
CHAP. IV.**SUCCI SPISSATI, 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; mucilage, the principle more peculiarly named extract, tannin, fecula, and even a portion of resin. 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 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, sulphate and muriate of potash, and sulphate of lime, with frequently so much free acetic acid as to redden litmus; they exhale vapours of acetic acid when acted on by sulphuric acid, and they give an ammoniacal smell when rubbed with 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 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 alcohol.

In the same manner are to be prepared Inspissated Juices from the leaves of Deadly Nightshade, of Hemlock, of Henbane, and of Wild Lettuce. The London College admit the same Inspissated Juices, with the exception of the last, giving them the name of extracts. They give the following directions with regard to each. " Bruise

the recent leaves in a stone mortar, sprinkling upon them a small quantity of water, then express the juice, and without any defecation evaporate it until it attain a proper consistence;" the general direction being also given with regard to the evaporation, "that it is to be performed in a broad shallow vessel, by the heat of a water bath, until the consistence is that fit for forming pills, stirring constantly with a spatula towards the end of the evaporation." The Dublin College admit only the Inspissated Juices of Hemlock and Henbane, giving the following directions under the preparation of the former. "Express the leaves of Hemlock, gathered when the flowers are just appearing, and put aside the juice for six hours, that the impurities may subside, then evaporate the pure juice with a gentle heat to the consistence of an extract." The propriety of the direction of allowing any matter to subside from the juice before evaporation is doubtful, as the matter deposited is frequently possessed of considerable activity. It is not given therefore by the other colleges, and the London College order even the juice to be evaporated without any such purification.

SUCCUS SPISSATUS ACONITI NAPELLI. Inspissated Juice of Wolfsbane, Ed. EXTRACTUM ACONITI. Extract of Wolfsbane. Lond.

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.

SUCCUS SPISSATUS ATROPÆ BELLADONÆ. Inspissated Juice of
Deadly Nightshade. Ed. EXTRACTUM BELLADONÆ. Lond.

This has been recommended by the German practitioners in scirrhus, 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. Ed. SUCCUS SPISSATUS CICUTÆ. Dub. EXTRACTUM CONII. Lond.

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, though these are likewise 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. Ed. Dub. EXTRACTUM HYOSCYAMI. Lond.

This inspissated juice retains a considerable degree of

narcotic power, and is a form under which Henbane is occasionally employed as a substitute for opium. 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.

SUCCUS SPISSATUS LACTUCE VIROSE. Inspissated Juice of Strong-Scented Lettuce. 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 SAMBUCI NIGRÆ, vulgo Rob Sambuci. Inspissated Juice, or Rob of Elder. Ed.

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.

SUCCUS SPISSATUS SAMBUCI. Inspissated Juice of Elder. Dub.

Let the juice from the fresh Berries of the Elder, be prepared in the same manner as the inspissated juice of hemlock.

This preparation 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.

SUCCUS SPISSATUS MOMORDICÆ ELATERII, vulgo Elaterium.

Inspissated Juice of Wild Cucumber, or Elaterium. Ed.

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.

EXTRACTUM ELATERII. Extract of Elaterium. Lond.

Cut the ripe fruit of Elaterium, and strain the juice very lightly expressed through a fine hair-sieve into a glass vessel; then put it aside for a few hours, until the thicker part subsides. The thinner part which swims above being rejected, dry the thicker part with a gentle heat.

ELATERIUM. Elaterium. Dub.

Cut ripe Wild Cucumbers, and strain the juice lightly expressed through a very fine hair-sieve into a glass vessel. Put it aside for some hours until the thicker part subside: the liquid above being rejected, dry the fecula on a linen cloth, covered by another, with a gentle heat.

From the mode of preparation, it is obvious that this consists of a matter which had been suspended in the juice: hence it has been generally regarded as a species of fecula, without having been, however, very particularly examined; and from its not being dissolved during the slight boiling of the juice, it would even appear to be of a different nature. 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.