

**MANUFACTURING, MINING, AND RAILROAD ITEMS.**

The *San Francisco Bulletin* says:—One of the prominent executive officers of the Central Pacific Railroad has declared within the last ten days that this road will be finished to Salt Lake, and passengers will be transported over its entire length by the 4th of July, 1869. It is pretty certain, now, that there will be very little difference of time in the completion of the two roads. The prediction amounts to this in effect: That on the 4th of July, 1869, passengers will be able to travel by continuous rail across the continent, from San Francisco to New York. Strange as the proposition seems, we are not prepared to controvert it. The two great companies have surmounted the greatest obstacles which are to be encountered on their respective lines. Each has passed the summit of the highest intervening mountain ranges, and are now on the "home-stretch." The coming winter weather will not interfere, as heretofore, with the progress of the work. Only a limited force could be used in the deep mountain cuts; but upon the plains and more open country, gangs of men can be distributed at various points. Bringham Young, it appears, has not only contracted to build a section of the road from Salt Lake eastward, but is likely to undertake quite as large a job for the Central Pacific Railroad, west of Salt Lake. President Stanford was in the latter point some days ago, and there is little doubt that arrangements will be closed with Young for such available help as he can furnish. A large shipment of railway iron, said to amount to 5,000 tons, is to be sent across the Isthmus, and a dozen ships are under charter to bring rails by way of Cape Horn.

It is announced in Southern papers that new and important discoveries in the manufacture of steel, the results of which are of such magnitude as almost to stagger belief, will be shortly made public. The steel is said to be made directly from brown hematite ore. The process is said to be endorsed by distinguished engineers.

An Exchange says:—More than four thousand gallons of coal tar, which had floated through a sewer from the condenser at the Manchester gas works, has been pumped from a small creek east of the work. A similar deposit, estimated to reach 200,000 barrels, has recently been found in Charles River, near Boston.

It is rumored that a sixty-four gun man of war is now on the stocks of a private yard in New York, being built for the Spanish Government, to be used in a war against Peru and Chili.

An examination of the United States statistics of manufactures, shows a clear increase in wages in 1866, of upwards of 60 per cent as compared with the wages paid in 1860.

CHICAGO has 34 breweries, 29 planing mills, 12 grain elevators, 18 iron foundries, and 51 packing houses.

**Recent American and Foreign Patents.**

*Under the authority of the United States Patent Office, the following are the titles of the patents granted during the week ending July 26, 1868.*

**APPLE PARING AND CORING MACHINE.**—Isaac Rogers, West Chehalis, Oregon.—This invention has for its object to furnish an improved machine so constructed that apples may be pared, cored, and quartered, or cut into pieces with once handling, and which shall, at the same time, be simple in construction, not liable to get out of order, and will do its work fast and well.

**TIRE FRAME ATTACHMENT.**—N. H. Mead, Waterport, N. Y.—This invention has for its object to improve the construction of tire frames so as to make them more convenient and effective in operation, and which will enable the wheel to be detached and turned, when required, before the tire can get cold.

**FIRE KINDLING.**—J. Granier, Ch. Gagdin, and Z. Granier, San Francisco, Cal.—This invention has for its object to furnish a simple, convenient, effective, and reliable means for starting or kindling fires in stoves, ranges, furnaces, and other places.

**HAME FASTENER.**—A. B. Woodard, Alfred Center, N. Y., and Samuel A. Woodard, Harnettsville, N. Y.—This invention has for its object to furnish an improved hame fastener, simple in construction and effective in operation, drawing the hames closer together during the operation of locking, and holding them securely when locked.

**HYDROSTATIC PUMP.**—W. P. Callahan, Dayton, Ohio.—This invention relates to an arrangement whereby a forcing pump, which is used to operate hydrostatic presses in the process of manufacturing linseed oil and other similar operations where hydrostatic presses are used, is made and arranged so as to operate upon a number of presses, thereby saving much valuable time, and greatly facilitating and expediting the operation.

**PUMP.**—R. W. Cronse, Westminster, Mo.—This invention relates to the class of double-acting cylinder pumps, and consists in a new and improved arrangement of the valves by which power is economized, while the machine is rendered less complicated and less liable to get out of order.

