

MYRTUS PIMENTA. *Ed. Lond. Dub.*

Willd. g. 973, sp. 28. Icosandria Monogynia.—Nat. ord. *Hesperideæ.*

Pimento tree.

Off.—The fruit of the Pimento, commonly called Jamaica Pepper.

FRUCTUS MYRTI PIMENTÆ, *vulgo* Piper Jamaicense. *Ed.*

PIMENTÆ BACCÆ. *Lond.*

PIMENTO; (Piper Jamaicense) baccæ. *Dub.*

THIS is a native of Jamaica, and grows in all the woodlands on the north side. Soon after the trees have blossomed, the berries become fit for gathering, without being suffered to ripen, as when ripe they are moist and glutinous, and therefore difficult to cure, and when dried become black and tasteless. The berries are dried by spreading them on a terrace, exposed to the sun for about seven days, during which time they gradually lose their green colour, and become of a reddish-brown.

The smell of this spice resembles a mixture of cinnamon, cloves, and nutmegs; its taste approaches to that of a mixture of the whole three; whence it has received the name of *all-spice*.

Neumann ascertained that its flavour resides entirely in a volatile oil, heavier than water, and its pungency, in a resin or a substance soluble in alcohol, and insoluble in water. From 480 parts, he got 120 watery extract, 30 volatile oil, and 20 alcoholic extract; and inversely, 66 alcoholic, and 100 watery.

Medical use.—Pimento is a warm aromatic stimulant, and is much used as a condiment in dressing food. As a medicine, it may be advantageously substituted for the more costly spices, especially in hospital practice.

NICOTIANA TABACUM. *Ed. Lond. Dub.*

Willd. g. 379, sp. 1. Pentandria Monogynia.—Nat. ord. *Solanaceæ.*

Tobacco.

Off.—The dried leaves.

NICOTIANÆ TABACI FOLIUM. *Ed.*

TABACI FOLIA. *Lond.*

NICOTIANÆ FOLIA. *Dub.*

TOBACCO is an annual plant, a native of America, from whence it was brought into Europe, about the year 1560. It is now sometimes cultivated, for medicinal use, in our gar-

dens; but in general it is imported from America in large quantities. The leaves are about two feet long, of a pale green colour while fresh, and when carefully dried of a lively yellowish tint. They have a strong disagreeable, narcotic smell, and a very acrid burning taste.

The active constituent of tobacco was supposed to be an essential oil; for, by long boiling, the decoction and extract of tobacco become almost inert; and by distillation, an oil is obtained from it, so active, that small animals are almost instantly killed, when wounded by a needle dipped in it.

Vauquelin has lately analysed tobacco, both in its fresh and prepared state. The expressed juice is manifestly acid, and contains a great quantity of albuminous matter, super-malate of lime, acetic acid, nitrate and muriate of potass, muriate of ammonia, a red matter, soluble in alcohol and in water, which swells and becomes charred by heat, and an acrid principle on which its peculiar properties depend. The infusion of prepared tobacco is alkaline, and contains, beside the same principles, carbonate of ammonia, and muriate of lime, proceeding from the mutual decomposition of the muriate of ammonia and lime which is added to give it pungency. The principle to which the acrimony of tobacco is owing, is soluble in alcohol and in water, is volatile, but still may be concentrated by slowly evaporating its solution in water, and still more easily its tincture. Its volatility is also diminished by the malic acid with which it is combined. It is obtained in a state nearest to purity in the distilled water of the infusion of the dry, or of the expressed juice of the fresh plant. This water is colourless, but has the acrid smell and taste of tobacco smoke: with acetate of lead and nitrate of mercury, it forms white precipitates, soluble in acids, and with infusion of galls one soluble in alcohol and the alkalies. The principle on which the properties of tobacco depends seems not easily destructible, as it is the same in the dry and in the fresh plant, and is not destroyed by oxy-muriatic acid.

Medical use.—On the living body, whether taken into the stomach in substance or solution, or into the lungs in the form of smoke, or applied to abraded surfaces, tobacco is capable of producing deleterious effects. It often proves virulently cathartic or emetic, and occasions intolerable cardialgia, anxiety and vertigo.

The system becomes easily habituated to the action of tobacco; and many people use very large quantities of it in several ways as a luxury, without experiencing any other bad effect than what arises from their being unable to relinquish it after the habit is confirmed.

