

Recent American and Foreign Patents.

Under this heading we shall publish weekly notes of some of the more prominent home and foreign patents.

CULTIVATOR.—John E. Minter, Unionville, S. C.—This invention consists a combination of various devices, and the use of a cultivator tooth or shovel plow, the shank of which is slotted so that it may be moved up and down. It may be removed entirely when it is desired that the scrapers should straddle the row of cotton, corn, or other crop. For the first time going over the field with the cultivator, the row would generally be straddled, and consequently the shovel or tooth would be taken off; but for cutting and stirring up the entire soil surface between the rows, it would be put on. In the cultivation of cotton, it has been found extremely difficult to find a substitute for the hoe. The ordinary plows and cultivators are too inflexible and rigid to suit the purpose. With this adjustable implement, it is believed that the cultivation of the cotton plant will be greatly facilitated, and that it may be employed to good advantage in the cultivation of corn and other crops.

SHOE FASTENER.—Alexander Klinger, California, Mo.—This invention aims at providing for shoes and gaiters a hook attachment to receive the latchet or lacing string, which is so applied to the shoe or gaiter and secured to a metal plate as to avoid certain objections to other hook attachments, and attain advantages highly desirable in the manufacture of shoes. The device retains itself in place without aid of any other means, and the leather is punctured in but one place (which is done by a flat or cutting blade). The cheapness of such attachment, the absence of all liability to injure the shoe to which it is applied, and its capability of retaining itself in place, are claimed to recommend it above all others heretofore used or known.

CORN HUSKER.—Peter B. Snell, Manheim, N. Y.—A bench is supported upon legs of such a length as to raise it to a convenient height. The side edges of the middle part of the bench are concealed to allow the operator to sit astride of it conveniently. To the upper side of the middle part of the bench is secured a metallic plate or casting, having two parallel upwardly projecting flanges, formed upon its upper part. The upper edges of the flanges are concealed between their centers and ends, to receive the ear to be husked. A lever is pivoted to and between the flanges, and passes down through a slot in the middle part of the casting and bench. Through the lower end of the lever is passed a pin, the ends of which project sufficiently to receive the foot or feet of the operator. To the upper end of the lever, a little above the casting, is attached a knife or cutter, having serrated or slotted edges. The cutter is attached to the end of the lever so that its edges may project upon the opposite sides of the lever, and so as to pass down alternately between the flanges as the lever is vibrated. In using the machine, the operator or operators sit astride of the bench at the end of the casting, and place their feet upon the pin of the lever. An ear of corn is then placed across the concealed upper edges of the flanges of the casting, in such a position that the knife, as it descends, may sever the butt of the ear, allowing it to drop from the husks. Another ear is then placed upon the flanges at the other side of the lever, which is husked in the same manner, and so an ear is husked at each movement of the lever.

DOUGH MIXER.—Reuben Kent, Portland, Me.—The object of this invention is to provide means for mixing dough in the manufacture of bread, crackers, etc. A cylinder, made in two parts, is employed, the parts being connected by a hinge and catch, and provided with a cover, a shaft, knives, stop pin, drawer and stand, all constructed, arranged, and operating for the purpose named.

COMPOUND BUILDING BLOCKS.—The object of this invention is to produce a very inexpensive building material which will rank with the very best in the country, both as regards durability and appearance, but will be much less costly and more durable than material which is only valued for its appearance. The invention consists in forming brick building blocks with stone, metal, or imitation stone faces, so that, when put upon buildings, they will constitute perfect and uniform blocks of greater strength and durability, and with the desired appearance on the face. The building block is composed of a number of bricks, which are cemented or otherwise united together; and a stone, metal, or imitation stone face, if applied as a plate by cement or by mechanical fastenings, is secured to the block of bricks, and the entire block can then be conveniently transported to a suitable place, and put up as part of a building front. Such blocks can be formed in boxes or molds, wherein they can be put up by unskilled hands. When the ornamental face is made of composition, imitation stone, cement, plaster, or other matter, the mold should be formed to shape the compound in the desired manner. By this arrangement, it is claimed that cheap building fronts, richly ornamented or plain, can be made to order. Mr. Andrew Derrom, of Paterson, N. J., is the inventor.

