

be necessary to keep the mixture warm and constantly stirred while using, or the oil would rise to the top.

ANOTHER—A Subscriber at New-Haven, Conn., sends the following, which he says has succeeded very well with him, it being so hard when dry as not to rub off even on a black broadcloth. Mix: $\frac{1}{2}$ bushel of lime; $\frac{1}{2}$ lb. of white vitriol (sulphate of zinc); 2 quarts of salt; and 5 lbs. of sugar—any refuse sugar will answer. We do not see why a compound like this should be so impervious to water, as not to wash off, which is the main difficulty with out-door white-wash, exposed, as they are, to rains and dews. We judge only from the chemical character of the ingredients, and not from actual trial, and therefore can not certainly say it will not answer the desired end.

HOW TO MAKE SODA WATER.

Having waited for others to answer the above question that I might receive information, I will now attempt to impart to others how soda water is *really* made.

Soda water is simple water highly charged with carbonic acid gas, and the *pure* article now found in all the hotels, taverns, porter houses, and refreshment saloons in the country, and which has become such a universal beverage, so palatable, and in fact so healthy, is made in an expensive apparatus, and in the following manner: The apparatus consists of copper made vessels, sufficiently strong to sustain a pressure of 150 pounds to the inch. These coppers have an inside lining of lead, so that the water shall in no case come in contact with the copper. They are in separate vessels, as follows: The generator, in which is made the gas; the acid pot, containing the vitriol: the coolers and purifiers, and fountains, which contain the soda water charged ready for use, all connected by small but strong lead pipes. About 30 pounds of whiting or marble dust, is well mixed up with about 20 gallons of water, and put into the generator; an equal number of pounds of oil vitriol is put into the acid pot, the purifiers and fountains nearly filled with pure spring or filtered water. Being thus charged, and ready to fill the bottles, the acid is permitted to drop through a small aperture into the generator, and coming in contact with the whiting or marble dust, immediately throws off a gas, and enough to cause any amount of pressure desired. This gas passes through the purifiers of water, whereby the least particle of impurity is detected, and thence into the fountains, where by agitating fans the water and gas is well mixed, until the incorporation is deemed sufficient. It is then let into the bottles through one-quarter inch gutta percha pipe, connecting the fountain with the bottling machine.

The machine for bottling is a piece of ingenious mechanism; as I have no power of description, I cannot give a proper idea of it, yet simple in its construction. The bottle placed under a cylinder, and cork at the top; the water passes into the bottle, retaining its full pressure of carbonic acid gas, and displacing all the common air in the bottle; as soon as full the water is cut off, and the cork pressed by the machine, into the bottle; the bottle is then taken with bottling tongs to another part of the machine, and the cork tied down.

This soda water is often drank in its purely carbonated state, but like real mineral waters, in this way it is not quite so palatable; it is therefore most universally flavored with syrups. These syrups are always made to suit the demand, the largest proportion being sarsaparilla and lemon. These syrups are put into the bottles before filling. One man to fill, and two boys to tie, will fill, cork, and tie 250 bottles per hour throughout the day.