

surface, pour on sufficient diluted alcohol to make the product measure two pints. Prepared in this way, tincture of catechu is very clear, of a rich dark color, and will not deposit insoluble matter nor gelatinize inside of a year at least.

New Orleans, January 18th, 1877.

NOTE.—This is essentially the tincture of the B. P.—Ed. *Can. Pharm. Jour.*

BROMIDE OF ETHYL AS AN ANÆSTHETIC.

BY M. RABUTEAU.

At a recent meeting of the Academy of Sciences* M. Rabuteau gave some details of an investigation of the physiological properties and mode of elimination of bromide of ethyl.

Bromide of ethyl (C_2H_5Br), or "hydrobromic ether," in a colorless liquid, with an agreeable odour; it boils at about $40^\circ C.$, has a density of 1.43, and burns with difficulty. The boiling point and density are therefore intermediate between those of chloroform and sulphuric ether.

Bromide of ethyl absorbed by the respiratory passages produces absolute anæsthesia as rapidly, or even more rapidly, than chloroform. This result has been established with frogs, rabbits, dogs, etc. After five minutes, sometimes after two minutes, inhalation, by means of a sponge saturated in bromide of ethyl, dogs are completely æsthetized. The animals recover more rapidly than when chloroform is used.

When a solution of hydrochlorate of narceia or hydrochlorate of morphia was injected under the skin of dogs, before inducing anæsthesia, an action was observed analogous but perhaps inferior to the simultaneous action of narceia, or morphia, and chloroform.

Bromide of ethyl is not caustic, nor even irritant, compared to chloroform. It can be ingested without difficulty, and applied without danger, not only subcutaneously, but to the external auditory meatus and to the mucous membrane. In this respect it is preferable to chloroform, which is very caustic, and to sulphuric ether of which the ingestion is nearly impossible. Introduced into the human stomach in doses of 1 to 2 grams, bromide of ethyl does not produce anæsthesia as when absorbed in sufficient quantity by the respiratory passages. It soothes pain and does not disturb the appetite.

This anæsthetic is nearly insoluble in water. Nevertheless water shaken with it acquires a pleasant taste and odour. Frogs placed in water so saturated undergo anæsthesia in ten or fifteen minutes.

**Comptes Rendus*, vol. lxxxiii., p. 1294, in *Pharm. Jour. & Trans.*