

happening to unite within 100 yards or so, of the beach of Lake Erie. The western one is small, shallow, and marshy towards its mouth; but the eastern or main one, which is peculiarly calculated to form a commodious harbour, capable of containing 100 vessels, consists of a fine clear channel, from twelve to sixteen feet deep, and about twenty rods wide, extending full half a mile inland, besides being skirted to the eastward by a marshy bay of less depth, about 100 yards wide, the mass of vegetation on the surface of which being known to rise and fall with the level of the water in the creek, might easily be broken up, and floated down into the lake, and thereby add much to the capacity of the harbour. The land on the east side of this bay is low; but that on the west side of the east creek forming the point between the two branches, and also the right bank of the west branch is high and commanding, and well suited for a village site, being from twelve to sixteen feet above the water level, with steep banks on both sides, and covered with stately hard-wood forest. The soil also is good, being a light colored sandy loam, resting upon yellow clay; and there is no indication of rocks or stones in the neighbourhood. The Talbot road crosses both creeks about one mile and a half inland, where the banks of the east branch are about thirty yards apart, and ten feet deep, with a stream in the middle about thirty feet wide, and two deep. As already observed, from the point of land at the confluence of the two creeks to the beach of the lake is about 100 yards, and the mouth is sometimes obstructed by a dry sand-bank or bar, formed by the wash of the surf; as was the case when visited by my informants in the month of May, at which time it was about three feet above the level of the lake, and about thirty yards across. The lake off the creek deepens rapidly, there being sixteen feet about fifty yards from the shore; but there is a small shoal about 100 yards further out. Beyond that, however, there is uninterrupted deep water, from three fathoms upwards."

As a striking instance of the facility with which a channel may be cut through the sand bank at the mouth of the creek, it may be mentioned that on the occasion alluded to by my two friends happening to stop there in the evening with a loaded boat, they amused themselves with scooping out with their hands a very small channel, so as to allow the water to flow off towards the lake; and that in the morning they were not a little astonished to find an opening through which they were not only able to take their boat, but of such breadth and depth as to have admitted a schooner of considerable burthen.

To be continued.

very little above the level of the lake—that vessels, after effecting an entrance are, in a gale, liable to drag their anchors and run aground on the mud. It will, therefore, perhaps, not be wondered, that after an expenditure of from £25,000 to £30,000 of the public money in the attempt to convert the Rondeau into a safe harbour, and laying out the town of Shrewsbury on its north side as a port of entry, it was judged expedient to abandon the undertaking, and transfer the unfinished works to a private Company, by whom they have been allowed to go to decay, while so unproductive have the harbour dues and customs proved that they have seldom defrayed the expense of collection. Add to which, by late accounts, (1853), the location of the town has proved nearly a failure; the light-house at the point not having then been lighted for a year, several vessels had been stranded outside the harbour. Should, however, the plank-road between Chatham and Shrewsbury be completed, and a line of steamers be established between the Rondeau and Cleveland, there may yet be great changes, as though the neighbouring marshes are very extensive, their immediate connection with the lake produces a constant flux and reflux in their waters, which in a great degree counteracts any miasmatic influence.

Remarks on the Flavouring of Confectionery.

In the last number of the *Journal*, in a paper on Food and its Adulterations, abridged from the *London Quarterly*, reference was made to the use of certain substances now extensively employed in giving peculiar flavours to various kinds of confectionery, and thus successfully imitating those of different fruits. The author, in endeavouring to excite a prejudice against their use, says:—"All these delicate essences are made from a preparation of æther and rancid cheese and butter."

The fact is certainly true, but it may be doubted whether it is a fair line of argument to attempt to create disgust against any particular substance by referring to the sources from which it is obtained. The various chemical processes and operations to which the original matters are subjected, should be described at the same time, and it would then appear that the result is of a perfectly pure character, and bears not the faintest resemblance to the sources from which it has been obtained.

No one objects to eat vegetables, or fine hot-house grapes, although common manure is not an enticing article, and grape growers much delight in dead horses for their vine borders.

But a much more forcible argument against the validity of this objection is to be found in the fact, that one of the most curious discoveries of modern chemistry is the existence in plants, flowers and fruits, of certain flavouring principles which on examination are found to be of precisely the same nature as the substances artificially prepared for the above mentioned purpose. Several cases of this kind have been discovered, of which we need only mention a few:—the sweet scent of the Winter Green is owing to the presence of Salicylate of Methyle, a compound possessing all the characters of an æther. The flavour of the Quince is owing to Pelargonate of Æthyle, another perfect æther, which, like the former, can be readily prepared in the laboratory. I am not aware that the essence of the pine-apple has been separated in a pure state, but there can be but little doubt that it is Butyric Æther, or at any rate an æther of one of the analogous volatile fatty acids. Butyric acid itself (derived from "rancid butter") is found in the "St. John's bread," (the fruit of *Ceratonia Siliqua*), so that Dame Nature seems as liable to the same objection as the confectioners.

Several other instances might be adduced, but the above will suffice to show the probability of our artificial flavourings being in many cases absolutely the same as those existing in the natural products. This certainly does not hold good with all, the artificial essence of Ratafia (Nitrobenzide) is purely a product of manufacture and only resembles the oil of bitter almonds in its smell, it remains to be proved, however, that it is injurious in its effects, a priori one would judge it to be less hurtful than the crude oil or its preparations.

H. C.

New Expedition into Central Africa.*

The limits of the great unexplored region of Africa may be roughly indicated by the parallels of 10° north and south from the equator, and extending from Adamaus in the west to the Somanli country in the east. This extensive region is just touched by the routes of South-African explorers, Livingston and Lacerda,—and by the Abyssinian travellers, by Barth, Overweg, Vogel, and the Chadda Expedition in the north. The greatest inroad into this unknown region has been made by travelling up the Bahr el Abaid, or White River, on which and along which there has been a continuous tide of explorers since 1835, when the Egyptian Government despatched an Expedition up

* Athenæum.