results, if the emulsion is to be used at once. This gives us, then, by far the most convenient kerosene emulsion, when small quantities are required for immediate use.

The preparation is simple. The requisite amount of kerosene is placed in a dry vessel and flour added in the proportion of eight ounces to one quart of kerosene. It is then thoroughly stirred and 2 gallons of water are added for every quart of kerosene; the whole is then vigorously churned for from two to four minutes, and the emulsion is ready for use. When required for immediate use, two ounces of flour will emulsify one quart of kerosene; but, on standing a few hours, the kerosene will separate. However, it has been further found by Mr. Shutt that, by scalding the flour before adding the kerosene, an excellent emulsion which does not separate in the least after one week, can be prepared with two ounces of flour, by mixing the resulting paste with one quart of kerosene and emulsifying with two gallons of water. *Dr. Fletcher.*

White Hellebore.—This is a vegetable poison, being the finely powdered roots of *Veratrum album.* It is useful for leaf-eating insects and root maggots. Although very poisonous to insects, owing to the poisonous principles being soluble, it can be safely used where the arsenites would be dangerous. It can be applied as a dry powder or as a liquid mixture, using one ounce to two gallons of warm water.

Insect Powder (Pyrethrum, Buhach).—This is another vegetable insecticide of special value, from the fact, although it is extremely active in its effects upon nearly all insects, it is practically harmless to human beings and the higher animals. It is the pulverised flowers of some plants belonging to the genus *Pyrethrum.* It is useful for many household pests, as flies, mosquitoes and wasps, all of which are quickly affected, either by having a small quantity thrown into the air of a room by means of an insect-gun or small bellows, or by a small quantity (a teaspoonful) being ignited and allowed to smoulder. It seems to have a marked effect upon the breathing organs of insects. Where practicable, a dry application gives the best results. If mixed with four times its weight of common flour, and then kept in a tightly closed vessel for twenty-four hours, the mixture will kill nearly all caterpillars it is applied to, and in this strength becomes the best remedy for the caterpillar of the Imported Cabbage Butterfly. It can also be used mixed with water, 1 oz. to 2 gallons of water.—*Dr. Fletcher.*

No. 6.—*Tobacco and Soap Wash*:—

Soak 4 lbs. waste tobacco in 9 gallons hot water for four or five hours (or in the same quantity of cold water for four or five days); dissolve 1 lb. whale-oil soap in 1 gallon hot water; strain the tobacco decoction into the dissolved soap and apply the mixture to affected trees with a spray pump, using a fine nozzle and all the force possible. Or the mixture may be applied directly to the insects with a swab or brush. A good summer wash for all forms of aphides.

No. 7.—*Resin Wash.*—For Aphis and Scale Insects:—

Resin	4 lbs.
Sal soda	3 „