Chap. XV. Of the Drying of Herbs, &c.

477

lent to half a drachm of it when fresh;—a circumstance to be particularly regarded in the exhibition of this medicine. But if too great heat has been employed in drying it, it becomes almost inert, and it also loses its virtues by long keeping in the state of powder.

Dried squills furnish us with a medicine, sometimes advantageously employed as an emetic, often as an expectorant,

and still more frequently as a powerful diuretic.

Pulvis spongiæ ustæ. Dub. Spongia usta. Lond. Powder of Burnt Sponge.

Cut the sponge in-pieces, and bruise it, so as to free it from small stones (foreign matters adhering to it Lond.); burn it in a covered iron vessel, until it becomes black and friable; afterwards reduce it to a very fine powder.

This medicine has been in use for a considerable time, and employed against bronchocele, scrofulous disorders, and cutaneous foulnesses, in doses of a scruple and upwards. Its virtues probably depend on the presence of a little alkali. It also contains charcoal, and its use may be entirely superseded by these substances, which may be obtained in other manners at a much cheaper rate.

Pulvis quercus Marinæ. Dub. Powder of Yellow Bladder Wrack.

Take of

Yellow bladder wrack, in fruit, any quantity.

Dry and clean it; then expose it to the fire in an iron pot or crucible, covered with a perforated lid, until, after the vapours cease, the mass becomes of a dull red. Powder the carbonaceous mass which remains.

This charcoal was formerly known under the name of Æthiops Vegetabilis. It is analogous to the preceding article.

## CHAP. XVI.—EXPRESSED JUICES.

The juices of succulent plants are obtained by expression. They are of a very compound nature, consisting of the sap, the secreted fluids, and fecula, mixed together. When first procured, they are very high coloured, turbid, and loaded with parenchymatous matter. They may be purified by rest,

filtration, heat, and clarification. Rest may be employed with juices, which are very fluid, do not contain volatile matter, and are not susceptible of alteration, and with subacid juices, as that of lemon. By rest these undergo a kind of slight fermentation, and all their mucilaginous, and other viscid parts, separate. Filtration is perhaps the most perfect means of defecation, but it is tedious, and applicable only to very fluid juices. In many instances it may be facilitated by the addition of water. The action of heat is more expeditious, and is employed for juices which are very alterable, or which contain volatile matter. It is performed by introducing the juice into a matrass, and immersing it in boiling water for some minutes. The fecula are coagulated, and easily separated by filtration. Clarification by white of egg can only be used for very viscid mucilaginous juices, which contain nothing volatile. The white of two eggs may be allowed to each pint of juice. They are beat to a fine froth, the juice gradually mixed with them, and the whole brought to ebullition. The albumen coagulating envelopes all the parenchymatous and feculent matters, and the juice now passes the filter readily. By this process, juices are rendered sufficiently fine; but the heat employed deepens their colour, and manifestly alters them, so that it is not merely a defecating but a decomposing process. When depurated, juices are yellow or red, but never green.

The fluids thus extracted from succulent fruits, whether acid or sweet, from most of the acrid herbs, as scurvy-grass and water cresses, from the acid herbs, as sorrel and woodsorrel, from the aperient lactescent plants, as dandelion and hawkweed, and from various other vegetables, contain great part of the peculiar taste and virtues of the respective The juices, on the other hand, extracted from most of the aromatic herbs, have scarcely any thing of the flayour of the plants, and seem to differ little from decoctions of them made in water boiled till the volatile odorous parts have been dissipated. Many of the odoriferous flowers, as the lily, violet, and hyacinth, not only impart nothing of their fragrance to their juice, but have it totally destroyed by the previous bruising. From want of sufficient attention to these particulars, practitioners have been frequently deceived in the effects of preparations of this class: juice of mint has been often prescribed as a stomachic, though it wants those qualities by which mint itself and its other preparations ope-

rate

There are differences as great in regard to their preserving

those virtues, and this independently of the volatility of the active matter, or its disposition to exhale. Even the volatile virtue of scurvy-grass may, by the above method, be preserved almost entire in its juice for a considerable time; while the active parts of the juice of the wild cucumber quickly separate and settle to the bottom, leaving the fluid part inert. Juices of arum root, iris root, bryony root, and other vegetables, in like manner, allow their medicinal parts to settle at the bottom.

If juices are intended to be kept for any length of time, about one-fortieth part of their weight of good spirit of wine may be added, and the whole suffered to stand as before: a fresh sediment will now be deposited, from which the liquor is to be poured off, strained again, and put into small bottles which have been washed with spirit and dried. A little oil is to be poured on the surface, so as very nearly to fill the bottles, and the mouths closed with leather, paper, or stopped with straw, as the flasks are in which Florence oil is brought to us: this serves to keep out dust, and suffers the air to escape, which, in process of time, arises from all vegetable liquors, and which would otherwise endanger the bursting of the glasses; or being imbibed afresh, render their contents vapid and foul. The bottles are to be kept on the bottom of a good cellar or vault, placed up to the necks in sand. By this method some juices may be preserved for a year or two; and others for a much longer time, though, whatever care be taken, they are found to answer better when fresh; and from the difficulty of preserving them, they have of late been very much laid aside, especially since we have been provided with more convenient and useful remedies. The following is the only composition of the kind retained in our Pharmacopæias.

Succus cochleariæ compositus. Ed. Compound Juice of Scurvy-grass.

Take of

Juice of Scurvy-grass,

Water-cresses expressed from fresh gathered herbs, Seville oranges, of each two pounds;

Spirit of nutmegs, half a pound.

Mix them, and let them stand till the fæces have subsided, then pour off the clear liquor.

Compositions of this kind are of considerable use for the purposes expressed in the title: the orange-juice is an excellent assistant to the scurvy-grass, and other acrid antiscorbutics, which, when thus mixed, have been found from expe-

rience to produce much better effects than when employed by themselves. They may be taken in doses from an ounce or two to a quarter of a pint, two or three times a-day: they generally increase the urinary secretion, and sometimes induce a laxative habit.

## CHAP. XVII.—INSPISSATED JUICES.

This is a very convenient form for the exhibition of those substances which are sufficiently succulent to afford a juice by expression, and whose virtues do not reside in any very volatile matter. By inspissation, the bulk of the requisite dose is very much diminished; they are reduced to a form convenient for making up into pills; and they are much less apt to spoil than the simple expressed juices. The mode of their preparation is not yet, however, reduced to fixed principles. Some direct the juices to be inspissated as soon as they are expressed; others allow them previously to undergo a slight degree of fermentation; some defecate them before they proceed to inspissate them; and, lastly, Baumé prepares his elaterium by inspissating the defecated juice of the wild cucumber, while our colleges give the same name to the matter which subsides from it. The nature of the soil, of the season, and many other circumstances, must materially alter the quantity or nature of the product. In moist years, Baumé got from thirty pounds of alder berries, four or five pounds of inspissated juice, and in dry years only two, or two and a half. From hemlock he got, in October 1769, 7.5 per cent. of inspissated juice, and in May of the same year only 3.7; on the contrary, in August 1768, 4 per cent. and in May 1770, 6.5; but, in general, the product in the autumn months was greatest.

Succus spissatus aconiti napelli. Ed. Inspissated Juice of Wolfsbane.

Bruise the fresh leaves of wolfsbane, and, including them in a hempen bag, compress them strongly till they yield their juice, which is to be evaporated in flat vessels heated with boiling water, saturated with muriate of soda, and immediately reduced to the consistence of thick honey.

After the mass has become cold, let it be put up in glazed earthen vessels, and moistened with alcohol.