

bulges out at the side, when it falls down; and when it is wide at the bottom, it bulges a great deal worse than when it is not, every one knows, that knows much about stone fence; therefore we think if it is as narrow at the bottom as we can wall it, it will stand the better. Convenience of laying requires more than 2 ft., but otherwise I do not know what objection can be raised against having it that width: we have tried it so narrow considerable. Then make it 5 ft. high, and without your sheep are smarter than mine they cannot climb over it.

Sticks are of great use in a wall. Get wood that will split well, be durable and soft; or almost any kind will answer; split the sticks  $\frac{1}{2}$  an inch or an inch thick, and 2 or 3 wide, and have them nearly as long as the width of the wall where they are used. Mr. Rice of Hannibal, a man to whom no little credit is due for improvements in wall laying had some wall that was laid with sticks 8 years ago, taken down, and after taking down a foot and a half, from the top, the sticks resembled lumber seasoned under shelter, all of the way except the ends of the sticks. I have taken down wall after a rain and most of the inside was not wet at all by it. Mr. Rice was of opinion that basswood would last 50 years. The sticks should not stick out quite so far as the stone, or they will be likely to catch water, and carry it on to the middle. They are not needed at the top, where the stones reach across occasionally.

But with the truest proportions, and a liberal use of sticks, the stones will not keep their place on ground that heaves much. Dig a ditch at least 8 in. deep, and fill with small stone. For such a wall as I have been describing, the ditch ought to be about 3 feet wide, & care taken to have it straight, so that the wall will not be on the edge, and especially off the edge, in any place. If the ground is hard to dig, and you can plow a straight furrow, back furrow; but do not plow too wide. If the ground digs easy, a line, a few stakes, a shovel and peck, and a good digger, will operate to as good advantage as any thing, I guess. In filling do not put large stones in the side of it.

If the ground is dry and, not inclined to swell and shrink much, by freezing and thawing, and especially if you build your walls north and south, a ditch would be of little or no benefit; but it almost makes "all odds" on wet ground.

If you have round and flat, small and large stone, take some pains to have the kinds mixed together; especially have plenty of small ones to fill into the middle of the wall.

And no good wall layer needs to be told to have the coarse and fine, round and flat, long and short stone judiciously mixed and have the wall as well bound as may be. It wants some of the best stone on top, those that are coarse and will reach across; on account of making the wall firm, and staying on good.—*Albany Cultivator*.

**HORTICULTURAL PHENOMENON.**—A pear tree, which is known to be at least eighty years old, and which for a many years bore a considerable quantity of fruit, of the jargonelle kind, ceased to be productive on being surrounded by high walls, which were from time to time built near it, until it was almost entirely excluded from the current of air which seemed necessary for its preservation in health. At the usual period in this season it threw on its leaves, and even became more prolific than usual for some time past, by the production of two pears. Three weeks ago its leaves began to decay, and its branches in a short time became denuded. Ten days ago it was observed to have fresh green buds bursting forth from the bare twigs, and, strange to say, it is now in full blossom, showing large clusters of bloom, that would have been worthy of admiration in its best days. This extraordinary tree is in a garden belonging to a lady in Duke

street, in this town, and is inclosed in the building between that and Seel street.—*English Paper*.

#### SMALL FARMS.

If it were not for the irresistible desire of cultivating large fields, a system might be commenced, the benefits of which would soon be acknowledged by every farmer; a small amount of land well cultivated will make a poor man thrive—a large tract neglected will bring a wealthy man to poverty. If a man can obtain from one acre more than he usually obtains from five, the renovating system ought not to be delayed a day. When hay turns out less than half a ton to the acre, the labor and expense of getting the same will be double that of getting it when the produce is two tons. Fifty loads of manure to the acre will raise the produce to our hay land—worn out to the half-ton standard—up to the value of two tons for five years; and half that quantity for the succeeding five years, will keep the land up to that point. In the one case the land produces without manure five tons of hay; the expense of fencing, taking care of the land, and cutting and curing the hay, will amount to three-fourths of the value of the produce—so if the hay be worth \$12 a ton, the annual income of the land will be \$15 only; but in the other case seventy-five loads of manure will give twenty tons of hay per annum, worth \$240, on land which on the exhausting system gave \$60 only; leaving, at the end of ten years, more than the difference of the value of the land itself, with the satisfaction to the proprietor, worth as much more, of witnessing good crops, where only wretched ones grew before.—*Western Farmer*.

