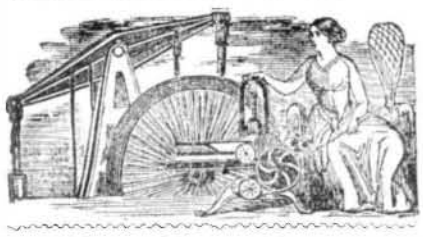


New Inventions.

Eureka Cotton Gin.

Henry Clark, Esq. of Eufaula, Alabama, has invented a new Cotton Gin, which is destined to work a great revolution in the cleaning of cotton in a superior manner. There are no saws like those in common use. It picks all kinds of cotton from the seed with as little injury to the fibre, as if it was picked by the fingers and it does the work expeditiously. We forbear to give a minute description of it at present, as we shall probably be able to present an engraving of it in some future number, but this much we can say regarding the manner in which it does its work, that we have now a sample of common cotton picked by it, and we venture to assert that no person has seen the same kind of cotton, as well picked by any other machine. Measures have been taken to secure a patent, and we have no doubt but this machine will be another tribute to the inventive genius of the South, which seems to be roused up this year into wonderful activity, as the many patents granted for the Southern States abundantly testify.

Street Sweeping Machine.

Mr. C. S. Bishop, of Easton, Pa., has invented a machine for sweeping streets. It is so constructed as to sweep along the street carrying up all the dirt into a wagon. In fact it is simply a wagon street cleaning machine, which by the simple motion of itself through the street will sweep up and carry off all the dirt far speedier and better than can be done by hand. Such a machine is certainly much wanted in this city. On a rainy day all our public streets look more like Sloughs of Despond than thoroughfares of the mistress city of a great republic. We shall probably be able to present an engraving and description of this machine at some future period.

Improved Cider Mill.

Mr. Daniel Williams, of Buckram, L. I. has invented a new and useful improvement in Cider Mills, for which he has taken measures to secure a patent. The improvement we are informed consists in the manner in which the apples are squeezed, or pressed, which is altogether different from those in common use. It can be applied to a horse power, is portable, can be carried into any orchard, set up, make all the apples into cider, and be carried easily about from place to place. Their cost of construction is said to be much less than that of the common mills.

New Mop Handle.

We have received a model of one of the most convenient and neat mop handles that was ever sent to bless the good housewife.—It is the invention of Ubridge Webber, of Gardiner, Maine, whose name is prolific with invention. By the most simple contrivance of a spiral spring the lips of the handle can open like the click of the telegraph and the mop can be taken out and wrung and put in again, without the use of a screw or a string or any thing of the kind to fasten it. It is a most useful and simple invention, and for which the inventor has taken measures to secure a patent, which will no doubt bring a handsome return, as it really deserves.

An Improved Railroad Brake.

Mr. John Layhae, an ingenious mechanic of Baltimore, Md, has invented and patented an improvement in the railroad brake. Mr. Layhae's brake is so arranged, that as soon as the engine is checked, the buffer spring of each car causes it to clamp the wheels tightly, while by a backward motion in the engine the brakes are all relieved and the train can be immediately impelled backward, out of the way of danger. No matter how great its length it is said that it can be reversed as easily and almost as soon as the simple engine.

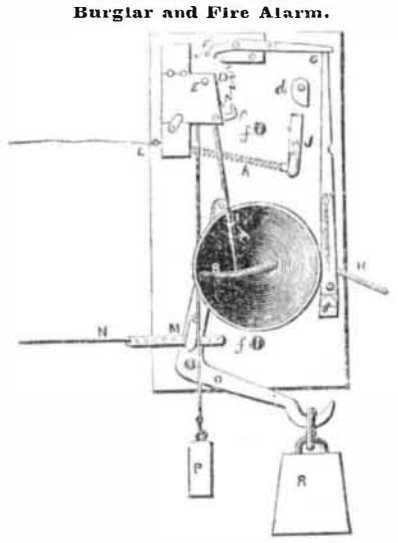
Carriage Bow Spring.

C. S. Woolson of Cleveland Ohio, is the inventor of a most beautiful spring for carriages and other light vehicles. By the manner in which it is constructed the weight of the carriage body is brought to bear entirely upon the axle near the wheel, thereby avoiding the strain upon the centre of the axle, By this invention a light strong and cheap carriage is obtained. The motion of the vehicle with this spring is said to be perfect. These springs are now manufactured by the inventor at the above place

Suspender Buckles.

