

was relieved by the inhalation of chloroform, for ten minutes, and partial anæsthesia kept up for four hours saved him.

The case reported by Dr. O'Reilly, of St. Louis, is too well known to be detailed here. He saved a patient fully poisoned by strychnia, by the exhibition of table spoonful doses of infusion of tobacco. The following experiments reported in the *Dublin Hospital Gazette*, December 8, 1856, are in point. Two baths were made, each having five ounces of water, one of them five grains of strychnia, the other five grains of pure nicotina (a most terrible poison and the proximate principle of tobacco.) In one of the baths, a frog lived four minutes. A similar frog put in the other, lived one minute. The two baths were then mixed, so that the water now held the strychnia and nicotina in solution. A frog, in all respects like the others, was put into the mixed bath and appeared to be very little injured at the end of 47 minutes, and it did not die till 24 hours had elapsed. The antagonism of the strychnia and nicotina is so obvious, that we need not stop to speak of it.

Still more recently we have an account of the antidotal power of *Hydrocyanic Acid* in the *Medical Times and Gazette* of August, 6, 1859. We remark, in passing, that this acid is more speedily fatal than strychnia.

A physician owned a favorite dog, now become mangy and so offensive, that it was decided to kill him with strychnia. An ample portion was given to the beast, but it only set up terrible jerks, without speedily killing, as was anticipated. To relieve the dog from his torture, a drachm of strong hydrocyanic acid was given in a saucer of milk. The whole was lapped up speedily, and soon the animal vomited, got on his legs, ran off a considerable distance and recovered. Here was most obvious antagonism.

The last antidote to be named, is *Arsenious Acid*. On the next day after my lecture on this subject, three years ago, Surgeon Judson, of the U. S. Navy, handed me a printed slip, taken from *Bell's Life in Sydney*, which shows conclusively, that so terrible a poison as arsenic can control the poisonous action of strychnia. A farmer's grounds were much infested with crows, and to get rid of the pest, he shot an opossum, cut into its body and placed in the cavities a large quantity of strychnia. The opossum thus prepared was hung to the fork of a tree. A favorite sheep-dog, attracted by the stranger in the tree, made out, by vigorous efforts, to grasp it, and then to eat freely of the meat. Very soon, he was thrown into tetanic jerks of great severity. The owner resolved to put a period to the animal's suffering by the use of arsenic, a large spoonful blended with water was passed down the throat. Presently the dog was evidently more quiet; the jerks soon ceased, and in one hour, recovery was complete.

In this brief paper we have no less than ten articles, each of which is capable of counteracting the poisonous action of Strychnia, viz: Gin, Rum, Tannin, Iodine, Sulphate of Morphia, Chloroform, Tobacco, Hydrocyanic Acid, Camphor and Arsenic.

Purposely, we have passed over the *modus operandi*, as well as the tests of strychnia, partly because these are of less practical moment to the profession at large, than the immediate treatment of cases; and also because those points have been, as we think, fully met by the wide publication of the celebrated *Palmer* case (in London), and by

the numerous essays growing out of that affair.— Our main design was to furnish practitioners with such a birds-eye view of the reliable means for the arrest of the poisonous action of strychnia, as can be found in no volume known to the profession.

Before we dismiss this interesting subject, it may be well to group the points involved in the question, "how much of any poison is competent to destroy life?" This is the more important in view of the obvious lack of information just here.

The points that cross our path in attempting a direct answer to the question cited are:

1st. The purity or worthlessness of the article. Ten drops of Croton oil, we are told, did not seriously hurt a child ten years old, although given at one dose. The oil however was very largely adulterated with another oil, and so made harmless. So too, spoiled digitalis leaves, or leaves from a plant raised in soil unfriendly to its perfection, are inert in any dose. Extract of belladonna, utterly decomposed by excessive heat employed in its preparation, would hurt no one in drachm doses.

2d. The condition of the stomach, as to fullness or emptiness. Two men, of the same age and vigor took each an ounce of laudanum on the same day. Both had medical aid in two hours after the accident. The one died, while the other speedily recovered. The full stomach of the one and the empty stomach of the other, accounted for the difference. The one took the poison an hour before the usual dinner time, the other, an hour after he had dined.

3d. The presence in the system, either in the body or mind, of a potent counter-agent, calculated to antagonise the poisonous dose.

The antidotes, named above, for a poisonous dose of strychnia, are in point. The strychnia and the antidote were mutual antagonistics. So too, the case reported in a foreign journal many years ago, of a medical student who, in a fit of desperation amounting to insanity, swallowed twenty grains of acetate of morphia. The terrible mental excitement of the man absolutely controlled the agency of the mammoth opiate dose, and he was restored although not visited until two hours had elapsed. The presence of a full dose of liquid chloride of soda in the stomach of the *Fire King* or American Buffoon as he was called, saved the man from the poisonous action of a drachm of hydrocyanic acid swallowed in the presence of hundreds of wondering spectators, and it is on the very same principle that alcoholic spirit taken until complete intoxication results, is a well known expedient to save life after the bite of the most venomous serpent. The bane and the antidote are perfect antagonists. While, therefore, one grain of any known poison might kill an adult in full health and with an empty stomach, another person of the same age might swallow, with comparative impunity, ten or twenty grains of the same poison, under circumstances such as those above stated.

1009 Clinton St., May, 1863.

GLYCERINE LOCALLY IN FEVERS.—Jno. E. Ennis, M.D., of Lyons, Iowa, after an experience of two years in the army, recommends glycerine highly as a soothing application to the parched lips, tongue and fauces of continued fever, being pleasant to the taste and forming an excellent substitute for the natural secretion of these organs until their glands shall have resumed their functions.—*Chicago Medical Journal*.