

"Dump" it in between your mould-boards, and "tamp" it down with a trowel wherever you suspect a hollow place. Two men can lay 100 feet a day of this, one foot thick.

As the lime must be slacked and left for not less than three hours before mixing with the gravel, it is necessary to have a mixing-box separated from the lime-box.

Let no scaffolding touch the walls, for fear of pressure.

KINCARDINE (ONTARIO) PLAN,—being the experience of a person who had been for the last fifteen years employed in the construction of concrete houses.

METHOD OF MIXING.

"Make a large lime-box, in which slack four bushels of good strong lime. Cover the lime well with water and stir it whilst slacking, to keep the lime from 'burning.' Be sure to keep plenty of water in the box. Have the slacked lime about the consistency of very thin white-wash. It is better if allowed to settle for ten hours before being mixed with gravel.

Make a pit 8 inches deep and 14 feet long by 10 feet wide. Lay the bottom with boards, and let the side-boards be 8 inches wide. This size of a pit will contain materials for 216 feet of wall 9 inches thick.

Throw gravel (including pebbles and small broken stones,) evenly over the bottom of this pit. One man stirs the wash that is in the lime-box, and dipping it up with a pail throws it evenly over the gravel in the pit, whilst two others fill up the pit with gravel. These now turn over the gravel from the floor, beginning at one corner of the pit, and merely turning it over, leave one corner of the pit empty. The men shift the mould-boards on the wall, which will take say two hours. This will give the material in the box time to settle.

Whilst the others are filling the material into the wall, the man at the lime-box must always be kept at his post, as this will ensure his proficiency in the very important work of slacking the lime. He must keep his lime-box full of the white wash, and in bailing it out over the gravel must not stir this wash to the bottom, as only the finest particles of the lime must be used for external walls.

If the mixed concrete is too poor, a little more wash must be added, if too rich a little more clean gravel and lime-water from the top of the box will settle the business.

One man attending to the lime will keep two men wheeling, for carrying the material to the wall in wheelbarrows is the most expeditious way.

216 feet of 1 foot wall can be filled in 5 hours."

This builder says:—"I have put three and even four courses in succession, in dry weather, but it is not prudent to do so. The best walls are built in damp cloudy weather.

No walls ought to stand more than two days without a course being put on, as the under part will in such cases be too dry.

All moulds for flues and other openings must be moved up three hours after filling.

All hammering of walls and jarring of scaffolds must be carefully avoided until the walls are thoroughly set, and hard.

The best 'gravel' includes one-third sharp sand, one-third pebbles, and the remaining third broken stone of say from 2 to 4 inches in diameter, if the wall is thick. Large stone will not pack close.

Concrete partitions should not be less than six inches thick.

All bond timber must be set in perpendicularly.

All frames, such as those for doors and windows, should have inch strips nailed on their wall-side to pack into the wall so as to hold the frames in their places.

All frames must be braced across the centre, to prevent 'thrust.'

All lintels above openings must be of well seasoned stuff."

From a United States Government contractor, resident in Rochester, N. Y., who has had great experience in concrete foundations, I obtained this plan of mixing cement or water-lime concrete, which is as follows:—

To obtain the proper rule of proportions in mixing,—Take a tub and fill it with broken stone, in pieces about the size of a hen's egg. Fill up the tub with water. Drain the water off and put into another tub as much sand (in bulk) as the bulk of the water drawn off. Pour as much water on this sand as will just cover it,—then draw the water off and get as much Louisville cement as the bulk of this water—and a little more—to allow for waste. This gives the proportions of broken stone, sand and water-lime for good foundation concrete. Mix with as much water as will make the sand and water-lime or cement into a thin mortar.

Mix (and use immediately) small batches at a time.

Cement does not do as well above ground as below.

When cement concrete is made in batches it must be covered with sand to keep the sun off it.

Louisville cement costs in New York, \$1.75 per barrel. Rosendale cement of excellent quality can be had there for \$1.50 per barrel.

Cost of lime concrete for external walls as given by the builder in Kincardine, Ontario:—

"Three men will build 216 feet of nine inch wall in one day,—materials on the ground. Wages for two laborers per day \$2.50; foreman's wages, \$2.; total \$4.50. The same number of feet in brick requires 2908 bricks, four men, viz: two laborers at \$2.50, and two bricklayers \$5 per day,—making for labor \$7.50 per day. 3456 feet of concrete wall cost \$200. The same in brick work would cost \$450."

