

THE NEW LOCK AND KEY BOTTLE FOR HOLDING POISON.

The question of regulating the sale of poisons has become a very serious one in the great cities of the world, where the rush and roar of modern life make the druggist busy and the consumer careless. Thousands of inventive minds have been busy trying to devise some means of averting the many fatalities which we read about in the newspapers; and bottles have been produced with rough corrugations, fantastic death's head labels, and the like, but to little purpose.

Nurses and relatives of the invalid, or in many cases the sick man himself, have reached hastily for supposed medicine, and poured out and administered instead a deadly dose before the dreadful error was detected. Now, however, in London, Paris, Berlin, and other great centers an entirely new bottle for poisons has been devised, with the simplest lock and key arrangement, which will render it absolutely impossible that any tragedy shall ensue if it be used in the sickroom.

This new bottle, which has the approval of the most eminent physicians and toxicologists, costs but a few cents more than an ordinary medicine bottle, and it has a way of locking itself automatically, although the key is always attached to it, so that it may be readily opened when necessary. Thus it is absolutely impossible for anyone to mistake this poison bottle for one containing innocuous fluid. It clearly conveys its message of warning even when handled in the dark—a circumstance of the sick-room which has led to so many tragedies.

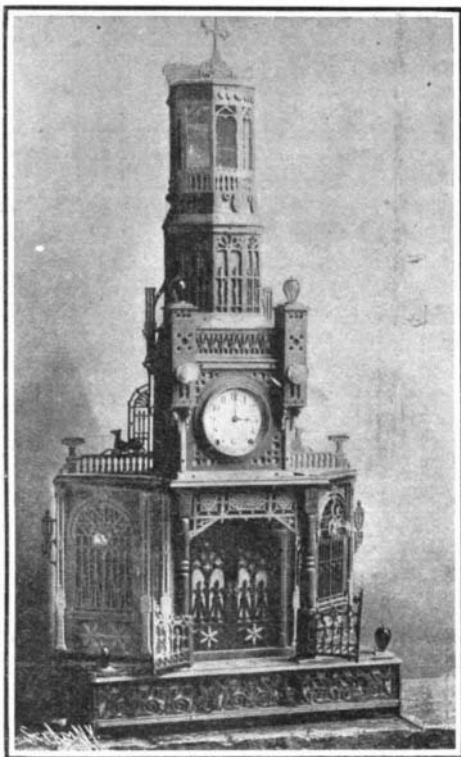
THE SPIDER'S WEB AS A NEGATIVE.

To one on a vacation and interested in photography, the good part of a day may be spent in collecting and printing cobwebs. The process is easy. Let him get the farmer's potato sprayer, put in it some "sizing japan," thinned with turpentine and colored from a terra-cotta tube. Then let him take some old window glass, or a few cleaned photo plates, and go in quest of a clear web with a good center. He will find it on an outbuilding or fence in the open. When found, let him spray it, then bring up a dry plate of glass behind it and lift it from its moorings. In a couple of hours the web will be dry, and so hard that the plate can be washed without any injury to the web. From plates thus secured he may make prints to his heart's content. To make combination pictures, put the plate over any clear negative and print through both of them. For printing the webs themselves, blue-print paper may be used to advantage, inasmuch as it simplifies the work.

In finer experiments I have tried dyeing the web, spraying it with a tincture to make it opaque, then taking a fresh damp photo plate which had previously been exposed to the light and washed in a hypo bath, to lift it. The filaments of the web were so fine, however, that though perfectly preserved it was impossible to make a print from it. So that for photos I still stick to the enameling process; that is, to spraying with "sizing japan." The japan is the same as used for gold lettering.

A CLOCK MADE OF SLATE.

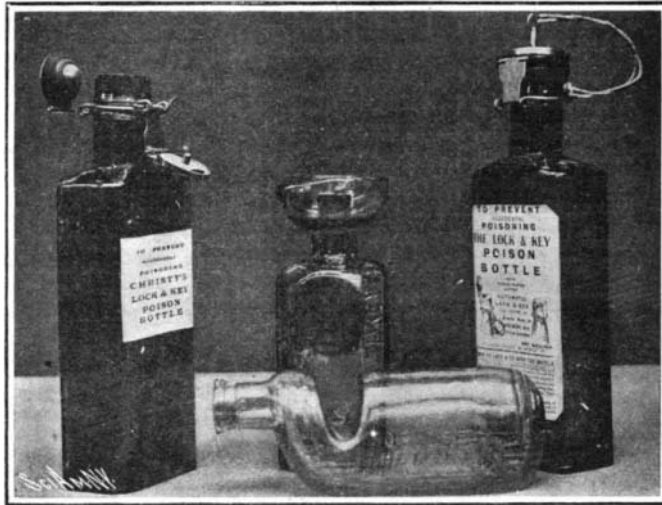
Among the many queer materials from which clocks have been constructed heretofore, slate is probably



A CLOCK MADE OF SLATE.

one of the rarest; in fact, it may be taken for granted that the clock shown in our illustration is the only one of its kind in existence, being constructed entirely of roofing slate.