As a medicine, it is exhibited in various forms :

1. In substance. When chewed, it causes an increased flow of saliva, and sometimes relieves the toothach; and reduced to powder, it proves an excellent errhine and sternutatory, when snuffed up the nostrils.
2. In infusion in water or wine. Taken in such small doses as to have little effect on the stomach, it proves powerfully diuretic, and was employed by Dr Fowler, with very great success, in cases of dropsy and dysuria. It is also applied externally for the cure of psora, tinea, and other cutaneous diseases.
3. In the form of smoke, it is injected into the anus by means of a bellows of a peculiar construction. By acting as a stimulus to the rectum, it sometimes succeeds in reviving the vital powers in some kinds of asphyxia, and in evacuating the intestines in cases of obstinate constipation.

NITRAS.

NITRATE is the generic term for secondary compounds, which consist of nitric acid, combined with any base. Their general characters have been already mentioned. There are three families of nitrates.

1. Alkaline nitrates;—soluble in water; solubility increased by increase of temperature; crystallizable; forming no precipitate with alkaline carbonates.
2. Earthy nitrates;—soluble in water; forming a white precipitate with alkaline carbonates.
3. Metallic nitrates; generally soluble, both in water and in alcohol; decomposable by heat, furnishing nitric oxide gas, and leaving the metal oxidized to a maximum.

NITRAS POTASSÆ, v. s. Nitrum. *Ed.*

POTASSÆ NITRAS, s. s. Nitras potassæ purificata. *Lond.*

NITRUM, s. s. Nitras kali. *Dub.*

Nitrate of potass. Purified nitre.

NITRATE of potass is annually produced on the surface of the earth in many countries. For this production, the presence of a calcareous base, heat, and an open, but not too free communication with dry atmospheric air, are requisite. The putrefaction of organic, especially animal, substances, is not necessary to, but accelerates the formation of this salt, by affording the azote in a state in which it combines readily with the oxygen of the atmosphere, and forms the nitric acid. Accordingly, in Germany and France, nitrate of potass is

prepared, by exposing mixtures of putrefying animal and vegetable substances, and calcareous earths, to the action of the atmosphere. The salt is afterwards extracted by lixiviation and crystallization. The nitre used in this country is chiefly imported from the East Indies. As it occurs in commerce, it often contains a little muriate of potass and muriate of soda, from which it is easily purified by dissolving it in boiling water, and filtering it; on cooling, the nitrate of potass crystallizes, and the other salts remain dissolved.

Nitrate of potass has a sharp, bitterish, cooling taste. It shoots in pretty large crystals, which are generally six-sided prisms, terminated by six-sided pyramids; very brittle; permanent in the atmosphere; soluble in seven times their weight of water at 60°, and in an equal weight at 212°; melting when exposed to a strong heat, giving out at first oxygen, and afterwards nitrogen gas, until the whole acid be decomposed, and the potass alone remain behind. It deflagrates more or less violently with all oxygenizable substances, oxidizing or acidifying them. When dried in a temperature of 70°, it consists, according to Kirwan, of 44 nitric acid, 51.8 potass, and 4.2 water. It is decomposed by the sulphuric acid and baryta, by the muriate and acetate of baryta, and the sulphates of soda, ammonia, magnesia, and alumina.

Medical use.—Taken to the extent of from a drachm to half an ounce in the course of a day, in repeated doses, it diminishes the heat of the body, and the frequency of the pulse, operates by stool, and acts upon the secretion of urine, but is apt to produce pains in the stomach. In large doses, such as an ounce, taken at one time, it produces the most dreadful symptoms, constant vomiting, purging mixed with blood, convulsions, and death. Accidents of this kind have happened, from its being sold, by mistake, for sulphate of soda.

It is best given in small doses, as from five to ten grains, frequently repeated, and is only admissible in inflammatory diseases. Externally it is used in gargles for inflammatory sore throats.

OLEA EUROPEA. *Lond. Ed. Dub.*

Willd. g. 36, sp. 1. Diandria Monogynia.—Nat. ord. *Scpiaria.*

The olive tree.

Off.—Olive oil. The fixed or expressed oil of the fruit.

OLEÆ EUROPEÆ OLEUM. *Ed.*

OLIVÆ OLEUM. *Lond.*

OLEUM OLIVARUM. *Dub.*