**CULTIVATOR.**—A. P. Routt, Liberty Mills, Va.—This invention is an improvement upon the one patented by me April 30, 1867, and consists in an instrument which I attach to the standards that support the plows, and employ for the purpose of cutting and destroying the weeds and grass between rows of standing corn and other growing vegetables.

**APPARATUS FOR FEEDING FUEL TO FURNACES.**—J. G. McCormick, Louisville, Ky.—This invention is an apparatus for carrying fuel, coal, saw dust, etc., from a bunker to the furnace, and feeding it regularly, uniformly, and evenly over the length and breadth of the fire grate, under any number of steam boilers, at the same time. The machine is worked by the engine, and requires no care except in keeping the bunkers supplied with fuel to be used.

**CALCULATING BALANCE.**—Benj. W. Ogburn, Whittles' Mills, Va.—The object of this invention is to provide a simple, cheap, and easily operated balance, which will indicate either the weight of an article or its gross price.

**MACHINE FOR STUFFING HORSE COLLARS.**—S. B. McCorkle, Greenville, Tenn.—The object of this invention is to construct a machine which will place the straw in the collar in such a position that its elasticity will be preserved and utilized, thereby producing a better collar than any heretofore made, whether by hand or machinery.

**CHURN MOTION.**—David Morris, Bartlett, Ohio.—This invention consists in the use, in connection with a device for imparting two strokes of the dasher to one revolution of a crank, of a supporting frame consisting of an upright having a foot which is provided at its extremity and underside or bottom with a screw-threaded tubular stem, which serves the double purpose of a guide for the dasher shaft and means of attachment of the frame to the lid of the churn vessel.

**GANG PLOW.**—J. F. Porter and A. Norton, Tidoute, Pa.—In this gang plow, each plow has a hinged collar which severs the weeds, roots, etc., and by which the plow is drawn forward; the heel of each plow is hinged to its standards, and a new supporting frame, and new means of attaching and adjusting the plows upon it, are employed, by means of all which improvements a lighter, neater, stronger, and more completely adjustable gang plow is produced, than has ever heretofore been brought into use.

**GUNPOWDER.**—Paul A. Oliver, New York city.—This invention relates to a new and improved gunpowder, the advantages of which are, that it can be made much more rapidly, with perfect safety, cheaper and stronger than the ordinary gunpowder now manufactured.

**SELF-ACTING VARIABLE CUT-OFF.**—Samuel Stanton, Newburg, N. Y.—This invention relates to an application of a governor to the slide valves of a steam engine, whereby a more equitable motion than usual is obtained, and the steam admitted into the cylinder at all times when the ports are fully open, whereby the "wire-drawing" of the steam occasioned by the latter passing through a partially-opened port is avoided, and the steam within the cylinder allowed to work under a pressure equal to that which it has in the boiler.

**HORSE HAY FORK.**—C. E. Murray, Sugar Valley, Pa.—This invention relates

to a horse hay fork, for unloading hay and mowing it away in barns or forming stacks. The invention consists in a peculiar construction of the fork, whereby a large amount of hay may be lifted or unloaded in a given time.

**TRUSS.**—Thomas S. Lindley, Medora, Ind.—This invention relates to a truss of simple construction, which may be manufactured at a trifling cost, and be applied in such a manner that the wearer may attend to any active business without any difficulty whatever.

**DRESSING GRIND STONES.**—Philip Leonard, Sharon, Pa.—This invention relates to a machine for dressing grind stones and wheels or cylinders of any mineral composition for grinding, polishing, etc.

**CHAFING ROLLER FOR WAGONS.**—James M. Maybew, Providence, R. I.—This invention relates to a device for protecting the sides of wagons or other vehicles from chafing or wearing when the front wheel may be turned, and it consists in a hollow concave iron roller, secured to a holding frame, as hereinafter described.

**BREAST STRAPS.**—A. L. Hill, Decatur, Ill.—This invention relates to an improvement in breast straps, whereby several advantages are obtained over those in present use, to wit, much greater strength and durability, the avoidance of wear by the friction of the rings of the neck yoke on the straps, and a more ready means of detaching them from the hames and neck yoke.

