



MAPLE SUGAR MAKING.

The sap of the Sugar or Rock Maple when it first flows in the spring, is to appearances nearly as clear and liquid as pure water, and in reality it contains scarcely anything but cane sugar. The sugar is more easily obtained in a marketable state than from the juices of any other plant yielding sugar for commerce. If the sap be pure and clear as it flows from the tree, it is only necessary to boil it down in clean vessels, taking care not to burn it, and when sufficiently concentrated, to preserve it as molasses, or after boiling more, to pour it into moulds. It is so easily and cheaply produced that sugar makers have been very careless about it, using utensils of the rudest character. The amount of uncrystallizable sugar or molasses necessarily produced is very small, but as the molasses is quite as much valued as sugar in most markets, this has led to some neglect of the sap, and deteriorated the character of both sugar and molasses.

Let the first fact stated above, be fixed in the mind, viz., that pure sap yields nearly pure sugar, and that the coloring, the quality, and much of the labor of sugar making, result from foreign substances that get into the sap while in the troughs, etc. Remember further, that in the absence of these foreign materials the amount of crystallized sugar obtained will be much greater. We see then, the importance of securing the greatest possible cleanliness, in every thing connected with collecting and manufacturing the sap. Exposure to the air produces fermentation, and diminishes the crystallized sugar rapidly; therefore, covered vessels, and boiling as fast as the sap flows, are important. Fermentation of the sap also injures the peculiar "maple flavor" which is so greatly relished. The quality of the sap, that is the amount of sugar to the barrel of sap, varies considerably from year to year, but we know of no accurate experiments touching it, nor to determine the character of other substances present in the sap.

The wooden sap troughs and potash kettles are still in use in some parts of the country, but enterprising sugar makers use wooden buckets which are preferable to tin, and flat evaporating pans, and the sugar is much improved. The sap is sometimes conducted to the sugar house in "leaders" or small wooden troughs, which would be improved by scalding them out once a day to prevent souring. In like manner the buckets ought to be scalded occasionally. The trees are tapped with half-inch augurs, and the hole enlarged with a sixteenth of an inch larger bit, before the close of the flowing season. The sap spouts are 6 or 8 inches in length, 1 inch square, or turned round having a one-fourth inch hole bored through them. The ends are tapered off, and they are driven into the holes of the trees so as to barely hold. If tubs are used to collect the sap, there should be holes of about 10 inches square cut to pour in the sap, and over them linen towels should be laid, to strain out sticks, leaves, etc., if the arrangements of the buckets, etc., are not so perfect as to exclude all filth, as is desirable. After this, the sap must be kept covered. The storing tubs should stand on higher ground than the boiling pan, so that the sap will flow from one to the other. During the boiling, skim as often as skum rises. It is seldom that much skimming is necessary. When the cooled syrup is nearly as thick as good molasses, draw it off into a tub to settle, straining through a flannel strainer. Here any sediment will be deposited. After the syrup has settled clear, draw it off, and boil it down again until it is thick enough to sugar off.

When the sugar is to be "caked" or "stirred," it must be boiled until a spoonful of it put upon snow will be perfectly brittle when cold. The liquid sugar is taken from the fire and when granulation has commenced, and the mass is thickened considerably, fill the moulds rapidly. If it is to be stirred, at the same time commence stirring, the kettle being held firmly, and stir the mass till it has the appearance of dry brown sugar of the shops. When the sugar is to be drained it is usually taken from the fire before it would cool brittle, and after standing until it granulates quite thoroughly, it is ladled out into tubs with false bottoms, some five inches above the true, three or four holes being in the false bottom, and covered by saucers or plugged by round smooth sticks. The sugar is ladled into the tubs, and when settled the plugs are loosened and partly withdrawn, so that the molasses will run through. This may be drawn off from the bottom of the tubs. —[American Agriculturist.]

HOW TO CURE HAMS AND BEEF.—Joseph K. Hulm, Burlington Co., Iowa, contributes to the *American Agriculturist*, the following directions for curing hams and beef, by which he says he has satisfactorily treated many thousand pounds of meat for home use and for market: Provide a sweet, clean, tight cask or tub. Weigh the meat, pack it neatly but not too closely, sprinkling a few grains of coarse salt upon each piece, and cover with a weight to keep the whole in place. Take enough clear soft water to cover the whole, and dissolve in it good Turks Island salt until a fresh laid hen's egg will float enough to show the size of a dime above the surface.