MACHINE FOR PUNCHING METALS.—Gaspar Zender, Caledonia, Minn.—An annular die ring is provided, carrying dies of various shapes and sizes. A punch is provided for each die in case the latter vary in size or shape, and is readily detached when a different punch is required. When this is done, the die ring is turned on the bed, so as to bring the required die directly beneath the punch. When the die ring is thus placed, it may be held in position in any suitable manner. By this arrangement, holes of various sizes and shapes may be punched with a single machine without removing the dies. The advantages of this arrangement will be readily understood by all who are acquainted with the subject.

ELEVATOR.—Paul Giffhorn, Akron, Ohio.—This invention relates to a new endless ice elevator, for conveying ice from barges or sleds to sheds or ice houses; and consists of an endless double chain, provided with braced projections, and arranged on an inclined frame, which has a chute of guide at suitable elevation. A combination, with drums and double chains, having lugged and braced hooks of an inclined channel, formed of side bars and bottom, constructed and applied in a suitable frame, is the claim on which a patent has been allowed.

HOOBS AND EYES.—Miranda R. S. Davis, Kausas City, assignor of one fourth of her right to James P. Howe, Macon, Mo.—This invention relates to an improvement in hoods and eyes for fastening dresses or clothing, and for all purposes to which hoods and eyes are applicable; and it consists in the mode of fastening the hoods and eyes to the cloth or other material. The hoods and eyes are formed with two pointed shanks, which allows them to be inserted in the cloth the same as pins; and, when inserted, they are fastened either by bending the shanks over and down on to the cloth, bending over the eye or hook. No needle and thread are required. The improved hoods and eyes may be inserted and fastened almost as easy as common pins can be inserted, and, it is claimed, in the most substantial and perfect manner.

AMALGAMATOR.—George C. Langtry and George Emmert, Gold Hill, Nev.—This invention has for its object to produce an improved machine for pulverizing slime or mud containing gold and silver ores obtained in the preparatory dressing, tailing or the refuse part of stamped ore thrown behind the tail of the buddle or washing apparatus, or gold and silver bearing sand, and also to separate and amalgamate the precious metals therein contained.

COMBINED BUREAU, BEDSTEAD, BOOK CASE, ETC.—Herman Locke, of New York city.—This invention relates to a new combination piece of furniture, which embodies within a reduced compass nearly all the requisites of a sleeping and dressing apartment and of a study, since it contains a bedstead, mosquito-net frame, wash stand, toilet case, mirror, table, drawers, wardrobe, spittoon, boot jack, writing case, writing table, and book case.

BALE BAND STRETCHER.—Logan J. Anderson, of Water Valley, Miss.—This invention relates to baling cotton, hay, and all other merchantable commodities which are usually transported and sold in bales; and consists in a lever, clamp, or stretcher so constructed that the ends of the bands are gripped and drawn together, and the band is tightly drawn around the bale, for fastening or tying.

WRINGING MACHINE.—Martin Way and Frank Way, of Springfield, Ohio.—In this invention the power of the wringer can be held under constant and varying control, in accordance with the requirements of every single article passing between the rollers. A combination of a bench, wringer frame, tub, wringer rollers, rods, cross bar, lever, point, and treadle is employed to secure the desirable end.

BEH HIVE.—David Latchaw, of Barkeyville, Pa.—This hive comprises features which are not novel; such, for instance, as an arrangement of comb frames designed to form a suitable enclosure for bees without the use of the usual cover or case; also, removable comb frames, with top bars, beveled on the under side, and with central cross bars; also, sectional "supers," or surplus honey boxes; also, inclined bottom board; but the invention consists in a peculiar construction of the feed box, which is a combination with the comb frames provided with bevel top bars, of the feed boxing, having notched end bars and honey receptacles, and a trough, the same being adapted to fit into said frames.

