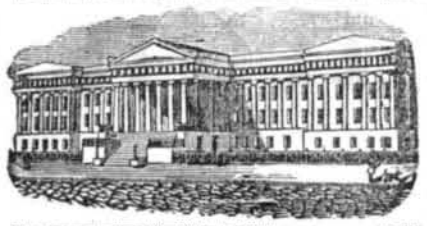

[Reported Officially for the Scientific American.]

LIST OF PATENT CLAIMS

Issued from the United States Patent Office,

FOR THE WEEK ENDING AUG. 21, 1855.

CANDLESTICKS—C. W. Blakeslee, of Northfield, Ct.: I do not claim forming the body and base of the candlestick of wire; neither do I claim a spring lamp or socket, in itself considered, or independently of the mode of constructing or forming the same, as shown, for they have been previously used.

I claim extending the wires of the body of the candlestick, through a dish-shaped plate, B, substantially as shown, for the purpose of forming a spring socket for the reception of the candle, as described.

[In these days of progress and new inventions, one would think it a rather difficult matter to introduce novelty enough into a candle stick to warrant the issue of letters patent. Mr. Blakeslee, however, shows that all new ideas are not yet exhausted: his improvement consists in making the entire candlestick of wire. It commences with a flat coil at the base, and rises in spiral form, the upper part terminating with a socket of simple but peculiar construction for the reception of the candle. Four upright wires are arranged on a disk, their upper ends springing together slightly; the candle is placed between the wires and thus securely held. A candlestick thus constructed is light, strong, cheap, and very ornamental in appearance.]

APPLICATION OF THE CONICAL PENDULUM TO TIME-KEEPERS—J. C. Briggs, of Concord, N. H.: I claim the application to clocks, time-pieces, or other machinery, as a regulator of a rotary or conical pendulum, the rod of which is flexible, and attached at its upper end to a fixed point above, and without the described cone, and extending only below the point of support, the pendulum to be kept in motion by a spindle coming up from below, substantially as described.

SEALING CANS—Wm. Burnet, of Cincinnati, Ohio: I claim the use of a clamp cap, B, constructed substantially as described, for the purpose of closing the opening in the can, between the filling and the final sealing thereof.

[The fact is coming to be pretty well known, that many of the fruits and choice kinds of small vegetables can be easily preserved in a fresh state, retaining all their original flavor for any length of time by merely keeping them in an air-tight vessel. The result is, that a very large demand for such preserved fruits is springing up, and as the chief expense, beyond the cost of the fruit, is in the can, it is highly desirable to have some ready means of opening and closing the mouth of the same, always leaving it air-tight. The old plan was to fill the can and then solder on the top. But such vessels are a nuisance to get open, and have been very properly discarded. Mr. Burnett appears to have made an excellent improvement; he clips and slightly bends the edge of the opening in the top of the can, and uses a cover having little projections which fit the clips. You turn the cover a little and it screws on tight; turn it the other way and it comes off.—The edges of the cover rest in a groove, and are sealed by wax, which is poured into the grooves at the time of filling the cans. It will be observed that this can, while it presents to the dealer the desirable quality of great cheapness, is also highly convenient to the purchaser. It is a good invention.

OBSTETRICAL EXTRACTOR—A. C. Buffum, of Chicago, Ill.: I claim an obstetrical extractor, which, from the peculiar form of its fingers, and by means of three cross-bands interlaced by down straps, so clasps and supports the head of the child, as that the force necessary to assist its delivery can be applied without injury to mother or child.

I also claim that by means of the frustra, the instrument can be ready for application, so small and of such shape, that it can be applied more readily and with less risk and pain to the patient than any forceps or other extractor in use.

GLASS JOURNAL BOX—Edward Campbell, of Columbus, Ohio: I do not claim the union of glass and iron, whilst the former is in a plastic state, and the latter at a red heat, by pressure, to produce a welding of the two.

But I claim, as a new manufacture, a journal box composed of an iron body and an anti-friction lining surface of glass, when the said glass lining is combined with its iron back, as set forth.

SWIMMING GLOVE—Dugald Campbell, of New York City: I claim the use or employment of flexible webs uniting the thumbs and fingers of gloves.

