

**MILK CAN.**—Nelson C. Burnap, Argusville, N. Y.—This invention consists in rounding the bottom of the can for the purpose of avoiding the creases which were formed where a flat bottom is used, and in which dirt could easily accumulate but could not so easily be washed out again.

**SLEIGH BELLS.**—Cyrus R. Clark, Cobalt, Conn.—This invention relates to a sleigh bell to which a shank is cast in the usual manner. To each side of the shaft are secured by means of rivets or otherwise sheet metal plates, which project beyond the lower end of the shank, forming flanges, when inserted in a leather strap, the flanges project beyond the inside of the same, and are then bent out, so as to firmly lock the bell to the strap.

**BED BOTTOM.**—Frederick Leadbeater, Detroit, Mich.—This invention relates to a new and improved mode of attaching wooden slats to the end pieces of bedsteads whereby a very durable and elastic bed bottom is obtained, and one which may be constructed at a comparatively moderate cost.

**BEVEL.**—Leonard D. Howard, St. Johnsberg, Vt.—This invention relates to a new and useful improvement in jointed bevels and it consists in having the screw and thumb nut arranged or applied in such a manner that the head of the screw and the thumb nut will secure the blade to the handle or stock, and will be flush with the rules of the latter.

**PARASOL AND UMBRELLA RUNNER.**—Henry Kursh, Brooklyn, N. Y.—This invention relates to a new manner of arranging the fastening of the sheet metal runners of umbrella or parasol frames, so that the central stick will not be weakened by slots or recesses cut into it as by the ordinary method.

**ANIMAL TRAP.**—Jeremiah Schroy, Fort Ville, Ind.—This invention consists in an arrangement whereby the animal is forced with a box by a revolving door which is actuated by a spring and which is released by the weight of the animal.

**ICE PITCHER.**—Nathan Lawrence, Taunton, Mass.—This invention relates to a new and useful improvement in double walled or ice pitchers, such as are constructed of white metal and most generally plated. Hitherto these pitchers have had their inner wall or lining constructed with a bottom connected to the body or main portion by means of solder and these bottoms would very frequently become detached or be parted at their joints or seams so as to leak owing to the throwing of large lumps of ice into the pitcher. This invention is designed to obviate this difficulty and to this end I construct the inner wall or lining with a seamless bottom and also strengthen the same by means of ribs or with a "backing" whereby the difficulty above mentioned is avoided.

**COMBINED TOOL.**—B. W. Collier, Oxford, Miss.—This invention combines in one instrument a pair of pliers, a pair of clippers, a burnisher, a hammer, several punches, three or four wrenches, a saw set, a screw driver, a scraper and a set of holes for straightening wire, nails, etc.

**ENGRAVING MACHINE.**—John C. Guentant and Benton J. Field, Leaksville, N. C.—This is an improvement on the engraving machine patented by the same parties Dec. 12, 1866, and numbered 60,506.

**GASOLINE COOK STOVE.**—Jacob D. Spang, Dayton, Ohio.—This invention consists of a simple device for utilizing and diffusing uniformly the heat from gasoline burners, for the purposes of cooking.

**FURNACE.**—David Hargar, Des Moines, Iowa.—This invention is for the purpose of conducting air from a pan, or from any cold air region, to a furnace or grate, and distributing it properly to the fire.

**MACHINE FOR MAKING PAPER BAGS AND ENVELOPES.**—E. B. Olmsted, Washington, D. C.—In this invention the machine is fed from a roll of paper, which it cuts into suitable pieces for bags or envelopes of any desired size and shape, gums, folds, prints, or stamps, and having united the edges firmly, delivers in perfect condition for immediate use.

**WAGON BRAKE.**—Thomas Smith, California, Mo.—This invention has for its object to furnish an improved manner of attaching the brake block to the brake bar, which shall be cheap, simple, durable and effective.

**SELF CLEARING ANCHOR.**—W. J. Armstrong and Charles Browne, Brooklyn, N. Y.—This invention has for its object to furnish an improved anchor, strong, durable, and simple in construction, and which shall be so constructed as to clear itself should it become fouled.

**COMPOSITION FOR TEMPERING STEEL.**—F. G. Harris, Willsborough, N. Y.—This invention has for its object to furnish an improved composition for tempering steel, which will give it a better temper, greater toughness, elasticity, and hardness without brittleness, than any of the compounds now in use for this purpose.