LAMP BASKET.—Patrick J. Clark, of West Meriden, Conn.—This invention consists of a combination of one or more springs with the metal baskets or cups of brackets for suspending lamp holders arranged to spring upon the annular bead or rib near the center of the lamps and hold them from being accidentally thrown out.

BAG HOLDER.—George W. Dungan and Warren Wasson, of Genoa, Nev.—This invention has for its object to furnish an improved device for holding bags, sacks, etc., while being filled with grain or other substances. It consists in the construction and combination of a movable bottom, flexible straps, levers, stops, perforated straps, hooks, and knobs or buttons, with a suitable frame work.

SULKY PLOW.—William B. Cummins, of Leon, Iowa.—This invention has for its object to furnish an improved sulky attachment for plows, which shall be simple in construction and easily operated to raise the plow from the ground for convenience in turning and passing from place to place, and to again drop the plow into working position.

STUMP EXTRACTOR.—Warren Beckwith, of Geneva, Wis.—The object of this invention is to furnish a machine for pulling stumps and raising rocks and other heavy bodies from the ground. It consists in the construction, arrangement, and combination of a frame, timbers, standards, windlass, pulley, and hoisting chains or ropes arranged to act with a standard shaft and hook in combination with the standards.

CHURN.—David A. Willbanks, of Harmony Grove, Ga.—This invention is a combination, with a belt, connecting two pulleys, of a looped rod and pin to prevent the belt from becoming tangled when removed from the dasher rod, which is vertical, and rotates the dasher in a churn having the general form of a frustrum of a cone.

HARVESTER.—George W. Holmes, of Council Bluffs, Iowa.—This invention has for its object to furnish an improved device designed especially for facilitating the operation of the cutter bars of reapers and mowers. It consists in a pitman provided with springs and nuts, and also a bar and a two armed lever combined in a harvester with the cutter bar and the rock shaft that drives it in combination with a sliding and supporting frame.

PRESS.—William Randle, of Hadensville Station, Ky.—This invention relates to an improvement in presses, which consists in a novel arrangement of perforated bars, ratchet bars, pawls, and levers with a beam carrying the follower to actuate the latter by lever power.

BRICK MACHINE.—Henry Jones, of Fort Madison, Iowa.—This is an improvement in brick machines, which employs a combination, with a mold wheel, of a chain of mold closers, pressers, and curved bars with inclined planes, also a combination with the mold wheel and pressers of a curved bar, and an endless carrier, also mold closers hinged together in an endless chain by the flanges and pins, the latter being provided with rollers and combined with a support and wheel, also the mold closers have pins arranged for gearing with a toothed rim, and finally bars, housings, and supporting screws arranged in a peculiar manner, the whole being embraced in five claims, allowed on the patent.

LAMP.—Joseph M. Parker, of La Grange, Mo.—This invention consists of a lamp, the body of which is in the form of a frustrum of a cone, with an inverted frustrum of a cone at the top, and the opening at the top being very large, for allowing a free escape in case of an explosion, it being intended that the burner and wick tube, which are held in said opening by a hollow plug of elastic substance, shall be forced out vertically and relieve the lamp so that it will not be broken. The conical shaped body is used because of being more favorable for the expansion and contraction without fracturing than other form; and the concave bottom is used because water, which it is proposed to use as a safeguard against explosion, freezing in such a formed bottom, will not burst it, as the said form allows the expansion without straining the walls. The inventor claims that a lamp constructed on this plan will, in the first place, be scarcely liable to explode at all; and, in the second place, if an explosion does take place, the burner and flame will be forced away from the lamp in the most harmless direction, and the lamp will not be broken. He uses water in the lamp nearly up to the lower end of the tube; as any burning fluid, however volatile it may be under other circumstances, gives off but a very meager portion of carburet of hydrogen, even at a high degree of heat, when resting on a column of water, whereby the danger of explosion is very much lessened.