Concrete houses are lathed and plastered on the inside, the lathing being about an inch from the wall. This leaves a space for ventilation, in the gradual drying of the wall, and prevents dampness,—the usual pest of stone houses.

Reader, if you think of building, and have followed me thus far, do not be afraid of concrete as an untried thing, nor shun it because of failures in the attempts of such as have not mixed it properly. Properly mixed and laid in the walls, it forms a beautiful and most durable building material.

Make a block or two of it first, or put up a small out-

building, and after observing the effect of heat, cold and wet, upon it for a year or two, your fears and doubts will vanish. The primary experiment will cost but a trifle.

If some of our enterprising young men, at present cramped by the want of capital, would but experiment upon concrete buildings a little until they should obtain proficiency, no one can doubt that here—as in Ontario—such builders would never lack employment, and people even in very moderate circumstances might easily enjoy the luxury and respectability of a handsome and substantial stone house.

JOHN AMBROSE.

For the Church Journal and Messenger.

LYNES

On seeing a very young child quite blind in London dancing and holding his mother's hand.

How mournful is his countenance! oh pity, let us stand
And see this little helpless child, holding a woman's hand;
No radiance of earth's morning beams can ever reach his sight,
And the violets and the cowslip buds for him are dark as night.

How can our hearts be grateful, or how can lips give praise,
When, gazing on those stony eyes, we think of earlier days—
Our childhood, with its happiness, its joys and bliss untold,
Not groping in a dreary street with nothing to behold:

No Summer and no seasons except the bitter cold;
Only a famished mother's kiss, her weary hands to hold?
But God, who loves the little ones, and set this load on thee,
The stamp of suffering and of sin, can let thy spirit free.

And when those orbs behold at last, with tears no longer wet,
The heavenly city's streets of glass, thou wilt not feel regret.

What thou hast missed, poor innocent, on earth, thou'lt never know,
When welcomed to thy Father's home, redeemed from pain and woe.

C.

For the Church Journal and Messenger.

CARNIVAL.

Last night all the fairies in Elf-land
Were out on a mad-cap levee;
I listened, and thought them as merry
Such little spirits could be.

Of course the old moon was not shining,
He knowingly pursed up his lips;
And the stars taking hint in a moment,
Passed with him in total eclipse.

And then what a shout of carousal
Went singing along through the sky;
Each elf astride of a snow flake,
Stood ready to fall or to fly.

Down, downward they floated so bravely,
Hurrahing and shouting they go;
And many an old wife looked upward,
And shivered. "It's going to snow!"

Going? Why, bless me! dear grandames,
The ground is already quite white;
And the little snow elves are coming,
For carnival frolics to-night.

But hark! from a mighty wind organ,
A wonderful key note is stirred;
Now loud as the blast of a trumpet,
Now soft as the trill of a bird.

And then other instruments join it,
With choruses piping and shrill;
And merriest, maddest, dance music,
Come floating o'er valley and hill.

They waltz on the roofs of the houses,
Thy tap lively tunes on my pane;
And whirling in stateliest measures,
They scatter their jewels like rain.

But one little, sad, grieving spirit,
Who probably never before
Had ventured upon such carousal,
Sobbed all the night long by my door.

Softly I called to the frost child,
Tried to imagine its name;
But over the roar of the revel,
It sobbed and lamented the same.

This morn when I looked from my window,
The landscape stood decked out in pride;
Each poor lifeless tree had been jewelled,
The earth was adorned like a bride.

A thin misty veil floated softly,
Pierced through by the sun's golden ray;
And ice gems were sparkling and flashing,
To crown her the bride of To-Day.

All rosy-hued, flushing, and trembling,
She stood while the sun in amaze,
A foolish and timid young lover,
Absorbed all her life in his gaze.

Alas, for the work of the frost elves!
Alas, for the bridal array!
Crowned and bedecked in her jewels,
A mist wraith, she floated away.

The sun climbing higher and higher,
Looked round for the vision in vain;
But the snow-elves cried, laughing loudly,
"Look out! We are coming again!"

M. R. H.

THE BURDEN OF SELF.

