

## New Inventions.

### Paper Folding Machine.

We stated a few weeks since that Mr. Crane of Mass., had invented a machine for folding newspapers, to be attached to printing presses. We have since learned that Messrs. Smith & Wells, of Springfield, Mass. are the inventors of this contrivance, Mr. Crane's machine being for catching the sheets as they come from the press and laying them evenly together, an operation called "flying." *The Paper Folder* is now in successful operation at Springfield, and is pronounced by those who have seen it to be one of the most curious and ingenious pieces of mechanism which have been brought out in a long time. It will no doubt appear wonderful to most of our readers, that a newspaper, the *Scientific American* for instance, can be taken in open sheet from the steam press, and instantly folded into as many different folds as desired by the unaided operation of machinery! Yet this is accomplished by Messrs. Smith & Wells' invention. We omit a more particular description at present as we shall give an engraving of the machine in a week or two.

### Shingle Shaving Machine.

Mr. S. Brewer, of Mount Henry, Montgomery county, Tenn., has obtained a patent for a new and improved machine for shaving shingles.

The Machine shaves both sides of two shingles at every stroke of the pitman, giving the proper slope, and throwing the shingles clear of the Machine. It is simple in its construction; not liable to get out of order; may be tended by a single hand; is a light draught for a horse or mule, but may be worked by any power; and may be easily removed from place to place and set up with little loss of time. The shingles made on the machine are of uniform thickness and of the very best quality, and may be made of any timbers of which shingles are usually made by hand.

### New Paddle-Wheel.

Mr. Jacob R. Custer, of Norristown, has constructed a hanging paddle-wheel to be used in propelling boats on rivers and canals. The paddles hang in a vertical position, supported by spur wheels and pinions, so that they dip and rise without disturbing the water. There are some five or six paddles on the wheel, adapted to each stroke of the engine: one will be dipping and another rising, alternately. The *Norristown Herald* states, that it has been brought out to the order of a company, and judging from the experiments which we have seen made with it, it cannot fail to prove the thing so long wanted to take the place of horse-power on our canals.

[It is rather a singular description and precludes any favorable impression regarding it. The cranks of all the shafts to drive the paddles are placed at right angles with one another, so that is nothing new, other parts may be new, but cog wheels and pinions are objectionable.—Ed.]

### More Telegraphs.

An English paper by the last steamer says,—“Last week a number of gentlemen interested in mechanical science were afforded a ‘private view,’ at the offices of Mr. Whishaw, Gray’s-inn-square, of a number of inventions for facilitating verbal communication. Among the most remarkable were several hydraulic telegraphs, all in working order, and performing their functions in a very satisfactory manner.”

We suppose the inventors are afraid to make them public. At best they will not be valuable private property.

### Bone Pens.

Pens made out of bones are now in use in England and sold at the rate of fifty for twenty two cents. They are pronounced to be as flexible as the quill and far more durable.

### E. Burt's Plaid Loom.

We have seen a letter of Mr. W. Norton, jr. of Marlboro Mills to Enoch Burt, Esq. of Manchester, Conn., the first American inventor of the Power Plaid Loom, which speaks volumes in praise of his invention. Mr. Norton says: “In one week's work, performed by one weaver (Mrs. Bell,) in regular mill hours, the cloth room book records 938 yards, equivalent to 39 yards and a fraction to a loom per day. I have no hesitancy in challenging the whole United States to beat it; and Mr. Blythe, the foreman, adds, “*the Continent of Europe too.*” The cloth woven was forty eight picks to the inch. It is but a few years since it was deemed impossible to weave gingham by the power loom. When we reflect upon the great improvements made within a few years upon machinery for manufacturing, and the greatly reduced prices of cloth arising therefrom, we cannot but feel, that our inventors, manufacturers, mechanics and operatives, are not estimated according to their value, neither are they rewarded according to the benefits they have conferred upon the country. They are the class of persons that “have done the state some service.”

