horizontal course towards the poles. A vertical ascending current of air is not regarded as wind, because there is no horizontal motion attending it, and the zone of ascending columns is consequently dreaded by the sailors as the region of calms. Occasionally the calm is interrupted by thunder-storms, due to the watery vapor which the ascending currents carry up with them. This, by its condensation in the upper atmosphere, forms clouds from which thunder-storms break out, liberating heat, which gives a new impulse to the ascending currents.

The warm, moist air rising from the region of calms, and taking its course toward the poles, does not remain in the upper air. Even before it leaves the tropic regions it divides, giving off a vertical descending current, which reaching the lower cool currents, is borne back to the torrid zone again. The regions through which it passes are again characterized by calms and storms. The main current, after having given off this descending current, continues its course towards the pole, approaching the surface of the earth nearer and nearer, until it reaches it in the temperate zone. Thus arises a double circulation, the lesser caused by that portion of the ascending current which descends near the edge of the tropics, and flows back to the equator; the greater caused by the main volume, which, descending gradually in higher regions, and becoming cooled, flows back over the surface towards the equator and is known, within the tropics, as trade winds. This double circulation would occur uniformly in all meridians, if the earth stood still, but as a consequence of the earth's motion, every current of air on the surface is appreciably deflected from its original course. As the earth revolves on its axis, from west to east, in twenty-four hours, every part of its surface, with its atmosphere, describes a circle greatest at the equator and lessening towards the poles. While a point on the equator is traveling 463 m. from west to east, a point under 45° lat. traverses only 326 m., and under 60° lat. only 231 m. Every place takes its own atmosphere along with it. If, then, a volume of equatorial air traveling at a speed of 463 m. an hour were suddenly transferred to the latitude of 45°, where the air has a speed of only 326 m., it would generate a gale rushing from west to east at a speed equal to the difference, *i. e.*, 137 m. an hour. While a volume of air transplanted from 45° lat. to the equator, would create a terriffic hurricane from the east.

Happily such sudden transfers with their violent consequences do not actually occur. Nevertheless the aerial currents on their way from the equator to the poles and back again, are subject to the influence of the earth's revolutions, only gradually, and for that reason with less violent results. The equatorial current apart from its drift from south to north, is also subject to motion from west to east, imparted to it by the speed of the earth's revolution at its birthplace on the equator; and traversing regions in which the speed from west to east is steadily diminishing, it is deflected from its course of south to north, in an easterly direction, until the original south wind becomes a sou'wester. On the same principle the Polar or return current on its way to the tropics, entering regions in which the rate of revolution is increasingly higher, gets left behind at every stage, until the original north wind becomes nor'easter in the tropics. The trade wind in the Northern Hemisphere has consequently one invariable direction, entering the tropics as a nor'easter. No wonder, then, that Columbus's sailors, who knew nothing of the trade winds, argued from the prevalence of the nor'easter on their outward course, that they would never be able to return to Spain. The upper or counter trade winds, subject to the same law, pursue an opposite course, at a height far above that of the highest mountain; the dust from volcanoes is, nevertheless, sometimes projected into and borne along by them.—*The Literary Digest.*

ANTHOPHAGY.

A writer in *La Nature*, quoting from Ovid,

"Qui amat flores reputatur
Amare puellas,"

says that it is well to-day to modify this aphorism and to say: "Those who love flowers are friends of good living." It appears, in fact, that in France as well as in England a true crusade is going on at present for the introduction of a certain number of flowers into our regular list of foods.

It was some London botanists who conceived this eccentric idea of rendering us *anthophagists*, a word which may be translated "eaters of flowers."

If the learned Englishmen succeed in their enterprise, we shall very soon see the edible flowers of the phog (*Caligonum polygonoides*), of the mahwah (*Bassia latifolia*), of the *Dillenia pentagnia*, etc., appear upon our tables and triumphantly take their place alongside of the violets, jasmins, and rose petals that we have long been receiving from Italy in the form of preserves.

In fact, in spite of our English neighbours, who would like for once to obtain the reputation of being initiators, flowers have been daily eaten by everybody for a long time.

Anthophagy is assuredly one of the commonest of practices; but ordinarily we are anthophagists without knowing it. The experimental proof of this assertion is soon and easily found. Thus, for example, when we eat the artichoke with pepper-sauce, we are eating the immature flower heads of the plant, and when we partake of a common cauliflower with butter-sauce we are eating flowers.

The cabbages, like the artichoke, are plants of many possibilities.

See, in fact, what we owe to the *Brassica oleracea* alone—the common cabbage—which the housewife daily puts into the soup pot.

In a wild state, the *Brassica oleracea* is a rare plant, at least in France, where it is scarcely ever met with except in the inaccessible parts of the chalky shores of Cape Gris-Nez. In order to develop at its ease, it requires sea air, saline spray, and phosphate of lime. But when man comes to take it under his protection, then, according to the mode of culture applied to it, it furnishes the common cabbage, the turnip cabbage, the cauliflower, Brussels sprouts, etc., according as the leaves, root, or flowers of the plant have been more especially developed. This latter is especially the case of the cauliflower and Brussels sprouts. The cauliflower, in fact, is nothing but the plant's inflorescence which has not reached its complete development, while Brussels sprouts are buds that have not reached perfect maturity. To add again to the list of Brassicas, there is the brocoli, a maritime and wild (or nearly so) variety of the *Brassica oleracea*, and the inflorescence of which, less tufted than that of the common cauliflower, is likewise edible and just as delicate.

In Holland, as well as in Brittany, the brocoli is cultivated upon a large scale in the *polders* (as the large pasturages on alluvial soil that has been reclaimed from the sea are called in the Netherlands), and, in order to secure for it an existence approaching as nearly as possible its normal conditions of growth, the peasants furnish it with a manure that is both mineral and organic; that is, the star-fishes that they gather by the cartload upon the beaches. Let us add, further, that