Mr. O. Pritchard, a slate quarryman of Cardiff, Md.,



A POISON BOTTLE WHICH CANNOT BE ACCIDENTALLY MISTAKEN FOR AN ORDINARY PHIAL.

the builder of this unique timepiece, has made use of five differently-colored slates, including the peach-bottom blue slate and the red, green, and purple slate of Vermont. These colors are blended very artistically together, and the 164 pieces, mostly in open-work de-



A SPIDER'S WEB PRINTED ON A PHOTOGRAPH.

sign, composing the clock are united by 300 screws of different sizes. The pieces of slate vary in thickness from 1/16 to 1/4 inch. The design of the clock, which has a cathedral gong, represents a church front, lighted with nine three-candle-power colored incandescent bulbs, adding much to the beauty of this unique construction. The clock, which required eight months to complete, is four feet high, two feet wide, and one foot deep. Owing to the extreme thinness of the slate sheets, many were broken before the clock was finished.

The maker of the above clock is working on another larger clock of slate in the style of a grand Gothic altar, which will require two years to finish.

Little is known about how long the seeds of the various vegetables preserve their germinative power. De Candolle alone, hitherto, had studied the question. In 1846, he sowed the seeds of 368 different species gathered by himself and preserved for 14 years. He saw 17 species germinate; 5 malvaceous (out of 10 sown); 9 leguminous (out of 45); 1 labiate (out of 30). Mons. Paul Becquerel has recently taken up this investigation upon a larger scale, and he has just communicated his results to the Académie des Sciences. He sowed 550 species belonging to 30 families of monocotyledons and dicotyledons. These seeds had been preserved at the museum for a time varying from 25 to 135 years. They were washed in sterilized water; husked when the integument appeared too impermeable; then placed upon moist aseptic cotton hydrophile in a glass tank covered with a glass plate, which was maintained at a constant temperature of 28 deg. C. Out of these 550 species, each represented by a dozen seeds, 23 only germinated: 18 leguminous (2 laburnum, 1 mimosa, 2 acacias); 3 lotus; 1 malvaceous (lava-

tera), and 1 labiate (stachys). Seeds from 30 to 60 years old, several of which had the reputation of being good for several centuries, did not germinate. Of this number were: poppy, tobacco, euphorbia, fox-glove, etc. The seeds more than 45 years old that germinated belong to the following species: *Acacia bicapsularis*, *Cytisus biflorus*, *Leucæna leucocephala*. These seeds have a thick integument assuring impermeability to the gas of the atmosphere almost as perfect as if that impermeability had been produced artificially. This peculiarity agrees with the fact universally known to-day, that desiccation is an indispensable condition in the good preservation of seeds.

A New Denatured Alcohol Bill.

The compromise denatured alcohol bill agreed on by the House Committee on Ways and Means carries a provision that the measure shall not become effective until after September 1, 1908. This date was fixed at the request of Mr. Yerkes, Commissioner of Internal Revenue, for the purpose of granting him adequate time to prepare regulations for the manufacture of alcohol by small manufacturers not connected with distilleries.

The present law removing all internal revenue tax from denatured alcohol permits only distilleries and factories having large denaturing warehouses to engage in the manufacture of the alcohol designed for fuel, light, and manufacturing purposes, and the bill just reported by the House Committee is to permit farmers to convert their products into alcohol.

PUBLIC WEATHER TOWERS IN VIENNA.

In several of the beautiful parks of the city of Vienna very interesting weather towers or booths (Wetterhäuschen) in the shape of a pagoda can be seen. In the Maria Josefa Park, just opened, is one shown in our engraving, which is distinguished from most others by the number of its meteorological instruments, and by very full data and indications of general interest. It was made by Heinrich Kappeller, from a design by Ignaz Fuchs. On the front is an ingeniously constructed universal clock, designed and patented by Prof. Lauda, of Leitmeritz, and made in Vienna. This clock shows the time in all the large cities of the world. On the northeast side is an immense atmospherical thermometer, showing the temperature of the moment, while another beside it gives the extremes of the twenty-four hours past. On the northwest side is a new instrument, namely, an electrical barometer, which gives warning of impending electrical storms. Beneath it is a meteorological telegraph instrument, and from these two weather prophets reliable conclusions can be reached. On the southeastern side is a self-registering barometer, by which the variations in atmospheric pressure for an entire week are recorded on a strip of paper. On the southwestern side are two self-registering thermometers, protected from the sun. One shows the variations in the temperature of the atmosphere, the other the changes in a stratum of earth beneath the booth some eight feet deep. The remaining space is filled with interesting meteorological data. The booth receives much attention from visitors. The idea of combining the useful with the ornamental is a good one, and might be followed to advantage in our public parks.



PUBLIC WEATHER TOWER IN VIENNA.