[Nothing now remains to render man an aquatic animal except the invention of some web-apparatus for his feet: if his toes could be slitted up and so made longer Mr. Campbell's apparatus would be applicable.]

WRENCH—J. D. Dale, of Philadelphia, Pa.: First, I claim the combination of the reversible flanged and winged hub, F, and pawls, G G', with the upper and lower ratchet wheels, B1 B2, constructed and operated as described.

Second, I also blaim the combination of the angular jaws and worm plate, F, or their equivalents, with the upper and lower ratchet wheels, B1 B2, and the mechanism giving them a continuous motion either to the right or left.

BASIN STOP COCK—Henry Eling, of New York City: I do not claim closing a cock by means of a spring, when said cock is not provided with a screw valve.

But I claim making the cap, C, independent of the nut, D, so that by simply loosening the nut, the cap may be turned and the valve adjusted.

[In city dwelling houses, where water is conveyed about through the apartments in pipes, it is usual to furnish the wash basins with stop-cocks, the handles of which are hollow, and so arranged that when you pull the handle forward, the water discharges through it into the basin, and when you push it back the liquid ceases to flow. These stop-cocks, although ornamental and exceedingly convenient, possess, nevertheless, some defects: for example, the children love to play with them, and sometimes leave them turned so that the water overflows and damages the house and furniture; then again, a careless servant does the same thing. Sometimes, too, the valve gets out of kilter and leaks, or lets the water run when the handle is in the wrong position. Mr. Eling easily obviates all these troubles, and renders this kind of stop-cock what it ought to have been long ago—a complete article. He prevents the possibility of a careless overflow, by arranging a self-acting spring within the stop-cock, in such a manner that the water will run so long as you hold the handle in proper position; but the moment you let go, it flies back, and the water stops. The other portions of the improvement, it is needless for us to deseribe; suffice it to say, that they perform their offices effectually. This is an excellent improvement; it will be appreciated by all householders and housekeepers.]

PRESSURE WATER WHEEL—Wm. Fields & S. Gerhard, of Wilmington, Del.: We claim the combination of the valve, B, with the buckets, A, upon the wheel, D, revolving in the case, C, substantially as described.

PUMPS—S. H. Gray, of Bridgeport, Conn.: I do not claim operating the two pistons of a single cylinder, double acting pump, by means of two racks and a pinion, when said racks and pinion are arranged above the top or below the bottom piston, and the rod of one piston passed through the rod of the other.

But I claim the employment and arrangemcnt of the rod, C C', and pinion, D, combined between the pistons.

[In this pump two pistons are employed in one cylinder, both operated by one handle or lever. The improvement consists in a novel means of operating the pistons. A shaft passes transversely through the center of the pump barrel, within which, on the shaft, a cogged pinion wheel is placed. The piston rods have teeth on them, like a rack, and gear with the pinion. Outside of the pump, and attached to one end of the shaft, there is a handle or lever, by working which back and forth, the pistons are operated. No piston rod, it will be noted, is seen on the outside, since all the moving parts, except the lever, are confined inside of the pump. By the use of this invention two separate streams of water can be discharged, if desirable, or a single continuous one. It is, in effect, the combination of two of the ordinary pumps into one apparatus, at a cost which exceeds only by a trifle the expense of the single pump. The prominent advantagess are, doubling the capacity, and therefore the utility, without much increasing the cost. This invention is simple in its parts, and not likely to get out of order. We regard the patent as one of value.]

HEMP CUTTERS—J. L. Hardman, of Arrow Rock, Mo.: I claim, first, the side reel constructed and applied for hemp, grain, or other articles of like nature, such reel having curved arms, be the curvature more or less.

Second, I claim the cleaning shears, substantially as described.

BRIDGES—H. L. Hervey, of Quincy, Ill., and R. E. Osborn, of Springfield, O.: We claim the arrangement of the blocks, D D, and posts, O O, in combination with the adjustable suspension truss, the arched truss, and the tension cord, so that the camber of the bridge may be increased or diminished by the adjustment of these blocks, in connection with the tension cord, so as to increase the strength of the bridge, by lessening the strain on any one point, by distributing it to many points, by means of the adjustable blocks, as described.

