

ARSENIC AND ITS ANTIDOTES.

M. Rouyer, assistant to Prof. Teltz, of the Faculty of Medicine of Nancy, has just published an excellent article, the aim of which is to discover what is the smallest dose of arsenic capable of destroying life, and what the effects of the antidotes recommended. This work is the result of numerous experiments, performed in the laboratory under the supervision of Prof. Teltz. These are the practical conclusions arrived at by M. Rouyer:—

I. ARSENIOUS ACID.—A. *Introduced into the blood.*—1st. Very small doses suffice to cause symptoms of poisoning to appear. Gramme 0.0006 to each kilogramme in the weight of the animal (A. grain 0.00926 to every $2\frac{2}{3}$ lbs., Troy weight.) 2nd. Grave symptoms of poisoning, and sometimes death, take place when gramme 0.0023 per kilogramme (A. grain 0.0354 to each $2\frac{2}{3}$ lbs., about) is injected into the blood. 3rd. Death is certain when the dose absorbed reaches grains 0.046 to $2\frac{2}{3}$ lbs. 4th. Death takes place in the space of from 24 to 35 hours when grains 0.0385 are given, and in 8 hours when the dose is 0.046.

B. *In the stomach.*—1st. Grains 0.926 of arsenious acid in solution to the kilogramme ($2\frac{2}{3}$ lbs.), the weight of dogs, injected into the stomach, is enough to cause death in nearly all cases. 2nd. The dose of grains 1.08 to the kilogramme is certain to cause death. 3rd. If poisoning supervened only on administration of a stronger dose, it was much more rapid, and this being relative to a particular condition in dogs, which throws off the poison too quickly. 4th. In poisoning by the average dose of grains 0.926, death ordinarily takes place at the end of 24 hours.

II. ARSENATE OF SODA.—A. *In the blood.*—1st. The true poisonous dose is grains 0.077 to the kilogramme. 2nd. Below this dose, grave symptoms appear without always causing death. 3rd. The duration of these symptoms is from 12 to 20 hours.

B. *In the stomach.*—The dose of grains 2.3 [?] brings on symptoms of poisoning, but does not always cause death, which, when it does, takes place from 24 to 30 hours after.

III. ARSENATE OF POTASH. A. *In the blood.*

1st. The poisonous dose is grs. 0.046 per kilogramme. 2nd. In this case death supervenes at the end of seven hours.

B. *In the stomach.* 1st. The poisonous dose is grs. 0.46 per kilogramme, takes place in from 6 to 7 hours.

ANTIDOTES OF ARSENIC. (a.) Hydrated sesqui oxide of iron recently prepared (gelatinous and brown) is an antidote for arsenious acid, but not for the arsenate of potash, nor for the arsenate of soda. (b.) At a longer interval than an hour it is useless to attempt recovery from poisoning by arsenic. (c.) For arsenite of potash, and arsenite of soda the author proposes perchloride of iron in conjunction with magnesia. (d.) The mode of administration is the official solution of perchloride of iron, and a half an hour after magnesia in the proportion of a drachm to $2\frac{3}{4}$ ozs. of perchloride. (e.) This perchloride of iron and magnesia are also an antidote for arsenious acid. Therefore, it is preferable to employ it always in cases of poisoning by arsenic or its compounds. (f.) An hour after the administration of an antidote, it will always be well to employ a purgative, in order to expel the ferrated arsenite which is formed, and as this arsenite is soluble in acids, to avoid acid drinks and lemonades.

A NEW METHOD OF DISPOSING OF THE DEAD.

The dead trouble the living. M. Cruls, ex-officer of the Belgian Engineers, and at present Engineer to the Brazilian Government, proposes a new mode of inhumation; viz., incrustation. Each body is to be encased in artificial stone, which would not allow the escape of liquids or of gas. These blocks, each containing a dead body, would serve to construct mausoleums, monuments of divers forms, which would cover the cemeteries. Each block would cost five francs.

There may be some good in the idea, but one cannot help asking, what would be done with all these blocks of stone when they accumulated in great numbers? If all the dead of Paris were placed in the same cemetery, there would be about 1,000,000 in 22 years, taking 800 as the average rate of mortality per week.