. In its control of convulsions passiflora closely resembles gelsemium. It will be To secure the keeping of the shells closed, a method found of service in opisthotonos, trismus, and tetanus