

NARCEINE AND MECONINE.

Narceine was discovered in 1832 by M. Pelletier, and meconine about the same time, by M. Couerbe. They are both obtained from the ammoniacal waters after the precipitation of morphia, which are evaporated to a thick syrup, and left for several weeks, by which time a mass of granular crystals is deposited. These are pressed and treated with boiling alcohol, the fluid is distilled, and a yellowish crystallized residue is procured, again pressed, redissolved in alcohol, and filtered with animal charcoal to ensure their whiteness. These are crystals of narceine and meconine combined with a little narcotine, which is separated by boiling water, and the meconine is separated by ether, which dissolves it and leaves the narceine.

Chemical properties of Narceine.

It is white, without smell, crystallizes in long needles, has a bitter and somewhat metallic taste. Acids destroy it if concentrated; diluted with a half of water they combine with it and produce various colours, at first causing a beautiful blue colour, and afterwards upon withdrawing the water by chloride of lime, a rose colour is produced. Nitric acid changes it to oxalic acid. Hence M. Couerbe gave it the name of "vegetable cameleon."

M. Pelletier states the composition of narceine as :

	At.	Comp.
Carbon.....	54.73 = 16	54.08
Azote	4.33 = 1	3.92
Hydrogen	6.52 = 24	6.62
Oxygen	34.42 = 8	35.37

Action of Narceine on the Animal System.

I have several times injected 2 grains of it in the jugular vein of dogs, but no appreciable effects were produced.

Chemical properties of Meconine.

It is white, and crystallizes in six-sided prisms, fuses at 90°, when it resembles a colourless liquid. It requires 18 parts of boiling and 265 parts of cold water for its solution. It is also soluble in alcohol and ether. Alkalis have no remarkable effect on it. Cold sulphuric acid dissolves it without change of colour, but heated, it changes to the green of chlorophylle. Nitric acid does not change it to oxalic. Chlorine at the fusing point of meconine causes a blood-red colour, and transforms it into an acid, to which the name of *mechloic* has been given.

Meconine is composed of

	Atoms.
Carbon.....	60.247 = 9
Hydrogen	4.756 = 9
Oxygen	34.997 = 3

Action on Animals.

Repeated injections of a grain into the veins of dogs have no effect whatever. I have never tried its action on man.

CODEINE.

Codeine was discovered in 1832 by M. Robiquet. In treating solution of opium with muriate of lime a muriate of morphia is precipitated, in combination,