For every 16 lbs. of meat, dissolve 1 oz. salt-peter in hot water, add 1 gill of molasses for each oz. of salt-peter, stir the mixture into the pickle, and pour the whole upon the meat, which should be entirely covered. Hams should remain in this pickle three weeks; then take them out to drain. If the brine be not strong enough to float the egg as before, add sufficient salt to bring it up. Replace the hams and let them remain four weeks longer. Then hang to drain, and afterward smoke them with hickory or apple tree wood, until they are about the color of mahogany.

Beef should remain in the pickle six days, at first; then be removed and drained, and again replaced for six days longer. After this drain, and smoke, the same as hams. Meat so prepared is known in many places as "Jersey Red," and is of first quality.

ANOTHER BEEF PICKLE.—Mr. David Garigus, of New Haven Co., Conn., sends to the *American Agriculturist* the following: To 100 lbs. beef, take 4 quarts salt, and 1-2 an oz. salt-peter; rub the beef well with it, and pack closely, in clean barrels; let it stand a few days, and then draw off all the brine which has formed. (This first brine is bloody and would hurt the beef if left on.) Then make cold brine strong enough to bear an egg, adding 1 1/2 an oz. salt-peter and cover the beef with it.

CARE OF FIREWOOD.—There is a way of piling wood out doors, which seasons it fully equal if not better than that piled in a wood house. The plan is simply as follows: When beginning to split, throw the split wood into a conical pile, until the circumference is sufficiently large to hold the most of the pile to be split; then build up a tier of wood around the split pile, continuing the tier up at intervals as the split wood is thrown on; when near through splitting round up the pile quite steep; you can then easily thatch it by laying tiers of wood singly around the top, beginning at the outer edge, letting each tier overlap the other until you reach the apex. This will afford sufficient protection from wet. In this way you get a better circulation of air through the pile than any wood house will afford, and when opened for use you will find a most excellent quality of wood. —[Agricultural.]

THE SHADOW.

I was traveling toward evening on one of those great moors, covered with low gorse and scattered stones, of granite common enough in Cornwall. The gorse was covered with snow, and the huge granite rocks that rose here and there pushing their way out of the earth from the stratum below, looked dazzling in their white covering. I was on foot. I had come a long way and was weary. It was, then, a matter of great anxiety to me when, after an hour's walking, I discovered that I had lost the track. It had never been more than a bridle road, and it was quite choked up with snow; it was easy to lose it. The inclement weather, so rare in Cornwall, had evidently deterred any traveler from choosing this shorter route, and the great bleak ridge lay now before my eyes in unbroken whiteness, unmarked by step of man or beast.

In vain I turned to the right or left, seeking to recover the lost path, or at least to find some blessed footprint that should speak to me in accents clear as human voice of help and shelter. None such met my view. If any wayfarer had lately passed that solitary waste, the fast falling snow had effaced his steps with the white covering that hid my own track almost as quickly as my weary feet marked their way.

I stood still in despair and gazed around. As far as I could see stretched one wide waste of snow dotted here and there by the rugged granite, that uprose in solid masses from the earth. The snow fell thickly, blinding me as I looked; but I fancied in the dim distance I could define the form of a solitary tree.

I stood patiently waiting till some momentary lull should quiet the sharp wind, which was now whirling the blinding snow into my face, and thus enable me to judge whether this indistinct object was a tree or not. In a short time such a lull occurred: the snow ceased suddenly to fall and I felt convinced there was a tree, being also equally certain it could not be growing on the common itself.

This inhospitable soil, scarcely an inch thick, resting on the primeval granite, could not shelter the roots of a tree. Here, then, were the limits of the moor. By the tree I should at least find a more hospitable country—meadows, roads, perhaps a village. I determined to steer straight for this point, abandoning all hope of reaching the place for which I had set out. By this means only could I hope to escape from this interminable waste, which, perhaps, stretched miles on either side of me. Shading my eyes with my hand, I looked at my landmark, and judged it to be about three miles off; and with cheerful courage, counting the distance but little in my new hopes, I started at a brisk walk in spite of my weariness.

Night fell suddenly around me as I sped on, but the moon had risen early in the afternoon, and her bright light enabled me to keep the tree constantly in view. I soon discovered that I was right in my conjecture when I supposed it to be beyond the moor. The changed character of the ground sufficed to prove that I was approaching the outskirts of the common. The gorse grew thicker and wilder, and here and there a little corner enclosed by a low hedge of loose stones, showed that cultivation was encroaching on these desolate borders. These little patches in the great

waste, covered as they were with snow, had an inexpressibly dreary look, making me feel the solitude more acutely from their very association with life and labor.

