

churning three, four, or five churns at the same time, and with a motion that is far less fatiguing to the churning than the present mode, as the very weight of the body is sufficient without working the arms. We would strongly urge our farmers and those who are the proprietors of dairies, to give this simple plan a trial.

#### FARM HOUSE BUILDING.

We have much useful instruction to give our farmers on this subject, and we will from time to time present them with as much matter under this head as we can afford space for. We beg in return that they will give us the results of their experience of them.

#### WALLS.

It is our earnest desire to see the use of timber in constructing houses lessened. It is dangerous in dwelling houses, but far more so in barns where spontaneous combustion is so very apt to take place. Another objection is its liability to decay. We would recommend strongly to all persons interested, the necessity of walls being of *incombustible material*. We therefore propose the following plan to our intelligent readers: Having marked out the extent of your intended buildings, allow a foot beyond the walls all round, and make a platform of loose stones, gravel, sand, and clay, (in fact *rubbish*.) When you have raised your platform one foot at least, then pour over it lime and gravel well saturated with water; leave it to harden. When ready to commence your walls strike down stakes at the angles; then nail boards on the outside of these stakes. Having determined the thickness of your walls, stick down stakes at the angles or corners inside the intended dwelling, then nail on planks on the inside of these stakes. Thus we have in the space enclosed by the outside and inside sets of planks the thickness of the intended walls. A floor may now be formed inside the house, four inches thick, of layers of small stones, gravel, and earth, having hot lime and water, together with fresh animal blood, well mixed together, and poured over the whole. This floor should be smoothed over and left to dry. While drying the builders may come on the outside of the walls, and having erected a scaffold sufficient to stand on, with boards forming a gangway up to it, they may proceed to throw in from the top baskets and boxes full of clay mixed with lime and water, having straw in it in good proportions, (it must not be *very wet* but *stiff*.) Thus the walls will be filled up. The building may now be left for two days to dry. The planks and stakes may now be removed, and the position of each window and door marked on the walls inside and out. Commencing at the top of each window and door, cut with a spade a hole through the thickness of the wall, and six inches longer at each side than the breadth of the intended open. Into each of these cuts insert a stone, if it can be procured, of sufficient length; if not, get a piece of well seasoned oak, the ends of which must be charred in the fire. Now cut away the entire of your window and door opens, and put in your frames, which may be secured

by wooden *plugs* to the walls. Planks should be laid flat on the top of the wall, and nailed together; then the frame of the roof put on and planked.

The inside should now be white-washed four coats, and the outside dashed with lime and water, having round pebbles in it, and made pretty thick. The doors, windows, and all wood work may receive two coats of white paint, made of the lime and curds before described, which has the advantage of being without smell, drying immediately, and being easily made in any farm house.

✂ We feel great pleasure in laying before our readers the foregoing specification for building a cottage, given us for publication by Mr. Dwyer, architect, lately arrived in Kingston from England. We are sure its extreme simplicity and clearness must render it very acceptable to the great majority of our friends. We are happy to be able to add that Mr. Dwyer has most kindly offered us the aid of his most valuable information occasionally, which we will give with illustrations, and which we are convinced will give additional interest to our pages.

#### To the Editor of the Farmer & Mechanic.

SIR:—It is to me a source of unfeigned pleasure that we are about to have among us a paper devoted to those two most important branches of our domestic economy—Agriculture and Mechanics. You will not deem it flattery when I say that the two classes of persons who labor in these respective departments, to one of which I am proud to belong, owe you a debt of gratitude for the step you have taken; and I at once take the liberty of availing myself of a portion of your columns—columns devoted to the advancement and protection of my interests, and in which I can consequently feel perfectly “at home”—to address to you, and through you to my fellow mechanics, a few words on a subject of much interest to them. I do so with the more confidence as I imagine from the fact of your proceeding in your enterprise, that you have received sufficient encouragement to warrant the undertaking from those hitherto despised classes who stand represented in proud relief at the head of your paper—the Canadian Farmer and Mechanic.