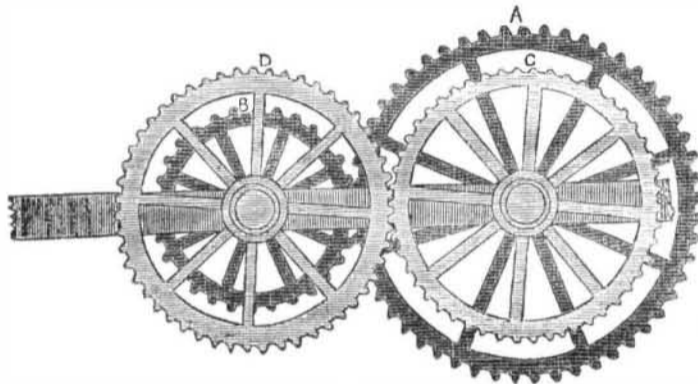
### Atmospheric Churns.

The common rotary handle churn, so old and well known, can be constructed to answer all the purposes of any atmospheric churn in existence, without increasing the cost more than six or seven cents. All that is necessary for this purpose, is simply to use two tubes on the lid instead of one. Let them be placed at right angles to one another running in an oblique direction in the lid, near to the curve line of the paddle and as the handle acts as a blower, one tube will supply the churn with the atmospheric and from the other the gas will be expelled and butter made in a very short time, and each tube will answer for the reverse purpose according to the motion of the handle.

### New Marble.

A patent has been granted by the authorities of Cuba for five years to Messrs. V. Pelopi & A. Potelesta, for the invention of a compound made from the mineral productions of the Island, which compound becomes in a short time as hard as marble, and may be used for the same purpose, with the advantage of being far less expensive.

## COG WHEELS OF UNLIMITED POWER AND VELOCITY.



This is an arrangement of cog or toothed wheels, by which unlimited power or velocity can be obtained by means of only four wheels, and also of turning in the same or contrary directions relatively to their partners. This is an extension of Watt's highly ingenious sun and planet wheels, and is as follows:—

A and C (in the plate) are two wheels on the same axle, free of each other, and B and D are two concentric wheels on another centre; but these two are fastened together, so that one cannot move without the other: all these four wheels being fixed on a bar so that they work together, and if they were all the same size they would in no respect differ from the sun and planet wheels in their motions; but in order to produce a power or velocity unlimited by anything but friction, or difficulty of workmanship, the four wheels are not all of the same diameter, but the less the difference of diameter of the two wheels A and B, which work together, the greater is the difference of their motions. If then we wish to give a very slow motion to C, A must be a little larger than B; C and D being equal, the motion then is produced by keeping A and C stationary while the bar is turned round their centre, which will cause C to move very slowly, because the wheel B being a little smaller than the wheel A, must evidently in rolling round it once, revolve round its own centre a little more than once, and wheel D being a fixture with wheel B, must do the same. But wheel D and wheel A being of

the same size, C must also turn a little round its own centre in order to allow D and C to work together, while (these two being of the same size) the one turns faster than the other; the whole motion of C then consists of the surplus velocity of B, to what it would have if of the same size as A, which surplus might be so small that C might only move the hundredth part of a revolution to a whole revolution of the bar, while the wheel A is stationary and the bar is turned round it, so that C would turn with great power. But if velocity be the object, then A must be fixed while C is turned round by a handle fixed on its rim, which will cause the bar to spin quickly round while the motion of C is very slow. If we wish one of the wheels to turn in the same direction as the wheel whose teeth it works with, C must be held fast, while the bar is turned round, in which case this motion will be produced; but it will be of wheel A instead of C which will then be stationary. A fourth kind of motion would result if the bar were to be held fixed, and motion were given to one wheel by moving the one whose teeth worked with it, but no difference of motion would be thereby produced excepting between the two free wheels A C, and this motion has nothing extraordinary in it.

The slow motion seems particularly applicable to cranes, &c., where great power might be wanted without much friction or complication; and the quick motion seems as suitable to clock-work, &c.

### Preserving Wood.

A Mr. Payne, in England, has patented a process for preserving timber, the result of which is, that wood so preserved becomes imperishable,—impervious to wet or dry rot, and perfectly uninflamable. The softest woods so prepared become susceptible of the finest polish.