Second, we claim constructing and arranging the blocks which sustain the tension braces of the suspension truss, so that they will slide or traverse on the string pieces, so that they will slide or traverse on the string pieces, so as to equalize, distribute and proportion the load more uniformly, and over a larger portion of the bridge.

Third, we claim supporting the floor timbers alternately, by or successively by the arch and suspension trusses, as set forth.

[This is a very valuable patent: a bridge of this construction will be stronger, and yet cheaper, than many of those now in general use. The inventors are ingenious men.]

ENGRAVING CALICO PRINTERS ROLLERS—John and Thomas Hope, of Providence, R. I.: We claim the combination and arrangement of the two sets of measuring markers, i i i i, the hold back rods, F F, and roller, with plane surface table, the same being not only to enable the design to be transferred, it being brought forward in regular sections, but to be maintained flatly upon the table.

We also claim the two measuring indices, in combination with the large pulley and the shaft of the driving roller of the cylinder to be engraved.

We also claim the means of holding and moving the cylinder, so that it shall not only be rotated, by pressure, against its external surface, but may be readily, either removed from or applied to its supports, the same consisting is employing a driving roller and a bearing roller, at one end of the cylinder, in combination with two sets of bearing rollers, made to extend into a groove, around the cylinder, and to support such cylinder, both laterally and longitudinally.

We also claim the arrangement of the pattern table, the tracer and its carriage, the several other carriages, the mechanism for operating each, the wheel, the shafts, and the supports of the roller to be engraved—the whole constituting an improvement in engraving machinery and securing to it important advantages in operation, as well as in construction, as set forth.

[The above is a very important invention; the beautiful figures and designs which ornament almost every species of calico sold in our stores, are produced by passing the white cotton cloth between solid cylinders or rollers made of copper, the surface of these rollers being engraved and inked over by other rollers, as fast as the cloth passes along. The result is the production upon the cloth, of various patterns and figures in different colors, just as books, newspapers, and the like are printed. The preparation of the cylinders, in calico printing, where an entirely new design is wanted, is a slow and costly matter, each cylinder sometimes costing as high as three or four hundred dollars. The improvement of Messrs. Hope is calculated to facilitate and cheapen the cost of the printing rollers.—The patent appears to be a valuable one.]

APPARATUS FOR VESSELS TO INDICATE THEIR LOCALITY WHEN THEY SINK, AND TO SUPPLY A MEANS OF RAISING THEM—J. Hyde, of New York City: I am aware that on some occasions, in throwing guns, anchors, and other heavy articles overboard, to lighten ships at sea, cords with floats have been previously attached, to indicate their locality when sunken.

But I am not aware that buoys, specially provided, have ever been arranged and connected with a vessel, or any thing within it, so as to remain so connected and give out the connecting cord, to remain on the surface of the water as the vessel sinks, to indicate its locality, and afford the means of forming the necessary connection for raising the vessel, &c., to the surface; and therefore I do not claim, broadly the use of floats to indicate the locality of sunken vessels.

I do not wish to be understood as limiting myself to the special construction of the buoys; nor to the special manner of arranging the cord which forms the connection between the buoy and the socket, or the hose; nor to the special mode of attaching the socket to the vessel or safe; nor to the mode of making the flexible bags, or cammels and hose; nor to the special construction of the grapple, as all these may be varied without changing the character of my invention.

I claim the mode of operation, for indicating the locality of sunken vessels, by means of a buoy or buoys, connected and combined with the vessel, by means of a cord or cords, or the equivalent therefor, attached to the buoy and a windlass or equivalent thereof, and connected with the vessel, or some valuable within the same.

I also claim the mode of operation, for connecting cables or chains, with sunken vessels or articles therein, by means of the socket, or any equivalent therefor, operated by the buoy cord, substantially in the manner described.

RAILROAD CAR SEATS—Ebenezer Jeffers, of Dorchester, Mass.: I am aware that a chair seat has been so combined with its legs, or supporting frame, as to be capable of being rotated horizontally. I am also aware that it is not uncommon to apply a table or other article to a stand, by such devices as will admit of its being moved in either a horizontal or vertical direction. I therefore do not claim such.

But I claim arranging the pedal, the bolt, and their locking recesses together and in the sector, and in the turning and stationary posts, as described, and so that by one single movement of the pedal, the sector and the turning post may be latched or unlatched simultaneously, so as to enable the chair to be operated.

