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Poetry.

FARMER'S HYMN.

God of the hills and verdant plains,
I bless thy ruling band;
For drifting snows and gentle rains
Are sent by thy command.

The opening spring is decked by thee
With each delightful flower,
And every leaf and bud I see
Bear impress of thy power.

The ripening summer's burning sun,
The winter's piercing cold,
The changing seasons, as they run,
Thy wisdom, Lord, unfold.

The joy that centers in my cot,
No less thy wisdom owns;—
With rural happiness my lot,
I cannot envy thrones.

Love dwells within my peaceful breast
At every morning's dawn;
And when the sun sinks in the west,
My cares are all withdrawn.

Beside the hill, the purling brook.
Glad nature's fond retreat,
With gratitude to thee I look,
And songs of joy repeat.

For lot so blest, my voice I raise,
Almighty God, to thee:—
Although thou need'st not angels praise,
Much less such praise from me.

The Widow's Charge at her Daughter's Bridal.

BY MRS. SIGOURNEY.

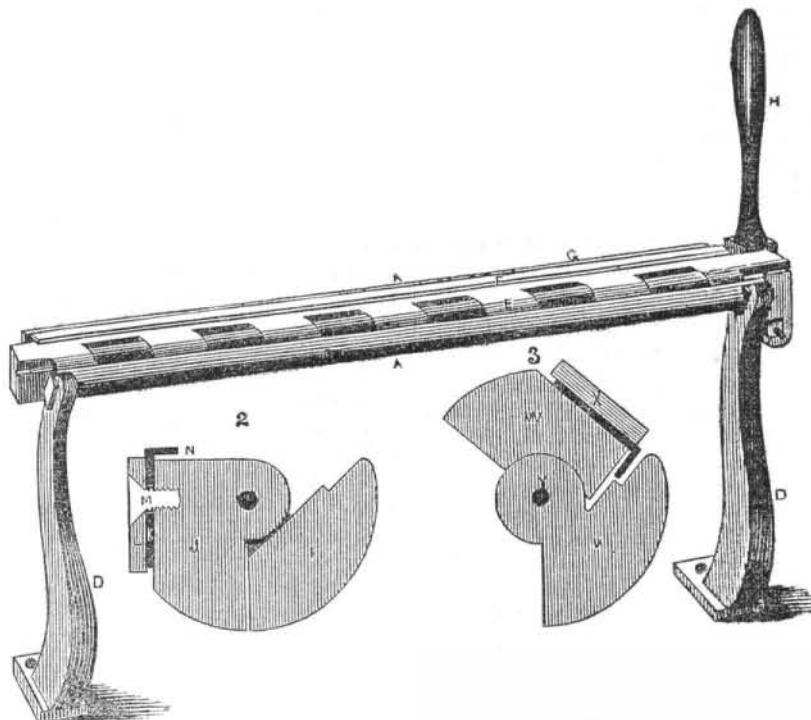
Deal gently, thou, whose hand has won
The young bird from the nest away,
Where careless 'neath a vernal sun,
She gayly caroll'd day by day;
The haunt is lone, the heart must grieve,
From whence her timid wing doth soar,
They pensive list, at hush of eve,
Yet hear her gushing song no more.

Deal gently with her: thou art dear
Beyond what vestal lips have told,
And like a lamb, from fountain clear,
She turns confiding to the fold;
She round thy sweet, domestic bower
The wreaths of changeless love shall twine,
Watch for thy step at vesper hour,
And blend her holiest prayer with thine.

Deal gently thou, when far away
Mid stranger scenes her foot shall rove,
Nor let thy tender cares decay,
The soul of woman lives in love;
And shouldst thou wondering, mark a tear,
Unconscious from her eyelid break,
Be pitiful, and soothe the fear,
That man's strong heart can ne'er partake.

A mother yields her gem to thee,
On thy true breast to sparkle rare;
She places 'neath thy household tree
The idol of her fondest care;
And by thy trust to be forgiven,
When judgment wakes in terror wild,
By all thy treasured hopes of Heaven,
Deal gently with the widow's child.

MACHINE FOR MAKING TUMBLER STOVE PIPE.



This is a very useful and ingenious machine, invented by Mr. J. J. Wright, of Rochester, N. Y., and patented in the month of March last. These machines are now manufactured by that excellent company, Roys & Wilcox, of the Matabessett Works, Berlin, Conn., where all orders are promptly supplied with the best materials. They will no doubt soon have an extensive sale for this valuable machine, which should be in every tinsmith's shop.

Fig. 1 is a perspective view, showing the machine open and ready for use. Figures 2 and 3 are transverse sections, showing the inside parts. D D are the legs fastened to the bench in any known way. E is a tumbler; it is fastened to the bed piece, C, and forms a hinge—the tumbler, E, working on the said hinge, while the bed piece, C, is stationary; F is a folding slide; it is connected to the lever, H, by means of a pin, which works in a slot cut in the side of the said lever next to the tumbler. G is the top edge of a cap plate, which is fastened to the tumbler, E, by screws, which pass through the folding slide, F. In this slide there is a slot which works on the screws. By moving the lever, H, in the direction of A, the folding slide, F, is brought down into the tumbler, E, and by moving the lever back, the slide is raised, as now represented. In order to turn a lock on a sheet of metal of any kind, the edge of the sheet is pushed in between the tumbler, E, and the folding slide, B. The lever, H, is then moved in the direction of the spoke of, which brings the folding slide down on to the edge of the sheet,

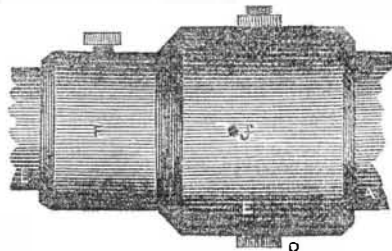
and holds it fast, then by drawing the lever forward and down, the folding slide is brought over so as to come into contact with the bed piece, C, and the lock is then turned. By throwing the lever back, the sheet with the lock formed on it is taken out, and so on.