I plodded straight on, ever keeping the tree in front, while an oppressive sense of loneliness, weariness and cold weighed heavily upon me, added to an undefinable feeling, more painful still, that made my flesh creep and shiver. Suddenly I found myself obliged to halt before a steep embankment rising like a snowy ridge on the plain. As it wound its length to some extent on either side of me, I scrambled up its side in order to see if I might not, by crossing the enclosure, avoid the detour of skirting it. On reaching the top, I perceived it enclosed the workings of an abandoned mine. The yawning shaft was still there—a black spot in the white snow telling of depth and darkness. The ruins of buildings lay in dreary snow-covered heaps; fragments of walls, piles of rubbish scattered here and there, glittered in the moonlight with dazzling whiteness; while through it all ran a dark stream, not bound up in frost, but brawling over stones and rocks in a precipitous descent till it reached a cliff, where in a shower of foam mingled with driving snow, it descended into some unknown valley lost to me in the darkness.

I stood for some moments contemplating this scene. Dread it would have been at all times; but now, in the silence of this winter night, clad in its snow garment, with that cold, still moonlighting up its chill desolation, it had to me something appalling in its ruin. The fear of some hidden shaft, or open adit, deterred me from crossing this place, and determined me to skirt the embankment which indeed scarcely deserved this name, as it was in fact but heaps of stones and rubbish flung from the mine.

The great shaft lay almost at my feet. By the light of the moon I could see some way into its depths, and mark where the snow speckled its dark sides. At the edge of the yawning pit lay a pile of heavy stones covered with snow. Against this the moonlight shone brilliantly. I was about to turn and descend, when I was struck by the strange appearance of my shadow on this pile. It had its arms folded as I had, it gazed into the pit as I did, it was no longer, or colder, or grayer than other shadows, and yet filled me with an indelible sensation of strangeness. I do not know what possessed me to do it, but I flung my arms into the air, and as the figure did the same, there was such an expression of measureless despair in the action that, unable to bear the sight, I turned and fled.

In this flight, which had a fear in it that words cannot express, I lost my footing in the treacherous snow, and fell heavily. As I rose from the ground I fancied I heard a cry, like the sound of a human voice, arise from within the embankment, mingle with the rush of the stream, and die away in the roar of its fall. I stood still and listened, but all was silent save the dash of waters; and then reassuring myself, I essayed to continue my journey. The moon lay at my right hand, the wall of stones on my left, and on its glittering surface of snow my shadow stood out distinct and clear. For a moment my shadow only; but in an instant I saw, with a sensation that lifted every fluttering hair on my head, the shadow that had stood on the brink of the shaft, creeping stealthily behind my shadow, mocking every motion of mine, and of it, even to the terror that my own feelings impressed on this gray image of myself.

I had been a spectre haunted man all my life long; but the shadow that had ever followed me had come in the shape of a murdered woman, sometimes accompanied by a pale sweet face I knew too well. But this was strange, unlooked for; so, with bewildered, fascinated gaze, I turned and faced my tormentor.

This shadow I thought was none of my raising. In the sharp outline of that haggard profile there was no likeness to my spectress. The pointed beard, the old fashioned dress, the waving curls, spoke of a by-gone period. I marked it well, as for a moment the shadow and I stood face to face; then, setting my steps towards the dim tree, I strode resolutely forward.

The thing followed. In vain I turned and faced it, or in despair dashed rapidly to the right or the left. It was always behind me, always mocking my movements. I gathered up snow and flung at it; in horrid mockery it repeated my action. The nerving myself for the effort, I sprang on it, and tried to grapple with its impalpable form. I only grasped the cold snow, while it stood by with its unchanging face, ever expressing that one look of dire, boundless despair.

In face of this thing I was powerless, and, feeling this, I resolved on flight; but when, on turning my head, I saw it gliding on, without apparent movement, and yet close to me, I lost my self-possession, and ran hither and thither on the moor, till sense failed me, and I fell senseless on the snow. When I recovered myself, the shadow still stood over me like a sentinel; the same despair in the sharp lineaments, the same strange appearance of life in its grey form.

I arose sick and numbed with cold. I began to feel that if I could not soon reach some human habitation I should die. In this new fear I almost ceased to regard the spectre; was I not used to strange sights hidden to others?

All my energies were concentrated on reaching the tree, whose snow laden branches gleamed distinctly before me. I had a small flask of brandy in my pocket; putting it to

my lips, I drank all it contained, and then, less pallid, less numbed with cold, I walked on with a surer step.

