proximity is dreaded. The general prevalence of the impression that substances like arsenic or strychnine are deadly poisons under all circumstances, further illustrates how firmly the masses hold to such unwarranted prejudices. Many people hold up their hands in holy horror when they learn that their physician has prescribed these medicinal agents for them.

Two distinct schools have naturally developed among those who differ as to the correct meaning of this word "poison."

The one holds that a substance only becomes a poison when, by its innate chemical nature, it causes impairment or destruction of function.

The other asserts that only a certain fixed class of substances, such as hydrocyanic acid, corrosive sublimate, morphine, and others that are capable of causing serious effects when absorbed by the human system in comparatively small quantities, can be termed poisons; and that drugs of this class possess certain native properties for the destruction of function not found in substances reputed inert.

The latter description, it would seem, is entirely too narrow and restricted. If we accept it as the logical definition, then all those substances not included among the arbitrary poisons must, of course, be reported as innocuous—and many of those substances reputed inert operate in precisely the same manner as those termed virulent, when taken into the system in unusual quantities. For example, opium, when absorbed by the system in overdoses, causes death for the reason that it then becomes a narcotic poison; strychnine, because it becomes a narcotico-irritant, and arsenic an irritant poison. Now the mode of operation of one-half pound of common salt when taken into the stomach, is precisely the same as that of five grains of arsenic. Both cause death for the reason that in the quantities mentioned they act as powerful irritants on the sentient extremities of the nerves of the lining membrane of the blood vessels, thereby producing a fatal impression sympathetically upon the general nervous system. In this instance, why shrink from calling common salt a poison, simply because a much larger quantity of it than of arsenic is necessary to act fatally? Both these substances in the quantities mentioned operate in precisely the same manner, causing suspension of life by overcoming the vital forces. The natural conclusion is, therefore, that a substance is a poison in relation to man, in the actual sense of the word, only when by its innate chemical nature it causes impairment or destruction of function; and from this it must be decided that no substance can be termed a poison *per se*.

Among medical men the following has generally been accepted as an authentic definition of this word "poison." It reads: "A poison is a substance capable of destroying life when taken internally or applied to the surface of the body, without acting as a purely mechanical irritant." This, however, is open to the same objection that it at once fixes a distinct class of substances as poisons under all circumstances.

The words "*a deadly poison*" form a phrase very generously abused in newspaper accounts of casualties by poisoning. Ammonia water, copperas, or salts of tartar are made to suffer under the same horrid epithet as the dangerous alkaloids or mercurials, when accidentally responsible for serious results. This term should be used only in describing those drugs which are poisonous in very small quantities.

The old aphorism, "One man's food is another man's poison," is nicely illustrated in the fact that many valued articles of food, such as fish, oysters, rice, strawberries, cranberries, apples and many others, often cause a form of poisoning characterized by eruptions of the skin termed "urticaria," when ingested by certain persons who are incapable of properly assimilating these palate-pleasing foods.

When this word "poison" is considered in its more general significance, independently of its relation to man, the fact of its being an indefinite relative word with only an approximate meaning, is clearly demonstrated in the circumstance that certain species of birds satiate themselves with the berries of deadly night shade, finding in them nourishment, and goats eat with impunity the leaves and pods of stramonium; so dangerous to man, this herb is to them, as it were, a rare and tempting delicacy.

Why Not Turn Your Knowledge to Account?

BY FRANK EDEL.

The pharmacist is often called upon to dispense odd chemicals, and if he were to keep anything like the assortment in stock that he may have calls for occasionally, he would soon find his shelves stored with goods in some instances likely to spoil and in others to be unsalable. It is astonishing how often pharmacists let customers go without once remembering that on their shelves are all the chemicals necessary to produce easily and simply the required article. And if a given substance is wanted in the form of solutions, its preparation would often require but a minute.

The pharmacist, by so doing, can easily make a reputation for himself in the manufacture of these goods, and one can often hear people say, "We will go to So and So's pharmacy, for if he hasn't got it in stock he will make it for us." It is astonishing how soon such things become known, and when known, what a powerful influence they are towards building up a tradesman's business.

The writer calls to mind an instance of a physician who, after going the rounds of the stores, inquiring for subiodide of bismuth, came to the establishment where he (the writer) was employed, and inquired for the article. He was told that it was not in stock but could be made for him within a certain time. At another time he wanted iodide of lime, and then sacharrated iodide of iron, and thus became a regular customer. Another time a certain photographer came in and asked for chloride of lead and sulphate of lead. He was told that they were not in stock, but would be made for him. This gentleman afterwards took particular pains to send people to the store.

Elsewhere, in an article on the remedy for the specialty nuisance, the writer has said that there is no place where a pharmacist can so easily make a reputation for himself, no place where he can occupy his spare time to so much advantage, as in laboratory work. And this work can be done without neglecting the mercantile part of his business. It is not the purpose of this article to advocate the making of chemicals in the drug store, for the reason that in most cases they can be purchased from reputable manufacturers for as little money as they can be made for by the pharmacist. And, therefore, there is no argument in favor of making them on the ground of economy.

But with odd chemicals it is different. The pharmacist cannot afford to buy them, for the sale would not justify, and in most instances they can be prepared from those chemicals carried in stock, and many of them can easily be made. Take, for instance, the lithium salts. Having the carbonate of lithium in stock, the pharmacist is able to supply the citrate, salicylate, benzoate, borate, etc., if in solution, in a few minutes. And he can, also, easily prepare the salts themselves when so desired. The same is true of the ammonium salts, also of those of potassium and sodium.

Some years ago, while employed in a pharmacy where many prescriptions calling for solution of benzoate of ammonium, 10 grains to each dram, were filled, the writer had his attention called to the insolubility of the preparation as sold in the market. This is entirely due to the salt being of acid reaction instead of alkaline, as directed in the Pharmacopœia. Of course, solution could be effected by heat, but it would crystallize out when cold. This difficulty was remedied by adding ammonia in slight excess. In order to overcome the trouble, a permanent stock-solution was made up, containing 10 grains to the dram. This solution was made by taking the proper amount of benzoic acid and water, applying heat, and adding ammonia to slight excess, filtering, and adding water to make the proper volume. Thus we were able to dispense these prescriptions rapidly and properly. It is an old practice, and a good one, to keep a 50-per-cent solution of acetate of potassium on hand for dispensing. Such a solution keeps well and is easily made.

It is astonishing what a number of chemicals the pharmacist can prepare