As a mechanic, I, as a matter of course, belong to the Mechanics’ Institution of this city—an institution with whose objects you are no doubt perfectly acquainted. It has been established for several years, with rather a chequered existence. At one period it boasted of scarcely half a dozen members, and not being able to incur the expense of an active existence, slumbered awhile. It was aroused from that slumber by a few spirited individuals, and made rapid strides to permanency. It now numbers about three hundred and fifty members—a proud array, you will admit, but it looks better on paper than on viewing it as it actually is. Its public meetings are rather thinly attended, and there exists an apathy, happily not fatal to its existence, but to a thriving and flourishing condition. Why is it? I might mention a number of reasons—one, the diversity of opinion which naturally exists in so large a body where there appears nothing tangible to excite an active interest—doctors will disagree. But the principal reason is the want of that spirit of enterprise which should ever characterize the mechanic. I have found, and I have regretted much to find amongst them a disposition to leave projects of higher nature to those who are erroneously supposed to possess a natural or hereditary right to lead in public measures—a disposition which cannot be too strongly deprecated. It is yielding up tacitly the dearest right we possess—the free exercise of judgment—to others whom experience has proved are not

over-anxious for our improvement. From this reason—for no other can I divine—mechanics have been apparently content to maintain their Institution in a building which alone is calculated to throw discredit on it, under a heavy annual rent, with all its discomfort and inconvenience—and the evident clog which it forms to its progress—with its reading-room, its library, and its museum crowded into apartments about the size of an Editor’s sanctum, a description which you will no doubt understand.

Now, this is a disadvantage which might be remedied by the exhibition of a little enterprise, exerted in the way of obtaining a building—one which would assist in stamping a high character for the Institution, and restoring public confidence in its operations. I do not know what the cost may be, but say that it would be necessary to expend £1500 or £2000, will any one so far insult the mechanical portion of the community as to assert that with the great objects in view which the Institution is designed to carry out, so paltry a sum cannot be raised? I am pleased to find that some project of this kind is on foot, and as far as I understand the details, they stand thus: that supposing the sum to be as I stated, or in fact any given sum, it shall be raised by way of loan by a joint-stock company. Perhaps the principle is novel, but it is independent in its character, and when the object is considered, it is perhaps the best plan which could be adopted. The shares to be placed at \$5 or \$10, to be within the reach of all—and when sufficient is subscribed, to proceed with a building which besides furnishing proper accommodations for the Institute would be composed of shops, a large public hall, offices, &c., which being rented would produce a sufficient fund to purchase after a few years, or gradually, as the case may be, the stock from the holders, paying legal interest. I have not the least doubt that a much larger amount could be raised if necessary.—The plan appears very simple—it is so in theory; but if pushed on, as I hope it will be, the practical part will come, and then it will be demonstrated whether mechanics possess sufficient enterprise to place themselves in an independent and proud position, and their Institution on a permanent establishment. We shall see. I wished to make some remarks on the influence such a step would have on the condition of the mechanics and also to draw a comparison with our neighbors, but I fear that I have taken up already more space than you will be pleased with, and will therefore defer those remarks to your next number. But perhaps you will feel disposed to second me, taking a similar view of the subject. If so I trust you will apply spur to the indolent horse.

#### A MECHANIC.

‘A Mechanic’ may rest assured he is quite welcome to our columns, and as this is the first we hope it will not be the last from him on the subject of the Institute. We hope the friends of the Institute will follow his example. Let the subject of promoting the interest of the Association of Mechanics and particularly the erection of a building for the Institute, be freely discussed, and the opinions of the members be fully expressed.—Ought not all the members to express, either in writing or orally, their views as to the proper means to be employed for promoting the objects and interests of this Institution? Let enquiry be made and discussion be had on the subject. This is the way to elicit facts, and arrive at just conclusions on any important subject. To us, the plan suggested by ‘a Mechanic,’ appears perfectly feasible, and so far as we can judge, the best plan that can, at present, be adopted. Although comparatively a stranger, we think we know some twelve or fifteen persons who would, on the proposed plan, take from fifty to one hundred shares each of Stock in the Institution.