**TO CURE A BURN.**—Take a spoonful of lard, half a spoonful of spirits of turpentine, and a piece of rosin as big as a hickory nut, and simmer them together until melted. It makes a salve, which, when cold, may be applied to a linen cloth and laid over the burn. If immediately wanted, spread it on a cloth as soon as melted—it will very soon cool. I have seen it applied after corroding effects of chemical poison, after a foot has been burnt by boiling sugar, after severe scalds, and in every case the sufferer obtained perfect ease in ten or fifteen minutes after it was applied. It may be applied two or three times a day, or as the cloth becomes dry.

**TO MAKE WOOD INCOMBUSTIBLE.**—Take a quantity of water, proportioned to the surface of the wood you may wish to cover, and add to it as much potash as can be dissolved therein. When the water will dissolve no more potash, stir into the solution, first, a quantity of flour paste of the consistency of common painters' size; second, a sufficient quantity of pure clay to render it of the consistency of cream.

When the clay is well mixed, apply the preparation as heretofore directed to the wood; it will secure it from the action of both fire and rain. In a most violent fire, wood thus saturated may be carbonated, but it will not blaze.

If desirable, a more agreeable color can be given to the preparation, by adding a small quantity of red or yellow ochre.

A good coat of it applied to the floor under stoves, would be an excellent precaution.

**THE METEORS.**—On the very interesting subject which has of late occupied so much of public attention, both in Europe and America, the periodical return of the meteors in August and November, we have been favored with the following communication from Sir John Herschell:—"To the Editor of the *Athenæum*.—Sir, the bright moonlight of the 9th inst. having prevented my obtaining sat-

isfactory observations of the meteors, to whose periodical return on the 9th and 10th of this month Professor Quetelet has drawn much attention, as being more regular than the displays of the 12th and 13th of November, allow me, in place of observations for the current year, to offer as my contribution to our stock of knowledge on the subject the following incidental mention of such an occurrence, in Sir W. Hamilton's account of the great eruption of Vesuvius in August 1799, printed in the *Transactions of the Royal Society*, volume 70, which will be read with the more interest, the periodical nature of the phenomena being then unknown, and its occurrence being ascribed to him by some local electrical agency developed by the volcanic ejections. 'August 9, 1799,' after describing the phenomena of the eruption during the day till seven o'clock at night, 'when all was calm,' Sir W. Hamilton goes on to say, 'it was universally remarked, that the air for many hours after the eruption, was filled with meteors, such as are vulgarly called falling stars. They shot generally in a horizontal direction, leaving a luminous train behind them, but which quickly disappeared. The night was remarkably fine, starlight and without a cloud. This kind of electrical fire seemed to be harmless, and never to reach the ground, whereas that with which the black volcanic cloud of last night was pregnant, appeared mischievous, like that which attends a severe thunder storm.' The meteors of August 9, 1840, in so far as I observed them, radiated almost without exception from a point in the heavens very near the star Gamma, in the constellation Perseus; which is almost coincident with the point (near the star B Cameleopardali) from which I observed them to emanate on the 10th August, 1839. Facts of this nature appear almost decisive in favor of the opinion that a zone or zones of these bodies revolve about the sun, and are intersected by the earth in its annual revolution.—I have the honor, &c.—J. F. W. HERSHELL.—*Collingwood*, Aug. 15, 1841."

**A BRILLIANT BEDSTEAD.**—The Emperor of Russia recently sent to the Shah of Persia, a bedstead made entirely of chrystal, worked in imitation of large diamonds, incrusting in a solid frame. On each side there are spouts made to eject scented water, which, by its murmurings, invites to sleep. It is crowned by a large chandelier, which spreads light in such a manner over itself, and the rest of the frame, as to give to the whole the splendid appearance of a million of diamonds reflecting their brilliancy at once.

A new mode of communication at sea by a trumpet called the telephonic, or far-sounding system, invented by M. Sucre, instead of the ordinary system of signals, has recently been tried by the squadron of Admiral Hugon, and found to answer completely. The sound may, it is said, be heard distinctly in favourable weather, a distance of 2,200 toises—about two and a half English miles.

**WONDERFUL SAGACITY OF A HORSE.**—A very singular circumstance occurred on a farm at Buchan, six miles from Crieff. A wild bull going at large in a park there, along with a number of cows, one day lately attacked the herd boy, and heaved him by his horns over his head; the boy fell to the ground and when lying, the bull was about to make a second attack upon him, when a horse, which was grazing near by at the time, and seeing the murderous intention of the bull, galloped forward, and turning himself round, struck the bull two severe blows upon his side with his hind feet, which rendered him almost lifeless. By this interposition of the horse, the boy was enabled so far to recover himself as to make his escape.—*Stirling Observer*.