**DEVICE FOR STAMPING AND SHAPING LEATHER.**—B. B. Harris, Lockport, Ill.—This invention relates to an improved device for stamping and shaping leather, and consists in a combination of toggle joints, levers, springs, follower, dies, and knife.

**GATE LATCH.**—Alfred K. Davis, Carey, Ohio.—This invention relates to an improved gate latch, and consists of two bars pivoted on an upright secured to the gate post or upon the gate itself, the bars being attached at one end to another upright or connecting bar, operated by a lever similarly pivoted or attached; or where the latch bars are pivoted to the gate post, then pivoted upon an upright or ear attached at the top of the gate post. The free ends of the latch bars hold the gate by extending over the front vertical bar thereof.

**HORSESHOE.**—Jacob Wheeler, Huntington, Ind.—This invention relates to an improved form of horseshoe, its object being to expand the hoof when hoofbound or the heel is contracted.

**GATE.**—S. M. Scothorn, Findley, Ohio.—This invention relates to an improvement in gates, and belongs to that class of double-slide gates in which the extension gate slides in the main gate.

**CLEAT CHOOKS.**—Amariah Lake, Smith's Landing, N. J.—This invention consists in an improved chook in which the cleat or cair is bedded. The chook, which may be made of wood or metal (the latter being preferred), is made in the form of a frame having a beveled or grooved edge the ends of which are returned down to clamp the timber or stanchion.

**WASHING MACHINE.**—Joseph Bevis, Putnam, Ohio.—This invention has for its object to furnish a convenient and effective washing machine, by means of which the clothes may be washed quickly and thoroughly without friction or wear.

**PESSARY.**—M. J. Rhees, M.D., Mount Holly N. J.—This pessary is to be used as a support and covering to the mouth of the uterus in cases of female weakness, falling of the womb, etc.

**COMBINED DOOR FASTENER AND POCKET KNIFE.**—Benj. F. Porter, Manchester, N. H.—This invention consists in the combination with an ordinary pocket knife, of a device suitable for use as a fastener for doors.

**RAIL JOINT CLAMP.**—Francis Pidgeon, Saugerties, N. Y.—This invention consists in the use of a dovetail shaped clamp, thereby dispensing with all bolts and allowing the rail to contract or expand by heat or cold; also in bringing the weight of the train when passing over the joint to and upon the flat bottom of the rail, by carrying the clamp upon the outside of the rail up even with the top of the rail.

**TABLE CUTLERY.**—Matthew Chapman, Greenfield, Mass.—By this invention the blade, bolster, tong, and handle are all made of or forged from one and the same piece of steel, whereby a most durable, serviceable, and desirable piece of table cutlery is produced.

**LAST.**—Ambrose Taylor, Osawatome, Kansas.—The object of the present invention is to provide some simple device as a fastening for the block to the last, whether the last be in use or not and which can be released or unfastened in the most ready and simple manner.

**SUPPORTER.**—J. B. Seelye, Philadelphia, Pa.—The present invention relates to an abdominal supporter consisting of two front parts, hinged, pivoted, or swiveled to the ends of spring bands, for encircling the hips of the person, the whole supporter being made of hard vulcanized india rubber or gutta percha.

**FASTENING FOR THE FLY FRONTS OF PANTALOONS.**—Isaac Stratton, Keene, N. H.—This invention consists in a device for fastening the lower part of the fly fronts of men's and boy's pantaloons, instead of employing buttons for the purpose, and is intended especially for the convenience of aged and other infirm persons whose fingers are disabled or crippled, and cannot button and unbutton with facility, and also for boys,

**SADDLE.**—Godfrey Marshall, Indiana, Pa.—This invention relates to the saddles of harness more particularly, and consists in making the top or frame to the saddle in one piece, having a raised flange or laps around its sides or edges upon its back or under side, and between such laps placing the cushion or pad made of the proper shape and provided with screw nuts, in proper position for receiving the tenet rings, screw sharps and other screw bolts, by means of which the pad is secured to the frame, at the same time also fastening the saddle straps.

**HEAD REST.**—Robert Hale, Chicago, Ill.—This invention relates to an adjustable head supporter, for use more particularly on railway cars while traveling, the particular object being to provide a supporter of such construction that rest and sleep can be obtained while traveling, while at the same time the supporter is portable, simple, and cheap in construction.

**WAGON REACH.**—Zenas Plumb, De Witt, Iowa.—This invention relates to an improvement in the construction of a wagon reach, either single or double, and consists in applying a swivel to it in such a manner that the fore and hind axles of a wagon or other vehicle can rock out of the level independently of each other when either wheel falls into a rut or strikes a stone or other obstruction, whereby all twisting or wrenching of the reach is prevented and injury thereof is avoided.