A man may be, even in some true sense, indeed humbled before God; he may be neither a proud, a self-enamored, nor a vain man, and yet he may know well, in his own bitter experience, how, in the still remaining form of a harassing self-consciousness, this evil struggles within him. Perhaps it is with him as a haunting presence everywhere: in his duties, in his prayers, in his meditations. In none of them can he get rid of self. In some forms of bodily sickness, what ought to be the unconscious actings of vitality, the beating of the heart, the passage of the blood through any artery, or the vibration of a nerve, make their every fulfillment of their functions felt, with a harassing distinctness of perception, by the sufferer. So is the self-conscious man tormented with an ever-present vision of himself in all that he is doing. Beyond even his acts for or with others, yea, into his very prayers, this dreadful self-consciousness will intrude itself. He cannot confess sin without thinking how well he is doing it; how humble he should appear to others if they could but witness his humiliation; he cannot pray with all his soul, because the vision of himself in prayer, and the thought how others, if they could see him, would applaud him, obtrudes itself, with a paralyzing pertinacity, into the most sacred moments. This is not seldom the departing struggle of the devil of vanity; from this the word of Christ will at last set free him who clings to his Lord for deliverance; but it is to Him that we must go if we would be delivered from it. In His presence only can we be disenchanted. . . .

In that presence, then, we must set ourselves; stand, as if we were already called into the mighty judgment; look in the face of our failings, our mixed motives, our unfulfilled resolutions, our poor performances, the seeming resistance of our will to His, our lack of true love to Him, and so estimate by the searching rule of God's judgment these miserable littlenesses, as to which, in our times of weakness and earthliness, we are tempted to feel some satisfied emotions of self-approbation. It is well to do this from time to time—as, for instance, at the opening of Lent—in a solemn and especial manner; more or less, too, we may do it at all times of earnest prayer and meditation. This, indeed, is one especial blessing, waiting on real acts of devotion. In such hours the spirit cools and grows calm; in that high communion, God in His mercy acts directly on it; and one whom He has so visited goes forth from His presence another man. Be persuaded, brethren, to try the experiment. Seize upon some time for more especial communion with God. Set you selves, thus, alone with Him; look calmly in the face all your sins, defects, infirmities, and littlenesses; picture to yourself how they will show before men and angels, and, above all, before the All-searching eye of God, on the great doomsday. Suppose yourself there already, and think how you could now meet that surely coming trial. This, if anything can, will help you to overcome these otherwise inevitable bonds of self-approbation. But then, having done this, you must also be on your guard to watch in detail against the temptation the moment it assaults you. The rules for doing so are simple and easy to one who is really striving to use them. They are such as these:

Think as little as possible about any good in yourself; turn your eyes resolutely from any view of your acquirements, your influence, your plan, your success, your following; above all, speak as little as possible about yourself. The inordinateness of our self-love makes speech about ourselves like the putting of a lighted torch to the dry wood which has been laid in order for burning. Nothing but duty should open our lips upon this dangerous theme, except it be in humble confession of our sinfulness before God. Again, be specially upon the watch against those little tricks by which the vain man seeks to bring round the conversation to himself, and gain the praise or notice which his thirsty ears drink in so greedily; and even if praise comes unsought, it is well, whilst men are uttering it, to guard yourself by thinking of some secret cause for humbling yourself inwardly to God, thinking unto what these pleasant accents would be changed if all that is known to God, and even to yourself, stood suddenly revealed to man.

Again, take meekly the humiliations which God in His wise providence deals out to you; they are a most wholesome diet. They come from His hand who knows all that you need, who orders all in love, who bore the Cross for your redemption, and will, if you let Him, heal your deep infirmities.

Lastly, place yourself often beneath the Cross of Calvary; see that sight of love and sorrow; hear those words of wonder; look at the Eternal Son humbling Himself there for you, and ask yourself, as you gaze fixedly on Him, whether He, whose only hope is in that Cross of absolute self-sacrifice and self-abasement, can dare to cherish in Himself one self-exalting thought, or allow Himself in one self-complacent action. Let the Master's words ring over in your ears: "How can ye believe, who receive honor one of another, and seek not the honor that cometh of God only?"—Bishop Wilberforce.

THE MAN WHO STOPS HIS PAPER.

Philip Gilbert Hamilton, in his admirable papers on "Intellectual Life," thus talks to the man who "stopped his paper": "Newspapers are to the civilized world what the daily house-talk is to the members of household; they keep our daily interest in each other, they save us from the evils of isolation. To live as a member of the great white race of men, the race that has filled Europe and America, and colonized or conquered whatever other territory it has been pleased to occupy, to share from day to day its cares, its thoughts, and inspirations, it is necessary that every man should read his paper. Why are the French peasants so bewildered and at sea? It is because they never read a newspaper. And why are inhabitants of the United States, though scattered over a territory fourteen times the area of France, so much more capable of concerted action, so much more alive and modern, so much more interested in new discoveries of all kinds, and capable of selecting and utilizing the best of them? It is because the newspapers pene-