**BURGLAR FIRE ALARM.**—William J. Biggar and John C. Blood, Conneaut, Ohio.—This invention relates to a circuit breaker for a fire alarm, designed to be connected with the apparatus of a magnetic burglar alarm, for which letters patent have been applied for by Wm. J. Biggar, John C. Blood, and D. M. Griswold, in connection with a device for breaking the electro-magnetic circuit by the entrance of a burglar through a door or window. This device for a circuit breaker is operated on by the heat of a fire that may occur in a room where it is placed, and thus give timely alarm through the agency of the magnetic signals.

**HORIZONTAL RECIPROCATING STEAM ENGINE AND WATER.**—Thomas Reese, St. Louis, Mo.—This invention relates to an improvement in horizontal steam water or pumping engines, whereby economy in both space and power is obtained, and it consists in an arrangement for supporting the cross head and pitman, and producing a parallel motion without the use of the ordinary guides or ways.

**COFFEE POT.**—Benjamin Boardman, Malden, Mass.—This invention relates to an improvement in coffee pots, by the employment of certain means whereby the steam and aroma which arises from the coffee during the process of boiling is condensed and saved or not allowed to escape.

**GANG PLOW.**—George Wharton, Jerseyville, Ill.—This invention relates to a gang plow, and it consists in a peculiar construction of the same, whereby the plows may be operated (raised and lowered), by the device with the greatest facility, and also made to conform to the uneven surface of the ground, so as to operate or turn a furrow slice in a perfect manner, whether the ground be level, undulating, or more or less inclined.

**IMPROVEMENT IN LANTERNS.**—Andrew Whelden, South Dennis, Wis.—This invention relates to an improvement in lanterns, which are provided with lamps, more especially designed for burning petroleum and similar hydrocarbons, the flame of which is not very persistent, and is liable to be extinguished by a sudden upward and downward movement of the lantern.

**LAMP BURNER.**—Frank H. Fuller, South Boston, Mass.—This invention relates to improvements in lamp burners for burning kerosene or other oils.

**CULTIVATOR.**—G. W. Cook, Macon, Ill.—This invention relates to a cultivator, and it consists in a peculiar construction and arrangement of certain parts whereby the driver may either walk or ride, as he may desire, and be capable in either case of operating equally the shares and shovels and managing the team.

**SECURING HEADS IN BARRELS.**—Peter Rink and Jas. Docherty, Wertsville, N. J.—This invention consists in securing heads in barrels in such a manner that the heads may be secured in barrels and removed therefrom without disturbing the hoops, and, in case of shrinkage, the heads rendered capable of being expanded in order to insure a tight adjustment of them in the barrels at all times.

**CLOTHES MANGLE AND IRONING MACHINE.**—Joseph Seamans, Chicago, Ill.—This invention relates to an improved clothes mangle, and consists of a device for actuating the lower roller upward against the top roller, by means of a pair of levers and a weight.

**WELDING FLUX.**—J. R. Tryon, La Crosse, Wis.—The object of this invention is to provide a superior welding flux or compound for steel or iron, which operates to refine and toughen the metal at the welded surface, thereby securing a perfect junction.

**HUB BAND FITTER.**—Charles E. Stone, Amesbury, and Alfred Herbert, Salisbury, Mass.—The object of this invention is to fit the outer bands of carriage hubs in an expeditious and easy manner. It consists of a tool with which a continuous shaving is pared from the hub by simply turning the wheel on its axle and holding the tool in proper position upon the hub.

**COMBINED DIE AND PLUNGER.**—H. G. Williams, Providence, R. I.—This invention relates to a method of forming tin or metallic boxes and covers for the same.

**SPECTACLES.**—Erastus S. Clapp, Montague, Mass.—This invention has for its object to provide spectacles for those who use them, which shall not require to be removed from the nose when the glasses are not needed, whereby much trouble and inconvenience are avoided.

**HARVESTER SHARPENER.**—Edwin L. Bushnell, Poughkeepsie, N. Y.—The object of this invention is to provide an instrument for sharpening the cutters reaping and mowing machines.

**FURNACES FOR SMELTING ORES.**—J. W. Shaeffer, Red Wing, Minn.—This invention relates to improvements in furnaces for smelting and reducing gold, silver, copper, and other ores, whereby many of the objections to the ordinary methods of reducing these ores are overcome.