**ADJUSTABLE ROTARY LOOM CAM.**—Ransom Sargent, Norwich, Vt.—This invention relates to a new and useful rotary cam for making the treddles of a loom to spring the web, and consists of a series of disks or circular trucks attached to a series of shafts which have their bearings in plates or heads secured to a central shaft, the trucks of the sub-shafts set on pins to be movable and adjustable on their shafts in such manner that any one or more may be made to engage with cams or corresponding treadles, for working the treadles and springing the web to suit the pattern of the cloth to be woven.

**PIVOT GAGE, STAFF AND FRAME FOR MILLSTONES.**—Walter Ring, Gosport, Ind. Patented Oct. 29, 1867.—This invention relates to a device for gaging and stuffing or leveling millstones accurately and plumbing the spindle truly, by which this important part of a miller's work may be performed readily and perfectly by anyone, even the most unskillful, with absolute certainty.

**SHUTTLE.**—George S. Crandal, Pitcher, N. Y. Patented Oct. 29, 1867.—This invention relates to devices attached to and connected with an ordinary weaving shuttle, for the purpose of regulating the filling during the operation of weaving as it runs from the spool to the eye of the shuttle, and also threading the shuttle with greater facility than in the old way.

**MODE OF REGULATING A POSITIVE TENSION OF RUBBER THREADS IN ELASTIC FABRIC LOOMS.**—F. Painter, East Hampton, Mass. Patented Oct. 29, 1867.—This invention relates to a new and useful improvement in looms for weaving elastic fabrics of vulcanized rubber threads, and consists in an arrangement of mechanical devices for stretching the rubber threads and holding them at a certain positive degree of tension while the fabrics woven.

**FASTENING FOR AXES AND OTHER HANDLES.**—James Stewart, Money Creek, Minn. Patented Oct. 29, 1867.—The object of this invention is to fasten helves or handles in axes, picks, hammers, etc., for the purpose of securing them firmly and permanently in the eye.

**FLOUR COOLER AND CONDENSER.**—John Gray, Dubuque, Iowa. Patented Oct. 29, 1867.—This invention relates to a new and useful improvement in apparatus for cooling flour and the stones of a mill when grinding, and condensing the moist vapors or steam which are generated in the process of grinding grain.

**BLIND HINGE AND FASTENER COMBINED.**—Nathaniel B. Spooner, Plymouth, Mass. Patented Oct. 29, 1867.—This invention relates to a new and improved device for hanging window blinds or shutters, by which they are fastened when either opened or closed automatically; it is simple and cheap.

**CHILD'S CRADLE.**—D. A. Dunham, Palatka, Fla. Patented Oct. 29, 1867.—The design of this invention is to make a cheap and convenient child's cradle of a flour or other light and clean staved barrel, by cutting out a portion of the staves and supporting those which are left to form the cradle with the hoops.

**UMBRELLA.**—Wm. Money, Paterson, N. J. Patented Oct. 29, 1867.—This invention relates to a new and improved device for holding umbrellas or parasols in place on the handle, whether raised or lowered, and allowing them also to be raised and lowered easily.

Answers to Correspondents.

**CORRESPONDENTS** who expect to receive answers to their letters must, in all cases, sign their names. We have a right to know those who seek information from us; besides, as sometimes happens, we may prefer to address the correspondent by mail.

**SPECIAL NOTE.**—This column is designed for the general interest and instruction of our readers, not for gratifying replies to questions of a purely business or personal nature. We will publish such inquiries, however, when paid for as advertisements at 50 cents a line, under the head of "Business and Personal."

All reference to back numbers should be by volume and page.

**L. C., of Mass.**—Cast nails of composition (brass) have been extensively used for boat building and ship building purposes. We have seen them from the size of an ordinary shingle nail up to large spikes. The cast metal is sufficiently tenacious for the purpose.

**G. W. F., of Pa.**—We know of no better method of razing or trueing a grindstone than cutting circumferential grooves in its face with a file tang and then using a bar of soft iron, as nail rod, to remove the intervening substance.

**P. J., of N. Y.**—Pen nibs made from the goose quill to be used in a handle, as steel pens, were manufactured in Taunton, Mass., at least twenty years ago. We have some specimens now on hand. They were never very popular.

**S. A. M., of Oregon.**—According to Bishop's History of American Manufactures, saw mills were used in Massachusetts before they were employed in England. The first mill was erected in the colony in 1633. In England it met with determined opposition, and as late as 1767 one was destroyed by the populace.

