

hour, settles to the bottom and dissolves in the small quantity of water which the syphon fails to draw out.

If now a living frog be passed into the bottle and the cork replaced as quickly as possible, the animal will become paralyzed in about twenty minutes. On bringing the animal into fresh air it soon recovers.

These effects may be varied a little by using a sharp-pointed syringe, and injecting under the skin of the back of the frog one drop of the yellowish brown liquid which forms at the bottom of the bottle. In this case, paralysis of all the voluntary muscles takes place in a minute or two, the animal being unable to either walk or jump. This effect passes away completely in about half an hour. If three or four drops of this poisonous water be injected, paralysis occurs almost instantaneously. The animal subsequently passes into a narcotic sleep from which it never recovers.

This same water kills vorticellæ and paramoecia immediately. Water fleas die in it within half a minute. The larvæ of the May fly were paralyzed by it in five minutes, and were dead within fifteen minutes. Nematode worms, which are found in decaying matter in pond water, and which were found to live over-night in a five per cent. infusion of cigarette tobacco, lived only half a minute in this solution.

A solution, precisely like the one in this experiment, forms in the mouth and throat in smoking tobacco in the form of a cigarette, cigar or pipe. Some of this poisonous solution is absorbed by the mucous membrane of the mouth, passes into the blood, and is distributed throughout the body producing poisonous and sedative effects upon both young and old.