**PRINTERS' GALLEY.**—Charles H. Lawrence, New York city.—The object of this invention is to construct a galley in such a manner that it will not be affected by shrinking. The frame is made of wood with its corners halved and mitered so as to make a good stiff joint, and is cut down its center along the inner side a depth of about two thirds its width, so as to receive a metal tongue, which is soldered to the lining. The lining is secured to the frame by screws which pass through the tongue into the frame, thus leaving the lining perfectly smooth and free from the heads of screws.

**MAGNETIC BURGLAR ALARM.**—Wm. J. Biggar, J. C. Blood, and M. Griswold, Conneaut, Ohio.—This invention relates to improvements in the construction and arrangement of an instrument for giving an alarm on the entrance of a burglar into a house, by means of a magnetic circuit, and consists in connecting copperwires with a battery to run through the house, and having circuit connections attached to the doors and windows, so that when a window or door is opened by a burglar the break of the circuit shall release a window from the magnet and thus act upon an alarm by striking a bell and lighting a fluid lamp or candle in the room where the instrument is placed.

**VAPOR OR MEDICATED BATH.**—Wm. Kent and Chas. Winterburn, Cincinnati, Ohio.—The nature of this invention consists in a box of peculiar construction, in which may be used medicated vapor baths, etc. It also consists in the combination of medicated baths with the vacuum produced in the aforesaid box. It further consists in the combination of electro-magnetism with a vacuum; also in the combination of vapor or medicated vapor baths with electro-magnetism produced in the said box.

**LETTER BOX.**—D. P. Jordan, 115 Randolph street, Chicago, Ill.—This invention relates to a new and improved letter box, and provides for the safe and convenient deposit of letters, papers, and other mail matter, separate receptacles being furnished for each, with hooks at the bottom to attach a mail bag into which the contents of the box are conveniently discharged through a trap door. The door is provided with a suitable lock, and the entire apparatus covered by a lid, to protect the contents from the weather. Patented July 7, 1868.

**BROILING STEAK BY GAS.**—H. Y. Lazar, New York city.—This invention relates to an apparatus for broiling meats or steaks by gas, or over a gas stove.

**MANUFACTURING RAILS.**—Wm. Haywood, and John Lees, Danville, Pa.—This invention relates to the manufacture of rails for railroads, of iron or steel, or iron and steel combined.

**ANILINE DYE.**—Benoit Bloch, Soultz, France, now temporarily New York city.—This invention relates to a gray dye, prepared from aniline oil.

**SPUR AUGER BITS.**—James Swan, Seymour, Conn.—This invention relates to an improvement in the manufacture of spur auger bits, and is designed to accomplish by means of dies what has hitherto been done by hand with skilled labor.

**SOLES FOR BOOTS AND SHOES.**—Baker Van Ansdall, Keokuk, Iowa.—The present invention consists in making the outside or wearing sole of a boot or shoe, of wood and a series of sections or parts from the ball of the foot to the back of the heel, whereby a flexible sole is obtained.

**SPIRAL OR WINDING STAIRS.**—Wm. J. Keim, New York city.—This invention consists in so constructing winding stairs that by one set of steps two or more separate stairways can be produced. The steps are made in a shape of straight bars, and secured around a central foot, that fits through the central hole, so that each end of the bar forms a separate step for a separate staircase, opposite to another step and staircase formed at the opposite side of the central post. In the same manner can treble and quadruple stairs be made, by using steps in which three or four arms radiate from the post.

**MACHINE FOR WASHING PAPER STOCK.**—J. E. Andrews, Coeyman's Hollow, N. Y.—This invention consists of a water tank provided with an agitating wheel and a hopper adjacent to the same into which the stock to be washed is placed and so exposed to the action of the floats on the wheel that it will be drawn down into the water thereby, where it is, after being sufficiently agitated, delivered to an elevating apparatus whereby it is raised out of the water and carried to any desired height and delivered from the same. The said tank is also provided with a means of supplying fresh water and discharging the foul water without carrying off any of the stock, and also with a screen for separating the kennels of grain that may be in the straw or small pieces of gravel or other similar matter.

**SHIP WHEEL BRACKET.**—Isaac N. Bunker, Hillsburg, Nova Scotia.—This invention relates to a new manner of locking ships' steering wheels when the same are to be retained in certain position, and consists in the use of a bracket which is hinged to the deck of the vessel or to any other suitable stationary apparatus, and which is provided with a notch, which, when the bracket is thrown against the wheel, will fit around one of the spokes or handles of the wheel and thereby lock it and prevent it from turning.