JOURNAL BOX ALLOYS—B. F. Lawton, M. D., of Troy, N. Y.: I claim the aforesaid alloy, or box metal, as a new material, for the purpose of forming boxes, journals, axles, and all other rubbing surfaces of the moving parts of machinery, as described.

PRESSURE GAUGES—Jno, Matthews, Jr., of New York City: I claim the construction of a gauge tube, in the manner set forth, that is to say, having offsetts thrown out along one side, for the purpose substantially as described.

WARM BATH APPARATUS—L. H. Lefebre, of New Orleans, La.: I claim the portable steam bath apparatus composed of a double generator, so arranged that the products generated in the two compartments may be conveyed to the bath, mingled or separately, of a bag, M, and of a connecting pipe, K, each of said parts constructed and arranged as described.

PERCUSSION PROJECTILES—Augustus McBurth, of Elizabeth, N. J.: I claim the improvement in bomb shells, or missiles, having four arms, b b' b'' b''', and eight flutes, with sharp edges, 1, 2, 3, fig. 3, in the manner and for the purpose substantially as described, also a rod to pass through the shell, in a longitudinal course, for the purpose set forth.

And also a hammer with a flat spring attached, together with a spiral spring, d, as shown and described.

[Here is another Sebastopol taker. It appears to be a good invention: it is apparently so arranged that the moment the shell strikes an object it explodes its magazine of powder, and scatters death and destruction all around. Common bomb shells carry such a magazine within, and when the fuse, which is lighted by the act of discharge, burns down to the powder, it explodes. Sometimes the explosion takes place in the air before the shell reaches its destination, and then the result is harmless. Oftener the fuse in the shell burns for some time after landing, and the enemy have time to run away from the shot and escape injury. Mr. McBurth's shell explodes when it strikes, and then so instantaneously that eseape is out of the question.]

HAND STAMP—S. P. Ruggles, of Boston, Mass.: I claim in a hand stamp the connecting of an electrotype plate to the handle of the stamp, by means of a screw cap, as described, for the purpose of facilitating the removing and replacing of the electrotype, or portions thereof, as set forth.

I also claim the combination of devices for holding the bed plate, E, to the shank, B, so as to preserve the ball and socket, or yielding point, prevent them from being separated, and to keep the coiled spring in place—the same consisting of the flanges, a f, on the bed plate, with the holes therein, the large opening, c, in the shank piece, and the pin, e, passing respectively through them, as set forth and described.

[Mr. Ruggles is a veteran inventor in the field of printing mechanism. His improvements are in use in almost every printing office in the country.]

WINDOW SHADES—J. J. Crooke, of New York City I claim so constructing and hanging a window shade, that the roller thereof shall be capable of being raised and lowered, and at the same time, shall roll or unroll the shade, and this without interfering with the fixtures for raising the bottom of the shade, in the ordinary manner, as described.

RAILROAD CAR SEATS—A. M. Smith, of Rochester, N. Y.: I do not claim the form or shape of the back or seat part of the car seat, as they are in common use.

But I claim the constructing and arranging of the car seat, so that the whole back of sufficient width and shape best adapted to support the body of a person for day riding if changed either side of the seat, to ride either way, can be reversed, the outside turned inside thereby, and at the same time raised high enough to support the head and body equally well for night riding, by means of and in combination with the different devices, or their equivalents, necessary for the purpose, as described and set forth.

HORSE YOKES—Jno. Woodward, of Wilmot Flat, N.H.: I do not claim a horse yoke, consisting of two eveners or horizontal bars, a connecting or vertical bar, two sets of harness and hame connections, arranged at the upper and lower ends of the harness, such being represented in the patent of Elijah H. Dantforth, granted July 23, 1853.

I claim constructing and arranging the hame connections with respect to a single beam, whereby such hame connections may be attached to the middle of the hames instead of at their ends, and thereby render but one bar or bearer necessary to connect the harness and the pole of a carriage.

DOOR KNOB—A. E. Young, of Dorcester, Mass, (assignor to himself and Mark Worthley, of Boston, Mass.:) I claim the sliding clutch and its attachments applied to the shank and the socket and the movable knob, as set forth.

