DRYING THE HOPS.

A great deal depends upon the proper drying of the hops, as a little carelessness will destroy half their value. If overdried or scorched, not sufficiently bleached, or bleached too much, their value is, to a greater or less extent, destroyed; and, if not dried enough, they are liable to heat and sweat from natural causes, which partially, if not wholly, destroys them. The process of drying requires the exercise of unremitting attention, and a good deal of sound judgment; and upon its success depends the results and profits of the whole season's labor. No matter how clean the yard may have been kept, how carefully the vines may have been trained, how rapidly and properly picked, and how neatly baled, if they are not cured just as they ought to be—if not quite enough, or a little too much is done—the whole season's labor, comparatively speaking, comes to naught.

The green hops should be spread upon the kiln to a depth of about twelve inches,—although, in case of emergency, they can be spread to a depth of eighteen inches. A 20x20 feet kiln is worked to the best advantage with from forty-five to fifty boxes. It should be stated, right here, that the hop-grower should either run one kiln or two kilns in twenty-four hours, and make his calculations for picking accordingly, so as not to have the hops picked faster than he can dry them. If one kiln only is dried per diem, it is more advantageous to dry them at night, as the hops picked early in the morning cannot, generally speaking, be kept in the sacks until the next morning, without spoiling. When two kilns are dried, the kilns are put on at noon and at midnight. They should be spread on the kiln at a uniform depth, and should never be stepped on, as it packs them so close that the hot air cannot circulate freely among them. If necessary to pass from one part of the kiln to another while the green hops are on it, the feet should be very carefully pushed down to the kiln-cloth, and slid along it as the person advances, without the feet being lifted up.

When the hops are spread, the fire is kindled in the hop stove, very moderately at first, and increased gradually so as to get the whole mass warmed thoroughly before a high degree of heat is reached, because, if the heat is too intense before the upper hops are heated, they will not allow the steam to escape, and the lower ones will be scorched. About an hour should be consumed in raising the thermometer inside the kiln to one hundred and thirty degrees. It should never advance above one hundred and fifty degrees, and should be maintained at one hundred and thirty to one hundred and fifty degrees. When the dryer discovers that some of the hops on the top of his kiln appear to be dry, which will be in about nine hours, they should be turned. This is accomplished by taking a common hay-rake, and commencing near the door, move the hops with the head—not teeth—of the rake from the sides towards the centre of the kiln, making a path two or three feet wide around the kiln to the door
again. Now, beginning at the outside of the hops thus heaped up, the
dryer shoves his feet under the hops and passes rapidly around the kiln,
scuffing the hops before him, and taking a furrow about a foot wide. Con-
tinuing thus to narrow the unturned mass, he arrives at the centre and the
hops are turned. They are now leveled off to a uniform depth, and allowed
to remain until thoroughly dried. In order to ascertain this examine the
cores in a handful of hops, and, if nearly all of them are dry and wiry, the
kiln is ready to run off. If the kiln is to be immediately used, they can
be shoved out into the store-room to cool; but as it is best to disturb them
as little as possible while warm, it is advisable if the kiln is not wanted for
immediate use, to allow them to remain until perfectly cool. If, then, they
are shoved out into the store-room to cool, they should be spread around
to a uniform depth. Before, however, a new kiln is shoved off, these should
be shoved back to make room for them, and hot hops from the kiln should
never be mixed with cool ones.

During the drying process it is customary to burn brimstone in the
stove-room, as its fumes bleach out the rusty spots on the outer leaves,
and also loosen up and expand the hops, and thus facilitate the drying.
When the kiln has become thoroughly heated up, at the expiration of an
hour from the time of firing up, and when the heat has been raised to
about one hundred and thirty degrees, half a pound of brimstone to each
ten boxes on the kiln should be burned in an open iron vessel on the stove.
After the fumes have passed away sufficiently to allow of an examination
of the kiln, if there are any considerable number of the hops still rusty,
half as much more should be burned. A very good way, when the hops
are very rusty or badly discolored by frost, is to set a pan or two of water
on the stove when firing up, which will soon boil, and the steam permea-
ting the hops will allow the brimstone to act upon the hops when applied,
at which time the pans of water should be removed. Sulphur has no
bleaching power upon dry hops. When properly bleached, they should
be a straw color, and no more brimstone should be used than is necessary
to produce this effect.

