

a paste may be added after the lime has been slaked. Boil for an hour and a half in a kettle or in a barrel with live steam. Make up to 40 gallons; strain into spray tank and apply while warm.

Other lime-sulphur washes, made without the addition of external heat, are being tested, but their effectiveness has not been definitely ascertained.

### III. Kerosene Emulsion (For Bark-Lice and Plant Lice).

Hard soap .....  $\frac{1}{2}$  pound, or soft soap 1 quart.  
Boiling water (soft) ... .. 1 gallon.  
Coal oil ..... 2 gallons.

After dissolving the soap in the water, add the coal oil and stir well for 5 to 10 minutes. When properly mixed, it will adhere to glass without oiliness. A syringe or pump will aid much in this work. In using, dilute with from 9 to 15 parts of water. Kerosene emulsion may be prepared with sour milk (1 gallon), and coal oil (2 gallons), no soap being required. This will not keep long.

### IV. Tobacco Decoction.

Refuse tobacco ... .. 2 pounds.  
Water ..... 5 gallons.

Boil the mixture for 30 minutes or more, until a dark brown tea-colored solution is obtained. Keep it covered until cool. It may then be used undiluted for spraying infested plants.

### V. Whale Oil Soap.

For Plant Lice.—1 pound in 7 gallons hot water.

For San Jose Scale in Winter.—2 pounds in 1 gallon hot water applied as the buds are swelling.

### VI. Crude Petroleum.

Undiluted crude petroleum may be used in late winter on apple trees for the San Jose Scale, but the trees should be dry, and no part should be sprayed more than once.

### VII. Wash for Borers.

First, add soft soap to a saturated solution of washing soda to make a thick paint, then add 1 pint crude carbolic acid, and  $\frac{1}{2}$  pound Paris Green to 10 gallons of wash.

To be applied to the trunks of apple trees in early June.