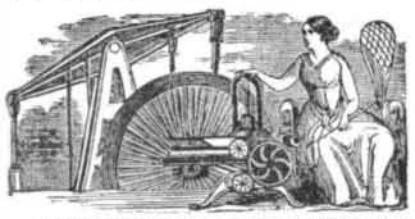


New Inventions.

Improvements in Saw Mill Gearing.

Mr. J. Moreland, of Adrian, Michigan, has sent us an account and drawing, (which we may yet be able to publish) of a new improvement in getting up the speed of reciprocating saws from the crank shaft of a steam engine. He employs a peculiar face plate with slides working in guides and connected with the pitman by crank pins in such a manner that a great velocity may be given to the saw with only a medium velocity of the engine. The plan is a simple and economical one.

New Spoke Machine.

Mr. Emerson Goddard, ot Petersham, Mass. has invented a new Spoke Machine, which will turn and tennon 20 spokes in a minute. All that is required is to place the wood on a bench, the large ends all one way. It is self feeding and self piling, leaving them when turned in a regular pile under one side of the machine, opposite to the feeding side. The above number turned out per minute, are of 23 inches in length. Lasts and fork handles, Mr. Goddard writes us, can be turned in it with nearly the same facility as spokes. We trust to be able to present an engraving of this machine in a future number.

Improved Faucet.

We have recently seen a newly invented Faucet or Stopcock, designed chiefly for water pipes, it is the invention of an ingenious machinist of Boston, and we hope soon to present an engraving of it. It is so arranged that by pressing a small handle, the water flows, but, on releasing it, the water, by its own action is instantly shut off. We remember a while ago that goods to the amount of several thousands of dollars in one of our stores in the lower part of this city, were damaged by the carelessness of the porter, who left the Croton water running over night. With this improved Faucet such an accident could never happen.

New Carriage Hub.

Mr. Harvey Baker, of Oneonta, Otsego Co., N. Y., has invented a new and exceedingly beautiful improvement in the mode of making carriage hubs. They are so constructed that a new spoke may be put into the wheel without taking the wheel off the axle or without removing the felloe. We will call attention to this improvement more at length at some other time. Measures have been taken to secure a patent.

Steam Boiler Alarm.

Mr. H. B. Furnald, of Mass., has recently invented an improved Steam Boiler Alarm, which consists in so applying a steam whistle to the boiler as to give an alarm to the attendant whenever the water is too low. An engraving will probably appear in the Scientific American in a short time.

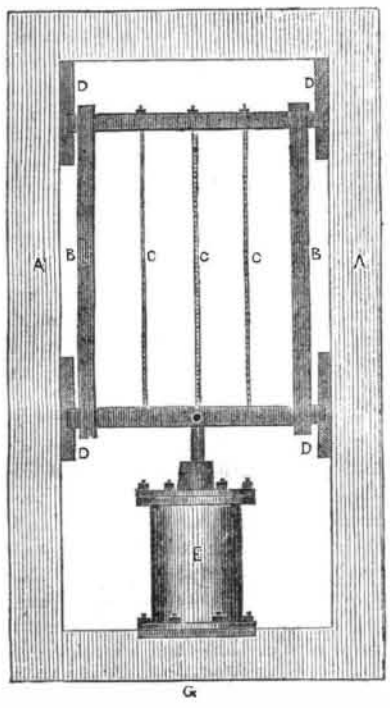
Self-adjusting Ox Yoke.

The Maine Farmer gives an account of a very excellent Yoke, invented by a Doctor Holmes, for lightening the toil of the patient ox. It is so constructed as to prevent what is technically termed "crowding" and "hauling." The principle of its operation is this —a bolt passes up through the yoke, instead of the staple, having an eye in the lower end in which the ring is placed. Near the upper end of the ring is placed an iron cog wheel or pinion, which plays loosely upon the bolt.— An iron rack is placed on each side of the pinion. One of the racks is attached to a block at the right end and another to a block at the left end of the yoke. The bows pass through these blocks, and the blocks slide back and forth in a slot made in the yoke. It looks rather odd but it fits as easy, is no heavier, and is as strong, and a little stronger than the common yoke. It can be arranged in five minutes, so as to give either ox the advantage as wished, and the sliding of the bows to or from, will keep the same relative distance.

Ocular Discovery.