**Q. A. C., of Ohio.**—"Will not a belt slip on a smooth iron pulley sooner than on a rough one? Please give your opinion." Our opinion has been given on this subject before. The general practice of builders and operators of machinery should be a sufficient reply. All pulleys are now made with perfectly smooth faces. The reason is obvious: the larger the surface presented to the belt, of course the greater its adhesion. We remember when for lathe cones nothing but wood was believed to be sufficient, and the faces of the pulleys must be circumferentially scored. Now they are made of iron and polished.

**C. G. H., of N. Y.**—"How can I prevent stovepipe from rusting while not in constant use?" Heat it and coat it inside and out with paraffine, or with asphaltum dissolved in spirits of turpentine; then keep it in a dry place.

**H. V. P., of Ohio,** asks how he can mend rubber boots that have cracked. He has tried common rubber, melted, without effect. There is a rubber cement sold almost everywhere which will do the business. Directions accompany each box or can. Pure rubber for the purpose may be dissolved in petroleum benzole. The boots should be perfectly dry and warmed.

**R. S., of Ohio** wants to know how to get the bright blue which is seen on fire-arms, etc. The process is simply heating the piece to be blued in a clear charcoal fire until the requisite color is obtained, and then covering it with dry ashes. The article to be blued should be highly polished and clean.

**J. H. H., of Conn.**—Your request that we should write on the incompetency of so-called engineers as one of the reasons for boiler explosions, has already been complied with in several articles. The remedy is beyond our influence. Legislative interference or boiler insurance companies can alone alleviate the evil. We do not propose to harp continually a subject which is already trite.

**H. K., of Wis.,** describes a "hair snake" which he found, and seems to suppose it to be a veritable horse hair. It gave the same sound, when stretched and vibrated, as a hair would under the same circumstances. If he will refer to page 280, in No. 18, current volume, he will find a sufficient reply.

**J. M. T., of Minn.,** thinks a "direct-acting—overshot or breast—wheel, may give better results than any turbine. His plan is to confine the water in the bucket until the pressure of the column from above is cut off and transferred to the succeeding bucket. There will be no chance for back pressure, and after performing their work the buckets are withdrawn so as to be out of the reach of back water until wanted again. This wheel would discharge water only with the motion of the wheel, while others discharge one-fifth or more faster than the motion of the wheel." This appears to be a modification of the automatic bucket wheel. If properly constructed it may be a success.

**J. E. R., of N. Y.,** inquires how to "cut gutta-percha and india-rubber so that it becomes a liquid." Probably our correspondent means by "cutting" dissolving. The solvent for gutta-percha is coal-tar benzole, and for india-rubber benzole of petroleum. India-rubber is "cut" by knives revolving or working in water.

**G. H. M., of N. Y.,** asks "what is the greatest distance to which steam and hand engines have thrown a stream of water." We cannot give a decisive reply, but we have seen a solid stream thrown 230 feet. Makers of fire engines would be better authorities.

**G. W. M., Ohio.**—"Do you know of a cement to stop up stove joints which will harden in time or by heat?" Pipe clay and clean sand equal parts; wood ashes and salt; or iron filings and sal-ammoniac. Either mixed with water will make a proper cement.

**A. D., of Pa.**—"Can black wool be bleached or dyed white?" No. The only dyeing of white we are aware of is in silk. The pearl white of silk is produced by dyeing; the silk in its natural state being of a pale yellow color and incapable of being bleached.

**H. F., of Conn.,** wishes to convey water from a dam through 40 feet of 20-inch pipe to a flume to supply a turbine, and asks if cement pipe will answer. In reply we would say that we see no reason why the cement pipe will not do, as there is but ten feet of head or fall. It is used for aqueduct purposes with success. A good pipe may be made of pine plank built in the form of a tube and hooped with iron. This is excellent where the diameter exceeds 30 inches. But probably the best form of wooden tube is that patented by J. K. Mayo, composed of spiral veneers. A two-foot tube on this plan 3/4 of an inch thick has successfully resisted a hydraulic pressure of 110 pounds to the square inch.

Business and Personal.

The charge for insertion under this head is 50 cents a line.

A metal-working shop, with two patents, for sale or exchange for Real Estate in city or country. Townsend & Sears, 218 Fulton st., room 7. Manufacturers of Portable Saw Mills and Engines please send circulars and cash prices immediately. Address J. J. Howell, Avon, Ill.