Mr. Wm. Scarlett, of Newark, N. J., has invented a machine for making suspender buckles. The machine is driven by steam-power. The end of a coil of wire, wound upon the reel, being placed in its jaws, it continues to feed itself, and drops into a receiving box about 30 bows for buckles in a minute, each completely bent, pierced and ornamented. The bars of the buckles are cut and pierced ready to receive the tongues by a still more simple and rapid process, the tongues are then fitted sharpened and fastened, and the complete buckles are thrown into a revolving barrel of sawdust, which absorbs the grease and cleans them—when they are more perfectly washed in muriatic acid, and finished by dipping them into a pot of melted tin, and which gives them a thin silvery looking coating. They are then counted and packed for the market. The labor which is very light is almost wholly performed by children. The ingenious inventor is about to apply his principle to making all varieties of buckles.

Burglar and Fire Alarm.



The above is an engraving of this invention, spoken of in our last number. The apparatus is fastened on a square block of wood and attached to any part of the house most convenient. Its purpose is to arouse the inmates of a dwelling by the alarm of a bell, which is operated upon by a hammer by the dropping of the weight P, in the following manner. D, is a rack wheel, on which is connected an escapement C, fixed on a pendulum hammer B, and connected with a small axle between D and E, which is not seen.—Round this axle is wound the cord which suspends P. Now if P was descending, it will easily be perceived that the hammer would be playing on the concave bell or rather gong, A, just in the same manner as the escapement of a clock and as if the weight of the pendulum struck a bell at every vibration. To make this a fire alarm all that is necessary is simply a clamp to hold fast the rack wheel D, and which clamp can be ungeared by the expansion of some connecting metal. F, then is this clamp, represented now as geared into the ratchet wheel by G, a perpendicular rod, both of which are kept connected ready for operation by a small bar *d*, which by a mistake of the engraver is turned upside down. N, is a metallic wire of a very expansive metal which when expanded by a very little heat pushes G out of gear with F, and the ratchet wheel being relieved from the clamp F, the weight P descends and the hammer plays on the alarm bell. It will be observed that the weight R, is suspended upon a crooked lever, and connected with N, (for holding it tight,) in the manner represented at M.—This weighted lever is geared unto G, passing through it at H. The whole of this arrangement then will be perceived to be nicely balanced for operation, but by the least expansion (pressure,) at M, the weight R acts as an assistant to ungear G with F, and set the escapement in motion, thus performing two offices.

Burglar Alarm.—The whole is geared for operation as for the fire alarm, and the clamp ungeared with the ratchet wheel by striking G, which is done by a spring attached to J door which, when the door is opened, pulls L, attached to I by the spiral spring K. There is an arrangement connected with the Burglar Alarm not represented in this engraving.—The connection is coupled or uncoupled with the opening of a door, in a very simple manner, so that no inconvenience is experienced by opening and shutting the door in business hours. The invention is simple and good and ought to receive the attention, especially of business men. See last number of the Scientific American for business information

Cottrell's Progressive Bridge.

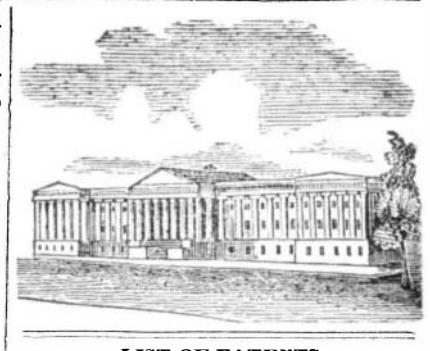
Ar. Albert Cottrell, of Newport, R. I., has taken out a patent for an improved system of Bridge building, and he offers to build bridges over any river on this continent, independent of the water, upon philosophic principles—He says: "My rule for the proportion is to extract the square root of one half the distance of the width of the river, in feet, for the vertical height of the solid lever at the line of transposition; and then progress those propositions into open space. I need not say that I can proportion a bridge to span with ease and efficiency, with the solid progressive levers, any river in this country, for prices much, very much below any other plan of building. For example:—Let it be required to build a bridge over the Bristol Ferry, a distance of 5000 feet, or nearly one mile. What would be the vertical height of the two opposite levers at the line of transposition, to meet in the middle of the bay? Answer—50 feet. I therefore want one hundred courses of timber of 6 by 12, each course projecting 25 feet in front of each other to reach the middle of the river. The cost of the bridge depends on the proportions. A bridge, however, can be built over Bristol Ferry, for carriage travel, of 6 by 12 timber, for $125,000.—But for a railroad bridge I would raise my proportions to a fourth power, which would require a lever 100 feet high, with 12 by 12 timber for the stretching course, and 25 feet for the projection. This would cost $250,000. In this plan of bridge building, during the progression over the stream, the last stick which is projected on the extreme end of the lever, is the first to break if power sufficient be applied, and the first which comes off from the abutment is the last to break. This is the unalterable rule and law of geometrical progression, as is applied to an independent progressive system of practical bridge building, adapted to the increasing wants of the people to span with ease, majesty and splendor the various deep and mighty rivers of the globe."