BREECH-LOADING MAGAZINE FIRE ARMS—J. Swyney, of Charlestown, Mass. (assignor to himself and James Dandridge, of Boston, Mass.): I claim the carrier, K, its spring, S, in combination with the magazine or tube, F, for the purpose of bringing a cap from the magazine, E, downwards, or into line with the rammer, as described.

I also claim the rammer, in combination with the rammer, F, and the mechanism by which they are connected so as to operate together, as described, such mechanism consisting, in part, of the rod, y, and the lever, b.

I claim combining with the charge chamber, C, and the magazine, E, the intermediate chamber or carrier, M, said charge chamber, C, and carrier being connected with and operated simultaneously by the guard, as described.

SAWING SHINGLES—Chas. Ketcham, (assignor to C. G. Judd and Andrew Oliver,) of Penn Yan, N. Y.: I claim, first, the feeding trough, C, for containing the shingle, or stock block, constructed as described and arranged, in relation to the means for feeding and the means for cutting, as set forth.

Second, the receiving trough 2, having the grooves in it, to receive each shingle, while being cut and holding them sufficiently to permit their easy and ready removal from the saws, in compact and orderly condition.

Third, the arrangement of the adjustable inclined levers, O O, by pressure exerted in the line of the edge of the shingle being cut, by means of the rollers, X X, or their equivalents, held and moved substantially as stated, in contradistinction to the holding of the block by lateral and end pressure, as is usual in shingle making machines, so that the shingle being cut, is neither pressed upon the sides of the saw, as must occur when lateral pressure is used; nor the block upon the teeth of the saws, as must occur when pressure is made.

CORN AND COB MILLS—D. S. James, of New Market, Va. (assignor to himself, J. B. White, of Dinwiddie C. H. Va., & J. W. McIntyre, of Dinwiddie Co., Va.: I make no claim to any of the parts of the machine separately considered; neither do I claim the simultaneous rotation of shell and burr; nor the means by which the same is produced, as such is not new.

I claim suspending the rotary shell by an upper arch, upon a shoulder of the main spindle, when the said shell is connected at bottom with the burr, as described, and the moving power applied directly to the shell, whereby friction is greatly diminished and consequent facility of operation attained.

PAGING BOOKS, &c.—W. C. Demain (assignor to A. B. Ely,) of Boston, Mass.: I claim operating the numbering wheels, by means of the springs, h k, whereby the first wheel is caused to actuate all the others, and the operation of the machine is rendered automatic, in the manner set forth.

Second, the repeating wheel operating according to the form and frequency of the notches thereon, substantially as described.

Third, I claim the drum with its notches, f g, in combination with the numbering wheels.

Fourth, the gate, F, in combination with the numbering wheels, and the parts which set them in motion.

[This is said to be the best book paging machine ever made: for rapidity of operation, excellence of work, simplicity in construction, and cheapness of operation, it will certainly take the palm. Few persons would be apt to think that the patent right for an apparatus which was merely used for stamping the numbers on to the pages of account books, was of any great value; yet the patent for a machine for this purpose was sold to certain parties, not long since, for *one hundred thousand dollars*. Such facts cannot fail to encourage inventors to persevere in whatever they are trying to produce.]

FOLDING PLATFORM—Jno. Cram, (assignor to himself and J. S. Cram,) of Boston, Mass: I claim combining the platform or seat, A, with the back legs, C C', by means of the turning or front legs, D D', and the connecting links or bars, E E', and so that said seat or platform may be either turned down horizontally so as to be supported on both sets of legs, or they and the seat be folded together.

BURGLARS ALARM—Alfred Bingham (assignor to himself and A. J. Bailey,) of Boston, Mass.: I do not claim combining with the match holder a roughened surface for the match to rub against.

But I claim arranging the friction surface when applied to a spring, bent as set forth, at an angle with the match holder or its path of movement, as described, in order to facilitate the ignition of the match, when the holder is in movement.

I also claim making the friction surface to revolve, as described, in order that a fresh portion of the surface may be exposed to the match, whenever any part of the surface becomes worn or unfit for use.

I do not claim the combination of an alarm apparatus or movable match holder, or friction surface, and a lamp; nor the combination therewith of a contrivance for casting the extinguisher off the wick tube of the lamp.