For sale low—the patent right of an improved Tag Holder—best out. Address A. Grushus, St. Paul, Minn.

Wanted—a Horizontal Face Plate Boring and Turning Lathe to swing 8 or 9 feet, new or second-hand. Address, with description and price list, T. H. Risdon, Mt. Holly, N. J.

Smith's Brick Machine.—This invention, which was illustrated on page 280 is further described and advertised in another column. See last page of this paper.

J. A. Althouze, New Harmony, Ind., wishes the address of Scissors Manufacturers.

Manufacturers of Loom Shuttles please send their address to Geo. L. Crandal, Pitcher, N. Y.

Wanted—by a thorough practical and licensed Engineer, who is a practical machinist and draftsman, and who uses no intoxicating drinks, a position as chief or assistant, either of a marine or stationary engine. Address Engineer, Adams' Express office, Georgetown, D. C.

A. Leize & Co., Reading, Pa., wish to correspond with Manufacturers of Machines to Saw, Plain, and Joint Barrel Staves.

For Sale Cheap—A Knee-Joint Press, of great Power, for Compressing Bale Cotton, etc. It can be worked by horse or other power, or by hand. Can be seen at Riverdale Mills, Mamaroneck, N. Y. John McDonald, Box 8 1/2, Mamaroneck, N. Y.

Makers of Machines for Packing Fine-Cut Tobacco in Paper per and Foil. Send address to Baird & Tuley, 61 East st., Louisville, Ky.

Wanted—The address of the "Diamond Annular Drill Company." Lewis B. Tebbets, Baltimore.

Wanted—A Manufacturer for my non-conducting illuminated base chimney burner, suitable for Benzine, or any light Petroleum oils, or fluid. Penrose Chapman, Box 145, Brunswick, Me.

Rights for Sale, of Browne's Patent Extension Cabinets for Sewing Machines. J. D. Browne, 177 West Second st., Cincinnati, Ohio.

EXTENSION NOTICES.

George E. Burt, of Harvard, Mass., having petitioned for the extension of a patent granted to him the 7th day of February, 1854, for an improvement in Machines for cleaning and assorting bristles, for seven years from the expiration of said patent, which takes place on the 7th day of February, 1868, it is ordered that the said petition be heard at the Patent Office on Monday, the 20th day of January next.

William Burnett, of San Francisco, Cal., and John Absterdam, of New York City, having petitioned for the extension of a patent granted to them the 28th day of February, 1854, for an improvement in the use of fusible disks in steam boilers, for seven years from the expiration of said patent, which takes place on the 28th day of February, 1868, it is ordered that the said petition be heard at the Patent Office on Monday, the 10th day of February next.

James McCarty, of Reading, Pa., having petitioned for the extension of a patent granted to him the 31st day of January, 1854, for an improvement in rollers for scarfing the edges of skelps for lap-welded tubes, for seven years from the expiration of said patent, which takes place on the 31st day of January, 1868, it is ordered that the said petition be heard at the Patent Office on Monday, the 13th day of January next.

Inventions Patented in England by Americans.

[Condensed from the "Journal of the Commissioners of Patents."] PROVISIONAL PROTECTION FOR SIX MONTHS.

- 2,578.—ANVIL.—James E. Emerson, Trenton, N. J. Sept. 11, 1867.
- 2,728.—HAT-LOCKING MACHINE.—Julius Sheldon, New York City. Sept. 27, 1867.
- 2,739.—RAILWAY WHEEL.—Cornelius Kingsland, McKees Port, Pa. Sept. 28, 1867.
- 2,742.—MANUFACTURE OF HATS, AND MACHINES FOR PRODUCING THE SAME.—Henry Killogg, New Haven, Conn. Sept. 28, 1867.
- 2,746.—LUBRICATION PACKING.—Thomas Silver, New York City. Sept. 28, 1867.
- 2,779.—MACHINERY FOR SEWING BOOTS AND SHOES.—Augustus Destouy and Frederic Renaud, New York City. Oct. 2, 1867.
- 2,785.—TREATMENT OF COTTON AND OTHER FIBROUS MATERIALS USED IN DENTISTRY.—John A. McClelland, Louisville, Ky. Oct. 3, 1867.
- 2,799.—MACHINERY FOR THE MANUFACTURE OF BRAID.—George Reiffuss Philadelphia, Pa. Oct. 4, 1867.
- 2,879.—ELECTRIC TELEGRAPH APPARATUS.—Elisha Gray, Oberlin, Ohio Oct. 14, 1867.