
CHAP. IV.

SUCCI SPISSATA, VULGO EXTRACTA.—INSPISSATED JUICES,
COMMONLY NAMED EXTRACTS.

THE juice expressed from succulent vegetables, frequently holds dissolved, or diffused through it, the principles in which the medicinal powers of the plant reside. But containing a large proportion of water, and being liable to decomposition, the process of inspissation is employed to obtain the active matter in a more concentrated state, and to obviate this spontaneous change. The preparations thus obtained are named *Inspissated Juices*, formerly *Extracts*.

In the greater number of cases, however, this operation cannot be performed without injury to the active matter. Any volatile principle is necessarily dissipated; and even where there is no injury of this kind, the vegetable matter, at the temperature required, suffers decomposition, either from the re-action of its elements, in consequence of which they enter into new combinations, or from the chemical action of the oxygen of the air. Extractive matter, such as that contained in the juices of plants, becomes insoluble from mere exposure to the air, as *Vauquelin* observed: this change takes place more rapidly at

the temperature of boiling water, as Fourcroy has shewn; and T. Saussure, who has examined these changes more minutely, has found that they are accompanied with an absorption of oxygen from the air, and a formation of carbonic acid, with probably, likewise, as he inferred, a formation of water, from the union of part of the oxygen and hydrogen of the vegetable matter. Such changes must give rise to alterations in the medicinal powers of these substances, and hence we cannot rely on the activity and uniformity of operation in these inspissated juices. Even after they are prepared too, they must continue to suffer a slow spontaneous decomposition, and hence their activity must diminish with age.

From the analysis of these inspissated juices, they appear to contain usually a large proportion of saline matter, principally acetates of potash, lime and ammonia, frequently free acetic acid, and sulphate and muriate of potash, and sulphate of lime.

The directions for preparing the inspissated juices are given in the Edinburgh Pharmacopœia, under the formula for the first of them, that of Wolfsbane. The Dublin College direct, that the juice, after expression, shall remain at rest for six hours, that its feculencies may subside before evaporation. The London College, with more propriety, order it to be evaporated without depuration.

SUCCUS SPISSATUS ACONITI NAPELLI. Inspissated Juice of Aconite or Wolfsbane.

“ The fresh leaves of the aconite are to be bruised,

and being inclosed in an hempen bag, are to be pressed strongly, that they may give out their juice, which is to be reduced by evaporation in open vessels, heated by boiling water saturated with muriate of soda, to the consistence of thick honey. The mass, after it has cooled, is to be kept in glazed earthen vessels, and moistened with alkohol."

This inspissated juice is the form under which wolfsbane was introduced into practice by Störck. He recommended it in glandular swellings, scrofulous and venereal affections, gout, and in obstinate chronic rheumatism, in a dose of half-a-grain night and morning, and gradually increased to 5 or 6 grains. It is very seldom prescribed.

In the same manner are prepared the following Inspissated Juices from the leaves of their respective plants.

SUCCUS SPISSATUS ATROPÆ BELLADONÆ. Inspissated Juice of Deadly Nightshade.

This has been recommended by the German practitioners in schirrus, cancer, in epilepsy and mania, in a dose of one grain gradually increased. It retains the peculiar property of the plant, that of occasioning dilatation of the pupil, whence it has also been prescribed in amaurosis.

SUCCUS SPISSATUS CONII MACULATI. Inspissated Juice of Hemlock.

Under this form, hemlock was employed by Störck in scirrhus and cancer. The dose given is at first two

grains, but it requires to be quickly increased, and it has at length been taken to the extent of several drachms in the day. In the preparation of it, the narcotic power of the hemlock seems always to be more or less impaired; it is also injured by keeping, and we have no other test of its activity than the strength of its narcotic odour. It is therefore inferior to the dried leaves of the plant, which are likewise, however, liable to a considerable degree of uncertainty, according to the manner in which they have been dried and preserved. A common form of exhibition is that of the inspissated juice made into pills by the addition of a sufficient quantity of the powder of the leaves; but, on the whole, the powder alone is to be preferred, both as being in general more active and uniform, and as we have a test of its proper preparation more certain in the richness of its green colour.

Succus spissatus hyoscyami nigri. Inspissated Juice
of Black Henbane.

This inspissated juice retains a considerable degree of narcotic power, and the plant resembling opium in its operation, it is occasionally employed as a substitute for it. The dose has been usually one grain, which requires to be increased; two grains are perhaps not more than equivalent to one grain of opium. The tincture has been introduced as a more certain preparation.

The London College admit the four preceding Inspissated Juices, giving them the name of Extracts. The Dub-

lin College have inserted those only of Hemlock and Henbane.

SUCCUS SPISSATUS LACTUCÆ VIROSÆ. Inspissated Juice of Strong-Scented Lettuce. *Ph. Ed.*

This plant, though a narcotic, has been principally used as a diuretic. It was recommended as a remedy in dropsy by the German practitioners, in a dose of four or five grains, gradually increased to one or two drachms in twenty-four hours; but in this country it has been little used.

SUCCUS SPISSATUS SAMBUCCI NIGRÆ, *vulgo Rob Sambuci.*
Inspissated Juice, or Rob of Elder.

The preparation of this juice, as directed in the Edinburgh Pharmacopœia, is peculiar. "Five pounds of the juice of Elder Berries, and one pound of Sugar, are to be boiled with a gentle heat to the consistence of thick honey."

It has been given as an aperient or moderate laxative and diuretic in a dose of half an ounce, or one ounce; but it possesses no quality to recommend it. In the preparation of it in the Dublin Pharmacopœia, it is merely inspissated without sugar.

SUCCUS SPISSATUS MOMORDICÆ ELATERII, *vulgo Elaterium.* Inspissated Juice of Wild Cucumber, or Elaterium.

"Cut the ripe fruit of the wild cucumber, and pass

through a very fine hair-sieve the juice lightly expressed ; boil it a little, and set it aside for some hours until the thicker parts subside. Pour off the thinner part which floats above, and separate the rest by straining. The thicker part which remains after the straining, being covered with a linen cloth, is to be dried by a gentle heat." Similar directions are given in the Dublin and London Pharmacopœias, omitting only the boiling,—an omission which is proper, if this substance be a fecula, as has been usually supposed.

From the mode of preparation, it is obvious that this consists of a matter which had been suspended in the juice, and hence it has been generally regarded as a species of fecula, without having been, however, very particularly examined. It is a very violent cathartic, operating powerfully in a dose of one or two grains. It has been used as a hydragogue in dropsy, and as a cathartic in obstinate constipation, where others have failed. The violence, and in some measure the uncertainty of its operation, prevent its frequent use ; and it is seldom even to be found in the shops.