

possibly see, as both head and point were hidden. One difficulty I found, which I subsequently avoided by a very simple contrivance. This difficulty was to build the corners and wall quite plumb and straight up and down, and at the same time to have the outside quite smooth and square. I tried the plumb rule with every course and the line to lay each course by, the same as bricklayers use, and this plan answered well enough; but it took twice as long to plumb a line each course as to lay it, and I soon gave that up and substituted the following in its stead: I selected twelve perfectly straight edged boards, about 16 feet long, and nailed them up at each corner, and the centre division between each corner, but not within 12 inches of the corner itself. The boards were tacked edgewise to the sill, and stood up all round the building, exposing the inside edge (nailed to the sill), as a guide by which the wall was to be carried up. These guides were carefully plumbed, so as to be perfectly upright. Without this precaution it was manifest the walls would slope outside or inside. A board standing 16 feet high, only tacked to the sill edgewise, must necessarily be very feebly sustained, and another piece was tacked to the upright in the form of a brace. To secure the outside end of this brace there was driven into the earth a piece of scantling about three feet long, and the brace nailed to it securely. This made all safe, stiff and secure, and the uprights were quite incapable of moving outwards, when laying up the walls, piece by piece, and of course were equally unable to be displaced towards the building, as the walls themselves effectually prevented this.

I recollect I finished building the walls of a stable, 25 by 16, and 14 feet high, in two days, with one man to help; and after ten years' use there is no fault to be found with this mode of architecture. I have several such buildings now, and believe them the cheapest and most durable of any, and certainly by far the warmest. Of this there is no doubt whatever. In fact, if there is any fault, they are too warm, and require ventilating holes cut opposite each horse's stall in rear and front, of about 12 by 8 inches, fitted with a sliding clap, to admit air. In cold weather, when the wind blows on one side, I open those opposite, and so alternately reverse the ventilation.

Now as to cost, (for the economy of building is certain, and the comfort and warmth equally so), one square hundred feet of upright boards outside, the same for lining inside, with studs between, braces for studding, and extra size for posts, will amount to three inch thick of a wall. The battens outside will be about equal to half an inch, and those inside half an inch more, and this makes exactly four inches thick. The lumber for this is worth about 25 per cent. more than what will be requisite for my mode of building, and the labour will be about double, or probably four times as much; the nails probably somewhat less for frame than for my plan; so that, on the whole, my mode will cost about 12 1/2 per cent. less than an ordinary frame of upright boards; and we all know what a cold, miserable, warped appearance this kind has in a few years; whereas my building will be just as good twenty years hence as at first.

This class of building is most extensively used for elevators and buildings requiring enormous strength, and I never heard of one breaking down; nor do I believe one ever got out "of truth," or failed in its original proportions in any way.

C.

Poetry.

My Birthday.

Beneath the moonlight and the snow
Lies dead my latest year.
The winter winds are wailing low
Its dirges in my ear.

I grieve not with the moaning wind
As if a less befell:
Before me, even as behind,
God is, and all is well.

His light shines on me from above,
His low voice speaks within,
The patience of immortal love
Outwearying mortal sin.

Not mindless of the growing years
Of care and loss and pain,
My eyes are wet with thankful tears
For blessings which remain.

If dim the gold of life has grown,
I will not count it dross,
Nor turn from treasures still my own
To sigh for lack and loss.

The years no charm from Nature take
As sweet her voices call,
As beautiful her mornings break,
As fair her evenings fall.

Love watches o'er my quiet ways,
Kind voices speak my name,
And lips that find it hard to praise
Are slow, at least, to blame.

How softly ebb the tides of will!
How fields once lost or won
Now lie beneath me green and still
Beneath a level sun!

How hushed the hiss of party hate,
The clamour of the throng!
How old, harsh voices of debate
Flow into rhythmic song!

Me thinks the spirit's temper grows
Too soft in this still air,
Somewhat the restless heart foregoes
Of needed watch and prayer.

The Larque by tempest vainly tossed
May founder in the calm,
And he who braved the polar frost
Faint by the isles of balm.

Better than self-indulgent years
The outliving heart of youth,
Than pleasant songs in idle years
The tumult of the truth.

Rest for the weary hands is good,
And love for hearts that pine,
But let the manly habitude
Of upright souls be mine.

Let winds that blow from heaven refresh,
Dear Lord, the languid air,
And let the weakness of the flesh
The strength of spirit share.

And if the eye must fail of light,
The ear forget to hear,
Make clearer still the spirit's sight
More fine the inward ear!

Be near me in mine hours of need
To soothe, or cheer, or warn,
And down these slopes of sunset lead
As up the hills of morn!

JOHN G. WHITTIER

Household.

Cider Making.

At the request of a correspondent, and in order to answer a variety of enquiries, we publish the following article on cider making:—

The art of making the best cider consists in observing some very simple rules hereafter; but no one can make a first-class article without having the true cider apples to do so with. Nevertheless, an excellent drink can be made, (and one that will retain its sweetness and yet keep well,) out of ordinary good grafted fruit, by attention to the principles of fermentation and the following rules:

1st. The temperature of the building in which the cider is to be made should be about 50°, and all frost must be excluded at the first part of the process as inconvenient, and during the fermentation as most injurious.

2nd. The apples must be ground as fine as possible. Fluted rollers are the best to produce absolute abrasion of the cells that contain the juice. Without this the yield will be small.

3rd. Any kind of press will do, but if the surface to be acted on is more than eighteen inches diameter, there must be a power applied that will raise at least two tons; in fact, you may safely conclude that whatever press is used, there must be a pressure of at least one ton to the circular foot surface, and more if it can be put on. I have seen on a surface of 5 by 4, or 20 square feet (equal to 25 circular feet), two large wooden six-inch-stump machine screws, and there was none too much pressure employed. However, one such screw on a surface of 3 by 3, or 9 square feet, will answer very well, provided that the frame that contains the pulp be strong enough.

4th. After pressure, the juice must be strained through a cloth so fine and of such material as to leave it quite free from any apple pumice or other matter; in fact, it must be "bright as wine" previous to fermentation.

5th. All the juice that is pressed one day should be strained and finished at once, not allowed to remain over-night standing about or neglected in any way; fermentation will otherwise set in before you are ready for it.

6th. Until you are ready for fermentation to begin, any temperature above freezing will answer well—the cooler, however, the better. Fermentation will be thus be retarded until the juice is finished and in the barrels; then the temperature should range between 50° and 55°.

These points are very important. We will now proceed to describe the process of pressing with the straw strainer, premising that