When removed from the kiln, the hops should always be allowed as
much air as possible, but shielded from the rays of the sun, which fade
them. They should be handled as little as possible, as they sell best when
unbroken.

If thoroughly dried, they will be ready for baling in four or five days,
but should not be baled so soon, unless absolutely necessary, although
they should not be allowed to lie over three or four weeks before baling,
as they lose strength rapidly by evaporation.

As long as lying in a pile in the store-room, they should be examined
from time to time, to ascertain that they are not disposed to heat and
sweat, and, if they are found to be so disposed, they should be shoveled
over gently, in order to give them air.

About eleven to twelve hours are required to dry off a kiln of hops
at about one hundred and thirty to one hundred and fifty degrees of heat—
the longest time, of course, being required at the commencement of the
picking season, when the hops are the greenest. For the last hour before
they are thoroughly dried, the fire should be allowed to slacken and the
heat reduced about one hundred and twenty degrees.

During the drying process, there is great danger of the drying-house
or the hops taking fire; and no grower should think of attempting it
without having an insurance policy on his house and hops, covering the
whole drying season. A few barrels of water and buckets should also be
kept standing at the door of the stove-room, as, owing to the intense heat
maintained in the kiln, and the inflammable nature of the dry hops, it is
impossible to suppress a fire when it has had a moment’s start. Should a
fire occur, it would not be amiss to throw water on the stove, as the steam
thus created would very materially aid in subduing the flames.
Enough air should be let into the stove-room, through the openings already described, to keep up a steady draft through the hops, and out of the opening in the roof, else the vapors thrown off by the hops will not be carried away, but become chilled and fall back, and the drying process be retarded.

PRESSING HOPS.

There are several kinds of hop presses in use in the hop region. The one, however, combining the most points of excellence, is the "Bellinger Excelsior Hop Press," manufactured in this county. In using this press, the following is the modus operandi:

The press is stationed directly under a hole in the floor of the cooling-room, which should be about twelve by twenty four inches, and provided with a bottomless sack, securely tacked around the edges, to conduct the hops into the press. The press should be taken to pieces, and a piece of sacking one foot longer than the inside of the press (or half of a temporary field sack) should be placed on the bed so there will be just the same margin on each side, and six inches on each end beyond the inside of the press when it is set up. The sides and ends should then be replaced and the fastenings secured, the movable end-boards put in place and buttoned, and the movable side-boards on top put up. About three bushels of hops are first put in the press, and two men get in and tramp them down. Dancing is a favorite pastime in hop-picking time, and if any of the men about the place are inclined to "trip the light fantastic toe," now is a good time for them to exhibit their muscle. A couple of Indian braves, dancing the war dance, to the music of their tom-toms, would do excellent service. More hops must be added from time to time, and the tramping continued until the press is full. A bale should weigh about two hundred pounds, and after pressing one bale and weighing it, a very good idea may be obtained of the amount of tramping necessary. The press being full, take the board which goes under the follower and cover it with a piece of sacking of the same size as that at the bottom, leaving the margins the same as before. Gather up the ends and sides of the cloth, (the latter being wrapped around the board,) and put in the press. Arrange the folds of the cloth so the follower will not confine it and apply the power. As soon as fairly started remove the first of the movable boards at each end, and the others as the follower descends. When the bale is about twenty-seven inches in height, remove the ends and sides and lay the upper over the lower sacking, fasten with six or eight scratch-aws, or slim iron pins about six inches long, until the sewing is completed. Large, awl-shaped needles are used; and the best soot sail twine for thread. A little piece of tallow will be found useful to grease the needles. Commence sewing about two inches outside the bale, and end about the same. Draw the stitches tight, and let them be about an inch apart. Now remove the power and carefully roll the bale out. The ends are neatly fastened by means of twelve slim hard-wood pins about six inches long, six at each end. The bale should now be set on end to be capped at leisure, care being taken to leave space between the bales for the circulation of air. In capping no larger pieces of sacking should be used than is necessary to cover the pins. The raw edges should be turned under.

MISCELLANEOUS.

The weight of hop-sacking should be about one and a half pounds to the yard, as anything lighter than that is not sufficiently strong to bear shipping long distances, and anything heavier is objected to by brewers as an unnecessary tax on them. We have known hop-farmers to use two-pound sacking, and to put in pins large enough to pin together a barn frame, but as every man's hops are marked by the buyer with lot and number, the fraud is easily traced back, and the dishonest farmer has to suffer for it. In training the vines wind to the left, or with the sun.