

and delay of lifting them off and on is great, two separate arches are better. These furnaces must have a flue, communicating with a chimney, to create draft, and carry off the smoke.

15. A bushel of quick lime.

16. A gallon of fresh bullock's blood, or twelve dozen of eggs, or twelve quarts of milk. Either will do, but one of the first two is preferable.

PRELIMINARIES.

Having your mill ready, your furnaces built, your kettles and other utensils above described, on the spot.

1. Provide abundant dry fuel, close at hand, and ready for immediate use.

2. Cut and deposit at the mill enough canes for the day's work, say ten canes for each gallon of juice required. Place two tubs (which we will call tubs 1 and 2) at the mill ready to receive the juice.

3. Prepare a bone black filter as follows :

Take one of the sugar moulds, (which we will call mould No. 1). About three inches from the small end, fit into it the circular piece of half inch board, full of small holes. Upon this, lay the circular piece of wire gauze ; over the gauze lay a piece of heavy ticking (or blanket of several thicknesses), laying the edges carefully round the sides of the mould, so as to prevent the bone black from escaping ; stop the hole at the small end of the mould, half fill the mould with hot water, then pour in as much bone black as the mould will hold, leaving about three inches of space on top. Set the filter, thus made, upon another of the tubs (which we will call tub No. 3), to serve as a cistern to receive the filtered juice. Or, a filter may be made of a tight keg or barrel, set on end, with a hole in the bottom, stopped with a plug or faucet, and having a wooden second, or false bottom, perforated with gimlet holes, three inches above the first ; cover this with a piece of ticking or blanket, and on that put the bone black, as directed.

4. Prepare some *milk of lime* as follows :—

Put about a gallon of quick lime into a pail, slacken it with water, until it resembles milk in appearance and consistency. Set it aside, and *stir it before using*.

5. Prepare some *lime water* as follows :—

Put a gallon of quick lime into another pail, slacken it, fill up the pail with water, stir it thoroughly, let the lime settle. The clear water will be a saturated solution of lime, and is called lime water. *Do not stir this again, but use it clear.*

[To be continued.]