EXPANSION PIVOTS FOR WHEELS OF SEWING AND OTHER MACHINES.—Emanuel Motz, of Woodward, Pa.—This invention has for its object to provide against the wear of pivots or arbors in machinery, or of the wheels running thereon; and consists in making the same expandible by means of longitudinally adjustable ratchet keys placed around the pivot and within a split ring. The invention is claimed to be particularly useful for sewing machines and similar devices, as it counteracts the wearing of bearings and eyes of wheels, and consequent noise, rattle, and increase of friction.

PEDAL ATTACHMENT FOR PIANOS.—Nathaniel A. Stimson, of Herkimer, N. Y.—This invention has for its object to furnish an improved attachment for pianos, to enable a performer upon a violin, flute, or other instrument to play with his feet a piano accompaniment for himself. It consists in the construction and combination of pedals or foot levers, rods, cross bars, pins and levers with each other, and with a frame to adapt them for attachment to a piano, and to constitute a pedal action of the kind set forth.

COMBINED KNIFE AND FORK CLEANER, KNIFE SHARPENER, AND CAN OPENER.—Frederick W. Echtenach and Milton J. Welch, of Philadelphia, Pa.—This invention is a combined knife and fork cleaner, knife sharpener, and can opener, consisting of a base, hard grit cakes, and a lever, pin cutter, and notched plate, all combined to form one implement.

SPARK ARRESTER.—Herman F. Reiner, of Blairsville, Pa.—This invention consists in a wire screen in the form of a frustrum of a cone, which is inverted and attached to the mouth of the smoke stack by its base, so as to extend downward therefrom to within a short distance of the base of an inverted funnel used for deflecting the sparks against the top of the stack, arranged suitably therefor, and receiving them there; the sides of the screen after the force with which they are carried up is arrested; and below this funnel, which has a hole at the bottom, is an inverted conical cup, into which the sparks are received, to be again delivered to the blast and forced up to the top of the stack, as before, to be extinguished and broken, so as to be carried off through the screen with the smoke, this operation being repeated until the sparks are fine enough for being so carried off and the fire extinguished. The apparatus is specially designed for application to straight or cylindrical smoke stacks, which are much more preferable than those with flaring tops.

HORSESHOE.—Thomas Kinghorn and Robert Kinghorn, of Morgan, Ohio.—This invention consists of a horseshoe with joints about half way between the heel and toe; and india rubber springs arranged to force the heels outward when attached to expand feet contracted at the heel. The two sides of the horseshoe are jointed so as to approach to or recede from each other at the heel, and provided with projections having cavities adapted for holding a spring on each side, in such a manner that they being contracted by moving the heels toward each other when the shoe is attached to the foot, will constantly tend to spread the foot at the heel by their action thereon. Projections are so placed on the inner side of the bar forming the shoe as not to rise so high or extend so low as to interfere in any way with the wearing of the shoe. A spongeholder is used, consisting of a piece of leather formed mainly in outline like the inner lining of the shoe, but a little larger, with a depression for the frog, and provided with metal clips, having an upper prong and a lower one which engage the inner edge of the shoe above and below, and hold the said leather piece in position. The leather is sprung, to contract it when being introduced and the clips are engaged with the shoe, one of the clips being near each heel and the other at the toe.

Practical Hints to Inventors.

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How Can I Obtain a Patent?

is the closing inquiry in nearly every letter, describing some invention, which comes to this office. A positive answer can only be had by presenting a complete application for a patent to the Commissioner of Patents. An application consists of a Model, Drawings, Petition, Oath, and Full Specification. Various official rules and formalities must also be observed. The efforts of the inventor to do all this business himself are generally without success. After great perplexity and delay, he is usually glad to seek the aid of persons experienced in patent business, and have all the work done over again. The best plan is to solicit proper advice at the beginning. If the parties consulted are honorable men, the inventor may safely confide in their ideas to them: they will advise whether the improvement is probably patentable, and will give him all the directions needful to protect his rights.

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Preliminary Examination.

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To Make an Application for a Patent.

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