Scientific American.

THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL AND OTHER IMPROVEMENTS.

Vol. 3.

New York, December 11, 1847.

No. 12.

THE SCIENTIFIC AMERICAN :

PUBLISHED WEEKLY
At 128 Fulton Street, New York (Sun Building,) and
13 Court Street, Boston, Mass.

By Munn & Company.

The Principal Office being at New York.

TERMS—\$3 a year—\$1 in advance, and
the remainder in 6 months.

See advertisement on last page.

Poetry.

THE QUESTIONER.

BY ROBERT NICHOL.

I ask not for his lineage,
I ask not for his name;
If manliness be in his heart,
He noble birth may claim;
I care not though of this world's wealth
But slender be his part,
If "Yes," you answer when I ask,
Has he a true man's heart?

I ask not from what land he came,
Nor where his youth was nursed;
If pure the stream, it matters not
The spot from which it burst;
The palace or the hovel,
Where first his life began,
I seek not of—but answer this,
Is he an honest man.

Nay, blush not now—what matters it
Where first he drew his breath;
A manger was the cradle-bed
Of him of Nazareth,
Be naught, be any, every thing,
I care not what you be,
If "Yes," you answer when I ask,
Art thou Pure, True, and Free?

THOSE DIRTY MECHANICS.

BY H. G. BARRUS.

"These mechanics, oh dear! what a nuisance
they are.
Remarked Mr. Fop to Miss Flirt;
"In the boat or the street they are sure to be
there,
All covered with smut and with dirt.

"Why don't they go live on a street by them-
selves
And associate there with each other?
I would not to one of them speak in the street
No, not if that one were my brother.

"'Tis surprising to me my dear Mr Fop,
And I think it should straight be put down
That these dirty mechanics should dare to con-
verse
With the aristocratic of town."

"Oh! had I the power, my dear Mistress
Flirt,
I'd soon set these fellows afloat;
I'd make them all walk in the middle of the
street,
And cross in a separate boat."

"And out of the pews in our church Mr. Fop,
I every mechanic would rouse;
And they should be seated in pews by them-
selves,
In the farthest part of the house."

Pray stop your wild speech Mr. Fop and Miss
Flirt,
And make you no farther ado;
Do you expect in the regions of bliss you will
find,
A place parted off for you?

Then if for yourselves, you have any respect
Pray cease to traduce and deride;
For those whom you speak of and think of so
light,
Are AMERICA'S GLORY AND PRIDE.

HOE-NECK AND TILT HAMMER.

The following is a specification of Nathan Brand's patent, of Leonardsville, county of Madison, N. Y. This valuable invention is for padding hoe necks, and also can be used for other purposes. The trip hammers are here displayed of the common form of lever, but the dies and stock are adapted for the purpose set forth, and are explained by the following references to the different parts of the above engraving.

The nature of this invention consists in the employment of the dies *b b*, having semi-circles *c c*, at one end for rounding the iron after it is drawn from the bar on that portion of the dies marked *e e*, which is constructed in the usual form. The end of the dies opposite the semi-circle and on the back side are brought to an edge on an angle of 45 degrees, as seen at *d d*. This portion is for cutting the neck from the bar and forging it in the required shape as represented at *f*. The die *h*, has a depression on its upper surface of the required depth and form and swedges the pad as seen at *i*, sectional back view and is attached to the upper part of the rotary stock *a J J*,

receives the axle *k*, shouldered as represented at *l l*, the upper part of which has an arm *m m*, projecting parallel with the upper surface of the axle near the outer end and on the arm, standing at right angles with it is a fork-like projection *n n*, in the crotch of which the shank of the hoe neck or other articles to be padded or plated rests, add by which a rotary motion is given to the axle and the required portion of the die *h*, is brought under the hammer *o*. *P*, represents a front or face view of the hoe neck as seen in the back view *i*. *g*, is a side or edge view of the same; *r*, a side or edge view of the bar as forged and cut as seen at *f*.

CLAIM.—What I claim is the combination of the die *h*, with the rotary stock, for the purpose and in the manner described. I also claim composing the die *b*, of the flat face *e*, the groove *c*, and the cutter *d*, as described, so as to perform with the same instrument the three operations of hammering, rounding and cutting.

NATHAN BRAND.
Rights and machines for sale. Address Nathan Brand, Leonardsville, N. Y.

The Capitol at Washington Illuminated.

The Capitol at Washington is now perhaps the best illuminated building in the world.—The old sperm lights are abolished and Mr. Crutchett has arranged and fitted up the gas lights in so tasteful and ingenious a manner that the Senate Chamber and House look like a scene in Aladdin's palace. Above the dome of the Rotunda, towers the great lantern filled with burners, and the chandeliers of both houses are superb. The one in the House of Representatives is ornamented with a beautiful scroll; that in the Senate by thirteen brilliant stars, representing the good old thirteen States, with their pendant prisms. These, reflected from the mirrors above, appear like double stars, and multiplied to nearly double the number. Each chandelier furnishes light equal to 5000 spermaceti candles. The lighting of the chamber is complete, enabling any one to read with perfect ease on any part of the floor, and the light though so powerful, is yet so soft that it is delightful to the eye.

