

The root is aerial, like that of the arum, but the pungency disappears in drying. Linnæus says the Laplanders use it for bread.

- 13th. *Anemone Nemorosa*.....Wood Anemone.  
 14th. *Ranunculus* of different }  
       species. } Crowfoot, Buttercups.

These well-known plants are amongst the earliest flowers of Spring, and are too common in all our meadows, pastures and woods, to require a particular description.

They are all more or less acrimonious, but like the arum and the calla, this property is lost by drying.\*

- 15th. *Sanguinaria Canadensis*....Blood Root.  
 Class Polyandria.....Order Monogynia.

This is one of our earliest spring flowers. The flower and leaf proceed from the end of a horizontal, fleshy, abrupt root, fed by numerous radicles.

Externally, the colour of the root is a brownish red; internally, it is pale, and when divided, emits a bright orange-coloured juice from numerous points of its surface.

The bud or hibernaculum, which terminates the root, is composed of successive scales or sheaths, the last of which acquires a considerable size as the plant springs up.

By dissecting this hibernaculum in the summer or autumn we may discover the embryo leaf and flower of the succeeding spring, with a common magnifier, and even the stamens may be counted.

The leaves are heart-shaped, with large roundish lobes, separated by obtuse sinuses. The flower consists of eight white spreading, and concave petals.

The root is violently emetic.

- 16th. *Phytolacca Decandria*.....Poke.  
 Class X.....Order X.

This is a common plant found on the road sides, and flowering in July and August. The flowers are succeeded by long clusters of dark purple berries, almost black, with which the Indians stain their basket work, and hair for embroidery.

The root is violently emetic.

(To be continued.)

\* The greater part of the plants of this order are objects of interest with gardeners, containing, as it does, many of the most elegant or showy of the tribes of hardy plants. It is here that the graceful Clematis, the lowly Anemone, the glittering Ranunculus, and the gaudy Paeony are found, differing indeed, in external appearance, but combined by all the essential characters of the fructification. It is remarkable, however, that the acrid and venomous properties of these plants are nearly as powerful as their beauty is great. They are all caustic, and in many of them the deleterious principle is in most dangerous abundance.

Mons. DeCandolle remarks that its nature is extremely singular; it is so volatile that, in most cases, simple drying in the air, or infusion in water is sufficient to destroy it; it is neither acrid nor alkaline, but its activity is increased by acids, honey, sugar, wine or alcohol; and, it is in reality, destructible by water. The Crowfoots of our pastures, and the Anemone Trilobata and Trifurcata of South America, are well known poisons of cattle. Blistering plasters are made in Iceland of the leaves of the *Ranunculus Acris*.

The Helleborus, famous in classical history for its drastic powers, and the Nigella, celebrated in ancient housewifery for its aromatic seeds, which were used for pepper before that article was discovered, are both comprehended in the Ranunculaceæ.

The range of this order, in a geographical point of view, is very extensive. A very great number has been discovered in Europe; but they are so abundant in all parts of the world, that an order can scarcely be found more universally and equally dispersed.

### On Accidental Discoveries.

Read at the Annual Conversazione of the Canadian Institute, April, 2, 1852, by HENRY SCADDING, D.D., CANTAB., First Classical Master of Upper Canada College.

I shall ask you to transport yourselves in imagination, for a few moments, to the sea side. The brilliant blue of the heavens—the stillness, and rather inconvenient glare of light on the surface of the water, may tell you that it is the Mediterranean. The arid aspect of the precipitous shore, with the dark palm-trees that stand out distinctly here and there along the strand, indicate that it is the Syrian coast. Yonder bold promontory on the right is the famous Cape Carmel. The spacious bay which you gaze into is the Bay of Acre. The river which you see entering between the ridge of low rocks and the beach of white sand on the left, is the Belus. To that beach of white sand let me direct your attention. A group of sea-faring men are there rising from their mid-day repast; their vessel—a small trading craft—has been run in close to the shore; their meal and siesta over, they are gathering up their rude culinary utensils, and are about to resume their voyage. The fire upon the beach has smouldered away; the pale ashes have become of the same temperature as the surrounding sand.

But while the party are busy in re-embarking, one—he is possibly the commander of the vessel—observes something in those ashes. Something that glistens strikes his eye; he touches it with his knife; he lifts it out from among the mingled ashes and sand, a bright, irregularly-shaped mass. Something has been fused in that fire; whilst fluid it has “run,” as we say, in several directions; where, in one place, it has met with the rock underneath, it has spread out in small sheets, which are, to some extent, transparent.

Now, it will be necessary to explain. Yonder vessel bears in its hold, among other merchandise, some tons of rough nitre—a substance produced naturally in the neighbourhood of the Dead Sea. It was used possibly of old, as now, in the preservation of fish and meats. The sailors, on landing, having failed to find near at hand stones adapted for the purpose, took some lumps of this portion of their cargo to rest their camp-kettle upon. The fire has acted on those lumps, as also on the silicious sand on which they are placed; fusion and amalgamation of the two substances have ensued; the hard transparent material, noticed by the commander of the vessel, is the result. The captain, during the remainder of the voyage, is more silent than usual; he is ruminating on what he has observed—“If this nitre and this sand, thus subjected to fire, will produce this hard, transparent substance once, they will do so again; if this substance spread itself out so readily upon the flat rock, becoming solid and continuing transparent, it will spread more conveniently, and be rendered more transparent by means of surfaces which I can prepare for its reception—nay, will it not assume any form of which I may be able to construct the mould?”

You will perceive that it is glass that has been discovered—a substance that contributes so much to the comfort and gratification of man—a substance that excludes from his house the inclemencies of the atmosphere, and yet admits freely the sun's rays; that adorns his hospitable board with a variety of vessels of brilliant hue and graceful shape—that permits him to refresh his eyes in winter with the green leaves and blooms of summer—that helps to repair his vision when defective, and to add incredible powers to it when at its best—a substance that, elaborated into massive plates, lends lustre along the street to his multifarious handywork; and, on occasion, forms walls of what, prior to experience, would be deemed of fabulous extent, to shelter in vast store-houses the gathered masterpieces of his skill.

The narrative just given may or may not be authentic. Pliny