But I claim the described arrangement of the match holder, cast-off lever and hammer rod of the escapement, whereby the holder is retracted, the escapement apparatus will be controlled, but during the forward motion of the match holder, not only will the cast off lever be tilted so as to throw the extinguisher off the wick tube, but the escapement set free, so as to enable the alarm mechanism to operate and strike the hammer with repeated strokes upon the bell.

JOURNAL BOX ALLOYS—B. F. Lawton, M. D., of Troy, N. Y.: I claim the aforesaid box metal, or alloy, as an improved material, for the purposes of forming locomotive crank boxes, piston rings, journals, boxes, axles, and other rubbing surfaces, of the moving parts of machinery.

HARVESTERS—Chas. Bradfield, of Philadelphia, Pa.: I claim the arrangement of the pulleys, D E f, on and near the axle, and the finger and cutter bar underneath the axle, when the cutters are operated from said pulleys, through the intervention of the endless belt, g, cranks, pitman, and connecting rod, as set forth.

CURTAIN ROLLERS—D. H. Chamberlain, of West Roxbury, Mass.: I claim attaching the spool directly to the spindle, and causing it to revolve with the curtain rod, when the spool is forced towards the jamb by the spring, g, as described.

RE-ISSUES.

CLOSING AND OPENING GATES—Wm. G. Philips, of Newport, Del. Originally patented March 7, 1854: I claim a double span, rotating gate, opening and closing, by an intermittent rotating motion, in one direction, only said motion being derived through lifting pieces or levers, cam planes, weights, or cords, or their equivalent.

LANTERNS—Hugh and James Sangster, of Buffalo, N. Y. Patented originally June 10, 1851: We do not claim fastening lamps to lanterns by spring catches; nor do we claim attaching said catches to the upper part of the lamp and extending them down, so as to spring outward over a flange in the lantern.

But we claim constructing and arranging the spring catches, I, or its equivalent, to cause the attachment of the lamp to the lantern by the operation of pressing the lantern down upon the spring catches.

Also, arranging the thumb piece, L, within the flange, G, at the base of the lamp, by extending the spring, I, towards each other, horizontally, and thus forming the elbow catch, to rest against the shoulder on the flange, E, of the lantern.

DESIGN.

IRON RAILINGS—M. H. Fowler & Enoch Jacobs, of Cincinnati. O.

Honor to an American Inventor.

The Emperor of Austria has conferred upon Professor Morse the large golden medal for arts and sciences, in consideration of the valuable services rendered by him to science by his system of telegraphs, which has been extensively applied in the Austrian dominions.

Scarcely twelve years have elapsed since Professor Morse's first public experiment in Electric-Telegraphing was made between Baltimore and Washington. Now there are about fifty thousand miles of the wires in operation, and they stretch under seas and over mountains, into almost every part of the habitable globe. Nearly as many miles more are in progress of construction. The Electric Telegraph is the wonder of our age. Its practical introduction is chiefly due to the ingenuity of our American citizen, who, previous to the realization of his great idea, was almost unknown to fame. This fact should afford great encouragement to all inventors. They hold the keys to myriad other treasure chambers of invention, as yet untouched and undeveloped.

Trial of Reaping Machines in France.

On the second of last month, the various reaping machines in the Paris Exhibition were subjected to several trials before an international jury. The first trial took place with a small French one horse reaper, a Bell's machine, which was made in France, and Wright's American automaton self-raker (Adkin's invention.) The latter beat the other two, and the small French reaper beat Bell's. The second trial was with a Bell's reaper, made by Crosskill, Manny's reaper, and another French machine. Crosskill's machine soon broke down, Manny's worked very heavily, and did not do good work. The third trial was between the machines of McCormick and Hussey, in which the former came off victorious, by doing more work with greater ease, and a greater quantity of it than any of the other machines.

After these trials, McCormick's machine was challenged to compete with Wright's and Manny's reapers in mowing a field of *lucern*. In this trial it again proved the victor. In another trial in a field of wheat, with Manny's reaper, McCormick's reaper proved itself superior.

Such are the accounts we have received of these trials by our foreign exchanges. Another series of trials with reapers was to be made on the 14th, but we have not yet received an account of them. Thus far McCormick's reaper has proved itself better than all its American and foreign competitors.