The Romance of War.

A French soldier who accompanied the armies of Russia, concealed a small treasure at the entrance of a village near Wilna, with a view of taking it with him on his return. After the defeat at Moscow he was made prisoner and sent to Siberia, and only recovered his liberty at the end of last year. On reaching Wilna, he remembered his hidden treasure, and after tracing out the spot where he had hidden it, he went to take it away. What was his astonishment to find, in place of his

money, a small tin box containing a letter addressed to him, in which a commercial house was mentioned at Nancy, where he might receive the sum buried at interest, since the year 1812. The soldier supposed that this was all a hoax; he went, however, to the house pointed out, where he received his capital with twelve years interest. With this sum he established a small business at Nancy which enables him to live comfortably; but he has never been able, though he has taken great pains, to ascertain how his money was taken away and restored to him.

The Heart.

Trifle not with the human heart. It contains a thousand delicate strings; if you break one of which, it is not in the power of man to restore it again. If you are loved and cherished, be not indifferent. If you cannot repay that love, treat it not with contempt. There are thousands repining in sorrow and solitude that a word or a look might have saved from sorrow, and made happy.

Agriculture.

Agriculture, says Socrates, is an employment the most worthy the application of man the most ancient and the most suitable to his nature; it is the common nurse of all persons, in every age and condition of life; it is a source of health, strength, plenty and riches, and of a thousand sober pleasures. It is the mistress and school of sobriety, temperance, justice, religion, and in short of all virtue, civil, and military.

RAIL ROAD NEWS.

Central Ohio Railroad.

The report of Jonathan Knight, Engineer to the Ohio Central Railroad Company, making a reconnaissance of the route between Wheeling Va. and Columbus, Ohio, is published in the Zanesville Republican. The distance from Wheeling to Columbus is 150 miles. The total rise and fall in this 150 miles may be about 2400 feet. Mr. Knight estimates the cost at \$10,000 per mile for gradation, masonry and bridging of a width for a double track between Wheeling and Zanesville, 90 miles and \$5000 per mile for the next 60

Various Railroads.

The Louisville and Frankfort, Kentucky, Railroad has been surveyed and a very favorable route has been found.

The Burlington and Rutland Railroad, Vermont, is being rigorously prosecuted throughout the whole line; and the Cape Cod and Wareham, Mass., Railroad is progressing rapidly. The various lines of Railroad throughout the Union are progressing finely. More caution and sagacity are now displayed in choosing proper routes. Experience has taught our people the value of railroads, and at no distant day, we shall jump on the cars in Jersey City and pop down at our cousin's door in Louisville, Kentucky.

Richmond and Ohio Railroad.

A large meeting of the citizens of Richmond, Va., was lately held there in the Odd Fellows Hall, when Wm. H. Macfarlane, Esq. offered a series of resolutions, which were almost unanimously adopted, recommending the State of Virginia and the City of Richmond to subscribe liberally to the enterprise of speedily constructing the Richmond and Ohio Railroad. The business men of Richmond composed the meeting and the subscription books are now open, so there can be no doubt but this contemplated road will soon be commenced.

Chicago has subscribed one hundred and twenty thousand dollars for the construction of the railroad between Galena and that city. The amount of all the subscriptions on the part of the citizens of St. Louis, with a population of sixty thousand, to railroads macadamized roads, and other public improvements since her first settlement, is precisely—nothing! It is very possible, that the railroad from Galena, to Chicago, will have the effect of diverting a large portion of the lead trade from St. Louis to the younger and more enterprising cities of the lakes.—*Mo. Republican.*

Lines of Telegraph in Progress.

From Buffalo to Detroit,	350 miles.
" Detroit to Milwaukee,	350 "
" Bridgeport to Montreal,	300 "
" Norwich to Worcester,	85 "
" Petersburg to Raleigh,	144 "
" Raleigh to Charleston,	347 "
" Charleston to Savannah,	276 "
" Savannah to Montgomery,	260 "
" Montgomery to Mobile,	250 "
" Mobile to New Orleans,	150 "
" Louisville to St. Louis,	300 "

Total, : : 2812. miles.

When Isaiah Thomas, printer of the Farmer's Almanac, was called upon by a printer's devil to know what he should put against the 13th of July, Mr. T. replied, anything, upon which the boy set rain, hail, and snow, at which the country was amazed but it so happened, that it did rain hail and snow on that day, and proved a profitable storm to the proprietor of the Almanac for the future numbers.

Keep your heart always ready for a misfortune.