Important Discovery.

A communication of engineers, who were required by the Secretary of the Treasury to examine into the operation of, and report upon the utility of an apparatus for supplying fresh water to boilers in marine steam navigation. After giving the result of the experiment. says:—

"With the ordinary method, the level of water in a boiler, is constantly varying from one or both of the following causes, viz., the quantity of the water blown off. or the particular extent of opening the feed pump and neglect of the blow off valve, involves the burning or explosion of the boiler. With the new method, these operations are set aside; thus, blowing off, is unnecessary, and the supply to the boiler being first obtained from it, the transit being immediate and the communication incapable of restriction, for if the condensed water were not taken off by the feed pump, the condenser would choak and become inoperative, there can be no decrease in the level of the water, other than that arising from leaks of water and steam. Further the use of fresh water in a boiler will extend the terms of its duration from three to five years, to seven and nine,"

The Bangor Whig says that Mr. E. Sargent, of that place has invented a new brake for railroad cars, which is so powerful that a brakeman can bring all the wheels to a dead stop almost in an instant.



LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending Dec 4, 1847.

To Curtis Wooster, of Philadelphia, Penn., for improvement in gauges used in finishing spiral Hand Rails. Patented Dec. 4, 1847.

To Elias Hall, of Persia, New York, for improvement in self-acting Cheese Presses.—Patented Dec. 4, 1847.

To George Pollock, of New York City, for improvement in Registers for Furnaces. Patented Dec. 4, 1847.

To Richard Albert Tilghman of Philadelphia, Penn., for improvement in decomposing alkaline and other salts. Patented Dec. 4, 1847. Ante-dated Feb 1, 1847.

To Richard Albert Tilghman, of Philadelphia, Penn., for improvement in decomposing Potash-Felspar, for obtaining certain salts.—Patented Dec. 4, 1847. Antedated Feb. 1, 1847.

To Reuben Cormitt, of Georgetown, Missouri, for improvement in connecting rods, pitmans, &c. Patented Dec. 4, 1847.

To Nathan Sawyer, of Baltimore, for improvement in Brick Presses. Patented Dec. 4, 1847.

To Harvey B. Nash, of Kingsbury, New York, for improvement in Bedstead Fastenings. Patented Dec. 4, 1847.

To Joseph Tuers, of Jersey City, N J., for improvement in Boats for sailing. Patented Dec. 4, 1847.

DESIGN.

To D. F. Goodhue, and Charles Guild, of Cincinnati, Ohio. for Design for Stove Plates. Patented Dec. 4, 1847.

INVENTOR'S CLAIMS.

Fish Hooks.

By Job Johnson, of Brooklyn, N. Y. improvment in the Fish Hook. Patented August 21 1847. Claim.—I do not claim to have invented the common fish Hook, as that is well known and in general use, but what I do claim as new and of my own invention and desire to secure by Letters Patent of the United States, is the original application of the stock or frame piece, the original application of the helicle contractable spring, together with the original constructive arrangement of these parts, for these purposes conjointly with a crooked and barbed dart, acting through the cock pin, trigger lever, and contractile helicle spring, to strike the fish, or animal by disengaging the dart from the trigger, through the combined action of the changeable hook with and upon the foregoing parts, the whole constructively arranged and combined to strike the fish or animal with the dart at the instant of the fish or animal biting at, or touching the bate on the hook, the whole effected without any action of the line, substantially as described and shewn. I also claim the application of the guard ring to prevent the user from injury by the dart accidentally disengaging while setting the bate tor use.

Fish Hooks.

By Stanton Pendleton, of New Haven, Connecticut. Improvement in Fish Hooks. Patented 21st August 1847. Claim.—What I claim as my invention and desire to secure by Letters Patent of the United States, is the attaching of the common Fish Hook to the spring fish hook, claimed to have been invented by the said Griswold, or the Sockdologer hook, patented by the said Engelbrecht and Skiff, before described by means of a screw spring or catch, or by any other convenient method, so as to be readily attached, detached and changed at pleasure, in manner and form substantially as herein described. And I do hereby disclaim all and every part of the apparatus claimed to have been invented by the Said Griswold and as patented by the said Engelbrecht and Skiff.