**PORTABLE CHAMBER CLOSET.**—W. J. Lyman, East Hampton, Mass.—This invention consists in arranging an additional seat-lid, besides the ordinary perforated seat, the lid being hinged to the back of the apparatus, so that it can be folded up or down at will. The hole through the lid is smaller than that through the seat, so that when the lid is folded down upon the seat, the apparatus can be used by children, while it is otherwise fitted for adults.

**STEAM PUMPS.**—Wm. R. Thomas, Cat-sanqua, Pa.—This invention consists in an arrangement whereby the steam is made to actuate the valves without the intervention of valve gear, in constructing the cylinder with extensions from each head to serve for the pump cylinders, in the arrangement of projections from the piston to serve the purpose of the plungers for the pumps, and in an improved means of packing the pistons of the pumps.

**EMBROIDERING MACHINE.**—Jacob Elmhorn, New York city.—This invention relates to a machine for embroidering on gauze or other fabric, and consists principally in fitting, the devices by means of which the stitches are made, in a swinging frame, and in stretching the fabric to be embroidered on a sliding carriage so that by these means the stitches can be made to follow any desired pattern that may have to be embroidered. It also consists in the arrangement of the needle and hook by which the stitches are made and in the devices for operating and adjusting the same, and for throwing them in or out of gear.

**Business and Personal.**

The charge for insertion under this head is one dollar a line.

For services of experienced detectives to obtain evidence against infringers of patents, address Box 581, Newark, N. J.

The patent sweet fern and chemical lacing, as made by J. H. & N. A. Williams, Utica, N. Y., cannot be excelled in quality or great strength.

Gear-cutting engine for small work wanted. Address, with price, C. Williams, Jr., 109 Court st., Boston, Mass.

A partner wanted—a gentleman of integrity and Christian character—with a capital of \$50,000 to \$100,000, to invest in the perfecting of new machinery. Address L. H. Soule, Mt. Morris, N. Y.

Peck's patent drop press. Milo Peck & Co., New Haven, Ct.

A young man who can furnish references from employer as to character capability, etc., desires a situation as sole workman in a repair shop, connected with a manufacturing establishment. For particulars address J. P. Link, East Arlington, Vt.

Agents wanted for Marshall's great line engraved portrait of Gen. Grant. Address Ticknor & Fields, Publishers, Boston, and 63 Bleeker st., New York.

Parties away from the market can have a full description of one of the most extensive stocks of tools and hardware by sending for Wilkinson & Co.'s catalogue, price 50c., 2 Washington st., Boston

Wanted—a machine to straighten sheet iron from No. 14 to 1/4 or 3/8 thick. Address L. H. Miller, 265 Balt. st., Baltimore, Md.

Universal filter well.—Drives and works successfully everywhere. Patented in Dec., 1867, by Oscar C. Fox, Georgetown, D. C.

Millstone-dressing diamond machine, simple, effective, and durable. Also, Glazier's diamonds, diamond drills, tools for mining, and other purposes. Send stamp for circular. J. Dickinson, 64 Nassau st., N. Y.

Prang's American chromos for sale at all respectable art stores. Catalogues mailed free by L. Prang & Co., Boston.

For breech-loading shot guns, address C. Parker, Meriden, Ct.

Winans' boiler powder (11 Wall st., N. Y.), 12 years a standard article for preventing incrustations. Beware of imitations and pretended agents.

**EXTENSION NOTICES.**

Isaac R. Trimble, of Long Green, Md., having petitioned for the extension of a patent granted to him, the 10th day of April, 1855, and antedated October, 1854, for an improvement in wooden splice piece for railways, for seven years from the expiration of said patent, which takes place on the 10th day of October, 1868, it is ordered that the said petition be heard at the Patent Office Monday, the 28th day of September next.

Eben N. Horsford, of Cambridge, Mass., having petitioned for the extension of a patent granted to him the 10th day of October, 1854, for an improvement in compounds for neutralizing chlorine, for seven years from the expiration of said patent, which takes place on the 10th day of October, 1868, it is ordered that the said petition be heard at the Patent Office on Monday the 28th day of September next.