The Worcester, Mass., Telegraph says that Mr Paine of that place, whose Spectacles we noticed last week, has made another important and wonderful discovery, which, should it prove *lasting*, will confer invaluable blessings on all spectacle wearers and poor sighted persons who avail themselves of its benefits. The discovery consists in the restoration of sight by means of etectricity applied with an instrument of the most delicate construction. The editor of the Telegraph says "we are not at liberty to give a detailed account of the discovery at present, but we can say that we have been personally benefitted by one or two experiments to which we have submitted, and in which the sensations produced by the application of the battery were of the most agreeable nature. And more than this—we know a lady of this city, who ten days since could not read the title letter on the first page of our paper, nor even distinguish it from the Boston Bee, without the aid of glasses ; nor could she read a common sized print without the use of a powerful lense. She can now read the former across the room, and can read a common newspaper print without glasses! We could not have believed it, had we not known the result of the experiments from observation."

Improvements in Sawing Machinery.



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This is the invention of Mr A. F. Ward, of York, Pennsylvania, and relates to applying the direct power of the piston to upright saws working in a slide frame. The principle of this invention has been described before in the Scientific American, but it is here made plain to all. The crank and crank shaft of a reciprocating engine, is allowed to waste some power, although not so much as some would lead us to believe. By this arrangement no power is lost by dead points, the action of the steam is applied direct to the work and the slide valves can be worked most admirably, while the speed can easily be regulated, but especially for sawing very heavy timber the plan is excellent. Measures to secure a patent have been taken, and there is no doubt but the invention will commend itself to all interested in saw mills.

A A, is a cast iron frame. B B, the saw frame. C C C, gang of saws. D D, the slides which work in grooves and are fitted nicely, so as to produce little friction, for in the inside of the slides are small friction wheels on a level with the face of the slides which beautifully lessen friction by the slide action. E, is the steam cylinder and F, the piston rod.— The power is applied to the work in a direct line. The feed motion is not displayed, but those acquainted with the art will readily perceive how that can be applied in the common way. The engine may be worked with the cut-off, or with the full power of steam the whole length of the stroke, as may be found most suitable.

Fire-Escape Ladder.

A small model of a fire-escape ladder was exhibited last week at Tammany Hall. It is the same as has been adopted by the fire department of Pittsburgh, Pa., and appears to possess many merits. Strong and compact it runs along on two wheels, and can be raised or lowered fifty feet in a few seconds, by one man. By it the firemen and hose can be taken up to any required height, and to places otherwise inaccessible, and persons or valuable goods rescued promptly from burning buildings. Firemen, house painters, and persons putting up telegraphic wires, should examine it. It would also be an excellent apparatus for every farmer for hand pulling his fruit.

Glass for Leather Cutting Boards.

North Bridgewater, Mass., June 9.

As your valuable journal is a grand repository for every thing useful in the arts and trades, I send the following :—

At the suggestion of a friend I have discovered that glass is an excellent substitute for a board to cut leather upon. To boot and shoe manufacturers it will be a most valuable substitute, being in the end much cheaper and does not dull the edge of a good knife any more than wood, if as much. I suggested the idea the other day to a shoe cutter and he laughed at me. He finally tried to cut on a large square of common glass and the next day he used it altogether and found it to far excel wood. Please try it yourself satisfactorily, and if you think enough of it to impart the idea to the world you will do a favor to many mechanics.

Yours, &c. J. T. Packard.

Bleaching Resin and Shellac.

The two following processes for bleaching rosin and shellac, taken from Examiner Page's Report of the Patent Office, will be found very interesting.

For rosin, take 12 gallons of caustic potash or soda of 5° to 10° degrees hydrometer, for heavy liquids, and raise the ley to a boiling heat. This is then charged with a barrel of rosin and the heat continued until the water boils through it. Then add 15 gallons of boiling water, continuing the heat with agitation, and when it has boiled five minutes the heat is discontinued, but the agitation is kept up as long as practicable. The alkali is drawn off and the coloring matter washed out with boiling water.

The shellac is first treated by heat with pure carbonate of potash and afterwards with chloride of lime and chloride of soda. Tartaric acid is then added to the solution, when the pure gum floats on the surface and is removed and washed. This process should also bleach Gutta Percha.

New Loom.

A correspondent of the Farmer and Mechanic states that Mr. Henry Kelly, of Manayunk near Philadelphia, has invented a new loom, which does away with the use of the treadle, and can work small patterns equal to the Jacquard, while it is only about one fourth the cost in making.