Often I turned to look at my companion. Some new demon surely possessed it: a thousand wicked lives were in it. On that haggard profile, with its deep lines of despair, a new malignity sat triumphant. It mocked no motion of mine now; it had a hundred of its own. It seized my shadow, and seemed to shake it, as it laid its thin long hand, of which I marked the bony fingers, on its shoulder, making my flesh creep at the touch, though it was not on me that gray hand rested, but only on the dim similitude of myself on the snow. Sometimes it flung its arms upwards with that same gesture of measureless despair that I had marked when I first saw it standing by the old shaft.

I went steadily on, an inexpressible feeling of relief stealing over me as I neared the giant tree. For hours its rugged branches had loomed before me, as an object to be reached by an effort. A thousand fancies had sprung up round its figure—hopes of rest and refreshment, visions of ruddy fires, of kind, helping hands, cheery voices, and merry faces—all, in my loneliness and pain, appearing to me with a beauty and happiness that merely homely life had never before worn for me.

I reached the borders of the moor. The tree stood out against the sky; so distinct every snow laden branch that I could have counted them. It was straight before me. I hurried on, with a step that had something of unreason in it, so eager and fierce had it become. A low fence now alone separated me from the object I had so long striven to reach. I leaped it with a glad cry, and found myself in a narrow lane, directly fronting the tree, which was planted precisely at the point where four roads met. I rushed rather than ran toward it, so eager was I to clasp the gnarled trunk, and feel that this thing, that for so many hours had seemed to mock my endeavors to reach it, was no phantom like that gray shadow lying on the moor. Quick though I had been, this creature of my spectre-haunted brain was quicker. I reached the tree to see it lying beneath the branches, stretched; on the snow—the shadow of a dead man!

It was impossible to mistake the sharp outline of death in the cold profile, the right position of the limbs, the stony look, and immovable calm of the prostrate figure. A moment before it had stood erect, and a thousand evil lives had been in it, as it tormented me on the dreary heath, now it lay beneath the leafless tree—stiff, rigid, motionless, dead, and yet only like the shadow of death.

With one arm around the trunk of the old weird tree, I stood regarding it till I grew frantic. In my frenzy I determined to cover it up, and hide it from my sight in the snow. I flung armsfull on it; I gathered snow around me in shining heaps, and dashed on it—always in vain. It lay there still, ever on the surface, in immovable calmness, more hideous a thousand times than the demon antics with which it had haunted my path on the moor.

Exhausted, I ceased these strange exertions, and drops of anguish fell from my forehead as I essayed in vain to leave this haunted place. Some invisible chain—some horrible attraction—kept me there, in spite of all the efforts made by my will and my reason to resist the spell. This struggle between me and the viewless power that held me was terrible; the sweat stood on my brow, and the veins in my temples swelled like cords. I felt myself giving way, when a little wooden cross standing just at the head of the shadow arrested my attention, and in spite of that horrible presence I stooped to regard it more earnestly.

By the light of the full moon I read this inscription in deeply-cut letters:

TO THE MEMORY OF REGINALD CAERBYDON.

May God have mercy on the self-murderer!

I started back. I stood, then, on the grave of a suicide. And this phantom—what was it?

I was not afraid of such things; from an early period of my life I had been shadow-haunted; but I hated the peculiar trance-like, benumbed, powerless state into which I was thrown, either by the visions themselves, or by some power which, through this state, then enabled me to see them. I wiped the sweat from my brow, and, with one arm clinging to that strange tree that had beckoned me on for so many miles to this grave, I concentrated all my faculties in the one sense of listening. A human sound—the faintest echo of my human life—reaching me there, would, I felt, break the spell whose horrible chain bound me to this spot. Gradually on my strained ear came the ripple of running waters; gratefully, pleasantly, it fell, bringing a new sense of power—a feeling of recovered strength. I unwound my arm from the deadly tree and stood upright.

Another moment, and the bark of a dog, mingled with the cheerful, hearty whistle of some rustic, broke like music on my ear. With a cry of joy—released, free—I bounded from the accursed spot—from that shadow of some unseen dead man, and, rushing on at headlong speed, found myself by the side of that little brook the sound of whose rippling waters had come to me like a holy whisper of heaven in an evil place. I sprang across the stream; and whether its clear springs had a power of their own to change the current of that magnetic or spiritual influence that had held me, I know not; but the moment I had crossed I felt myself free, calm, and with full power to perform my own will in anything on which I might resolve; in a word, I was master of myself.