In fig. 2, I is a section of the bed piece; J, that of the tumbler; K the folding slide and the cap plate; M, one of the screws which pass through the cap plate and the folding slide in the tumbler, J; the sheet of iron is placed between the tumbler, I, and the folding slide, K at N. The tumbler, J, is then brought over, so that the folding slide comes in contact with the bed piece, I, as represented in fig. 3. Fig. 3 is a transverse section through the machine, when the cap plate is in its place. V is the bed piece section; W, the tumbler; X, the cap plate; Y, the pin on which the tumbler works; Z is the folding slide.

One great advantage in this machine is, that after the pipe has been formed by rollers, the lock can be turned completely ready for use. In the common way of making stove pipe the lock is turned on the edge of the sheet of iron when the sheet is flat, hence a great difficulty arises in forming the pipe by rollers, or otherwise, without injuring the lock, for the rollers will not work truly up to within about half an inch, or more, from the lock, and for this reason the operator has to finish the pipe with a mallet, on a stake, after the pipe is put together. This difficulty is completely obviated by this excellent invention, because the pipe is formed with rollers before the lock is turned.

New Universal Joint.

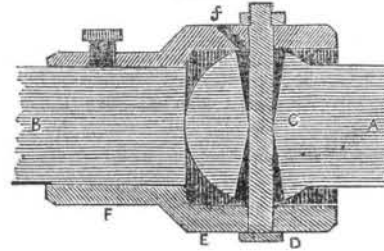
FIG. 1.



This is a very neat and unique universal joint, invented by Mr. A. P. Gross, of St. Louis, Mo. It is now in general use in that part of our country. It is used for any shaft that is desired to be driven on any angle. It is strong and operates well. It is composed of a sphere, or ball, C, on the end of the shaft, A, working in a hemispherical box, E, which

is secured on the shaft, B, by the screw bolt,

FIG. 2.



through F. The ball, C, has a double angular opening passing through the centre of it, as represented in the vertical longitudinal section, Fig. 2. Through this opening passes the bolt or stationary axis, D, which is secured on to the box, E, by a nut, as represented in fig. 1. The play of the universal joint, will therefore at once be perceived by the opening in the

ball, C, allowing the shaft, A, to play on D, according to the angle of the said opening. By taking out the bolt, D, and pouring a little oil through the duct opening, f, the motion of the shaft, A, may be suspended, and thus whatever it may be attached to in a mill, may be brought to, and allowed to rest at pleasure. This makes it exceedingly convenient. Mr. Gross is an ingenious man, and is the author of more than one good invention.

RAILROAD NEWS.

The construction of the Great Rail Road from St. Petersburg to Moscow, Russia, has been carried on entirely by American Mechanics, and the Chief Engineer, Major Whistler was a citizen of the United States. His death, a few months ago, has caused the necessity for a new chief, and it is stated that the office has been tendered to Major T. S. Brown, of the New York and Erie railroad, the proffer comes through the Russian Minister, and has been accepted under certain conditions. The road is 420 miles long, and it is estimated it will cost \$40,000,000. All the appointments are of the most complete and durable character, and it is expected that the distance will be regularly travelled in 12 hours. The road is graded all the way, 400 feet wide, and on this a double five feet track is laid. Concerning the *personnel* of the road, a writer in the Railroad Journal says:

An American house—Messrs. Harrison, Winnans and Eastwick, of Baltimore—has the contract for the equipment of this road, and they have already supplied it with 162 locomotive engines, averaging 25 tons weight, 72 passenger cars, 2,580 freight cars, two Imperial saloon carriages, capable each of carrying the Imperial Court of Russia.

There is considerable enthusiasm existing in the northern part of this state, to form a ship canal from the Hudson to Lake Champlain. It can be done, if our people put their shoulders to the wheel, in all earnestness.

A Convention of persons opposed to the privileges enjoyed at present by the Camden and Amboy Railroad and Delaware and Raritan Canal Companies, was to be held in Trenton, on the 5th inst.

American and English Railroad Iron.

A Staffordshire Ironmaster, in a long communication to the London Mining Journal brings to light the fact that English iron rails, as at present manufactured, are of the very worst stuff. He says the very worst iron that can be made or purchased is now used in the manufacture of railway bars. Hot-blast cinder iron, made into white pigs, is now sought after to be used for this purpose, and the price of railway bars, instead of being 10s. or 20s. per ton more than good best iron, is reduced to as low, and, in some instances, lower, than the most common bar-iron that can be found, either in Staffordshire or Wales—complete trash; and yet some of the purchasers will have you believe they get the best iron, while the fact is, rails cannot be made of good best iron at less than from two to three pounds per ton, above what they are now selling at. It reminds me of orders being sent for gold watch seals, tying the maker to about 9d. or 1s. each. This is just now the case with rails; and the consequence is, they are no sooner laid down than in a few weeks or months, they begin to laminate, split, and crush, and are obliged to be taken up and replaced, as they are found to give way; and thus the railway is continually endangering the lives of the passengers, besides being a serious expense to the company. Many are now putting on the round topped rail, which puts off the evil day a little; but this destroys the tyres as fast again, and thus increases the loss.