### Fire Annihilator.

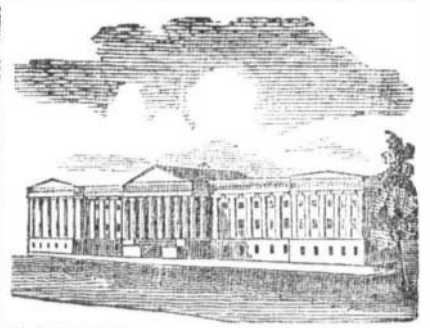
The London Builder describes a small machine, called “the fire annihilator,” which, by means of a sudden explosion of nitre, carbon, and gypsum “creates instantaneously an enormous quantity of steam, equivalent to and as effective as a fire engine.”

Well, that is something new in the chemical world! “nitre, carbon, (charcoal) and

unprepared plaster of Paris,” to extinguish fires! Just about as sensible as heating up water to form steam to extinguish fire, when by throwing cold water on the fire it would do the same thing more rapid, and at far less expense.

### Rolling Machinery.

A patent has been lately granted to Messrs. Winslow & Snyder, of Troy, N. Y. for improvement in machinery for rolling puddlers balls. They employ a flange on one of the rollers of the concave to prevent the bloom from spreading out. They also employ an eccentric chain formed squeezer, and use a hammer to strike and upset the bloom, the flange performing the office of an anvil.



### LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE.

For the week ending July 25, 1848.

To Thomas Spencer, of Syracuse, N. Y., for improvement in Furnaces for Evaporators. Patented July 25, 1848.

To William S. Barnes, of Buffalo, N. Y. for improvement in Water Wheels. Patented July 25, 1848.

To Edwin J. Smith and Horace Griswold, of Delhi, N. Y., for improvement in Hill Side Ploughs. Patented July 25, 1848.

To Robert Robinson, of Newburyport, Mass. for improvement in Radiators. Patented July 25, 1848.

To John M. Palton and S. D. Ball, of Milton, Pa., for improvement in Cooking Stoves. Patented July 25, 1848.

To Charles Stumer, of New York, for improvement in Enamels for Iron. Patented July 25, 1848.

To William T. Barnes, of Buffalo, N. Y., for improvement in Twyeres. Patented in the United States July 25, 1848. In Canada

### INVENTOR'S CLAIMS.

#### Brick Kilns.

To Joseph Ogle, of Baltimore, Md., for improvement in Brick Kilns. Patented 9th May.

Claim.—What I claim as my invention, and desire to secure by Letters Patent, is:—

“1st: The interposition of a grating of fine brick or other material applicable to the purpose, between the fire and the brick to be burned, in the manner herein described, by means of which I prevent the fire in the arches from immediate contact with the brick to be burnt, thereby obviating the danger of the bricks adhering together in the lower portion of the kiln, and blocking up the channels formed in the setting of the brick for the circulation of the heat.

“2nd: The construction of a grating along the floor of the kiln of fine brick or other suitable material, in the manner above specified, and combining the same with the grating (D,) and draft holes in the roof, by means of which I cause the greater part of the heat emanating from the arches to circulate between the floor of the kiln and the grating (d, D,) and thence upward to every part of the kiln, thus enabling the operator to burn the brick to any degree of hardness requisite.”

#### Bricks.

To Nathan Towson, of Washington, D. C. improvement in Bricks, Patented 16th May, 1848. Claim.—What I claim as my invention and desire to secure by Letters Patent, is the forming brick with dove-tail indentations, by means of which the brick, when covered with mortar, will be held together, and by which mortar, plaster, or other material used in plastering, stuccoing, or rough casting brick work, will be securely fastened thereto, and prevented cracking and falling or peeling off.

#### Bending Sheet Metal.

To John Epply of York, Pa, for improvement in machines for Bending Sheet Metal, Patented 16th May, 1848. Claim.—Having thus fully described by invention, what I claim and desire to secure by Letters Patent, is the combination of the revolving mandrel and concave recess, constructed substantially in the manner and for the purpose described

#### New Material for Cloth.

It has recently been found that the leaves of the pine apple contain an extremely fine, glossy, and silken fibre, easily separated by heating and washing. The ultimate fibres are finer than those of cotton or linen, applicable to the same purposes.