Broom Reform.

A mechanic at the mills on the Ramapo river has invented a machine for making brooms which threatens to exterminate broom corn. It takes a billet of white ash, and in a trice cuts it fine like the Manilla grass used for brushes. The brooms can be made for two cents each, and they are said to work quite as well in every respect as corn brooms, and to be much more enduring.

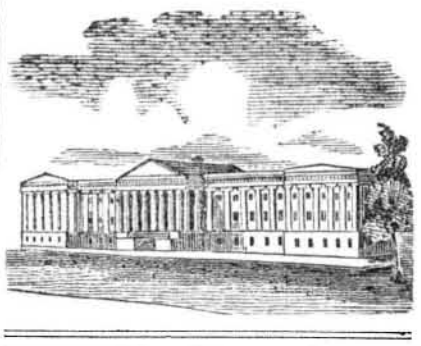
New Telegraph.

The Editor of the Cincinnatti Commercial announces that he has perfected and patented a new telegraphic machine which he thinks will prove superior to any now in use, and will surpass them in speed as six to one

Patent Shirt Collar.

A shirt maker in London, has invented a shirt collar, which he calls the "New Economic Shirt Collar." It has a recess or a kind of pocket in the band, in which are placed two or three extra collars to be turned up when required.

This is equal to the blacksmith in Albany, who used to put on six shirts at one time, once every six weeks.



LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending June 13, 1848.

To W. S. McLean, of Alleghany City, Penn. for improvement on Sash Stopper. Patented June 13, 1848.

To William H. Danforth, of Salem, Mass., for improvement in machinery for cutting and punching Copper Sheathing, &c. Patented June 13, 1848.

To Oliver S. Judd, of New Britain, Conn., for improvement in pullies for Window Sash. Patented June 13, 1848.

To Robert Tyhurst, of Petersburg, Penn., for improvement in Smut Machines. Patented June 13, 1848.

To Peter Lawson, of Dracut, and Aaron H. Sherman of Lowell, Mass, for improvement in Weavers' Shuttles. Patented June 13, 1848.

To Daniel Deshon, 2d., of New London, for improvement in Meat Cutters. Patented June 13, 1848.

Te Elisha S. Snyder, of Charlestown, Va. for improvement in machines for separating Straw from Grains. Patented June 13, 1848.

To John H. Schomaker, of Philadelphia, Penn., for improvement in Piano Fortes.— Patented June 13, 1848.

To William B. North, of Jersey City, N. J. for improvement in Cotton Presses. Patented June 13, 1848.

To Samuel Streeter, of Detroit, Michigan, for improvement in Water Wheels. Patented June 13, 1848.

To Elisha F. Aldrich of New York City, for improvements in Propelling Vessels. Patented June 13, 1848.

To Charles Lucas, of Charlottesville, Va., for improvement in drafting and measuring Garments. Patented June 13, 1848.

To Jordan L. Mott, of New York City, for improvement in the process of chilling Castings. Patented June 13, 1848.

DESIGNS.

To Michael Gibney, of New York City, for Designs for Spoons and Forks. Patented June 13, 1848.

To William Savery, George P. Bowers, and Joseph Pratt, assignees of H. V. Losea and J. H. Conklin, for Design for Stoves. Patented June 13, 1848.

RE-ISSUES.

To Isaac Adams, of Boston, Mass., for a Power Printing Press. Re-issued June 13, 1848.

To S. F. B. Morse, of Poughkeepsie, N. Y., for improvement in the mode of communicating information by signals by the application of Electro Magnetism. Re-issued June 13, 1848.

To S. F. B Morse, of Poughkeepsie, N. Y. for improvement in Electro Magnetic Telegraphs. Re-issued June 13, 1848.

INVENTOR'S CLAIMS.

Jointing Staves.

To Alanson C. Currier and Abel Bradway, of Monson, Mass. For improvement in machinery for Jointing Staves. Patented April 4, 1848. Claim —Having thus fully described our improved machine for jointing staves what we claim as new, and desire to secure by letters patent, is the adapting the jointing cutters to staves of various widths, by securing the cutter wheels in supporting adjustable bearings united to each other at a common centre, and combining with the same adjustable rests for supporting the edges of the staves, substantially in the manner herein set forth.

Twenty nine iron factories have been established in five counties in Pennsylvania during the past two years.