

RECENTLY PATENTED INVENTIONS.
Mechanical.

PLANING MACHINE CUTTER HEAD.—Victor V. Lawrence, Waterford, Vt. This head is made with end pieces having short integral journals projecting from their outer sides, parallel portions connecting the end pieces, which are separated by a clear space extending their whole length, and have flat inclined knife beds tangential to the axis of the cutter heads, leaving room for the clips, the invention also covering various other novel features.

MACHINE FOR CUTTING PATTERNS.—James W. Dearing, Brooklyn, N. Y. This machine provides means for manipulating a knife while in motion, and wherein the knife may be actuated by connection with any piece of mechanism having a vertical reciprocating motion, as the needle bar of a sewing machine, etc., being especially adapted for cutting scalloped edges and similar forms.

DYNAMO-ELECTRIC MACHINE.—Joseph W. Balet, New York City. This machine has an armature core grooved longitudinally with respect to the armature and transversely with respect to the field magnet, there being combined therewith one or more conductors wound in the grooves of the armature, so that the fluctuations of the current induced in the armature will not react upon the field magnet to modify the lines of force and cause the current to fluctuate.

DEVICE FOR TRANSMITTING POWER.—William G. Scott, Starkville, Miss. This is a pneumatic device which combines with a fixed air compressing cylinder and its piston a loose cylinder, a flexible tube connecting the latter with the fixed compressing cylinder, a spring-controlled piston in the loose cylinder with a hammer head on its front face, with other novel features, for transmitting power by blows or impact.

Agricultural.

PRUNING SHEARS.—James R. Gascoigne, Devenport, New Zealand. This invention covers a novel, irregular, and scalloped construction of the blades of the shears, whereby the twigs and branches are held from slipping, and the cutting edges can be readily sharpened, while the tool is intended to enable the operator to do more and better work.

Railway Appliances.

SNOW PLOW.—Eric M. Hesselbom, Rushford, Minn. This invention covers a novel construction and combination of parts in a plow designed to cut up the snow and discharge it in two streams to the side of the track, the plow being driven by a locomotive in its rear, and the invention being an improvement on a former patented invention of the same inventor.

Miscellaneous.

FOLDING BOOK CASE.—Phillip Kaffenberger, Springfield, Mo. This invention provides a permanent shelf upon which a permanent piece is supported at each end, such pieces forming portions of the sides and combining with those permanent parts, folding sides, and removable shells, giving rigidity to the entire structure, while the case may be folded into small bulk for transportation.

WATER PURIFIER.—Thomas H. McCulloch, Omaha, Neb. This device may also be used for other liquids, and comprises a series of settling tubes, the first tube having an inlet pipe at its lower end and an outlet at its upper end, pipes connecting the tubes, the upper end of each pipe communicating with the interior of a tube at its upper end and the lower side of the adjacent tube, with other novel features.

GAS CHECK.—Henry B. Eareckson, New York City. This device is for use on the waste pipes of wash basins and other water fixtures, to permit the discharge of the waste water while automatically preventing the back flow of sewer gas, the invention providing for the ready inspection and removal of the flap valve and its operating connections for cleaning or repairs, and to secure increased simplicity and efficiency.

KITCHEN CABINET.—Charles B. Rogers, St. Peter, Minn. Combined with a case having a cleat across its back and a moulding along the lower part of its rear edges are shelves hinged to the side of the case, and provided on their rear edges with rearwardly projecting strips adapted to engage alternately the cleat and the moulding, with various other novel features.

COFFEE POT.—Edward T. Newlin, Brooklyn, N. Y. This is one of the class of coffee pots in which an infusion is obtained by passing water through the ground coffee, held in a fabric strainer near the top of the coffee pot, the invention consisting mainly in a compressible ring held in the margin of the strainer, and in a removable support for the latter.

ASH SIFTER.—George W. Bown, Philadelphia, Pa. This invention covers a novel combination of parts in an ash sifter in which the parts may be detached, the casing being easily applicable to a barrel, so the ashes may be thus sifted, or the sieve may be locked to an ordinary ash pan, converting the two into a sifter.

FENCE MACHINE.—George W. Johnson, Dallas, Oregon. This machine is specially adapted for forming easily and rapidly fences of wires and pickets, the machine consisting principally of a tension device and a crossing device, and the invention covering various novel details and combinations of parts.

TENSION DEVICE.—Gabriel D. Coiner, Koimer's Store, Va. This is a device for use in making fences, and consists of a vertical standard supported rigidly on a broad base, a removable guard plate being rigidly attached to the face of the standard, and pins projecting from the standard, with other novel features, the device being moved from point to point as the fence making progresses.

HORSE DETACHER.—George T. Parker, Glasgow, Ky. In connection with a holdback hook for use on vehicle shafts, a dog and a presser acting on the dog are used to secure the latter in position in such manner that the ring connected with the breeching strap may be conveniently adjusted into the hook and may be released therefrom when the horse moves forward out of the shafts after the traces have been unfastened.

SLED BRAKE.—Clarence E. Holley, Fort Fairfield, Me. This brake is made with an end-wise or longitudinally movable plate or bar having connection with the longitudinally movable tongue, in combination with brakes having a whiffletree-like or cross bar connection with the longitudinally movable bar or plate, the brakes each consisting of an elbow lever pivoted at its angle to a runner of the sled.

WEATHER STRIP.—John E. Jones, New York City. This invention covers, as a new article of manufacture, a weather strip having a compressible and anti-friction surface of cork, composed of short blocks of cork applied to the door or window, with the ends of the grain at right angles to the edge of the window or door, the cork being held in a suitable casing in grooves.

WEATHER STRIP.—The same inventor has likewise obtained a further patent for a weather strip composed of a thin plate of spring metal set into the edge of the sash, so that its outer edge presses with a constant spring pressure upon the window frame, being designed to be used mainly on car and other windows to exclude air, dust, rain and snow.

FOLDING CONFESSORIAL.—James J. Dunn, Meadville, Pa. This device consists in a middle screen having a window or opening in its upper part, and outer screens hinged to the same vertical edge of the middle screen, being intended for use in Roman Catholic churches, where it can be readily set up in any part of a church, or readily folded up and removed out of the way.

AIR SHIP.—Herman A. J. Reickert, New York City. This air ship consists principally of a balloon supporting on its under side a closed basket, in which is located a motive power operating a suction wheel and propeller wheel, both located above the basket at its rear and mounted in supports connecting the basket with the balloon, the power also operating side and central wings, and the ship being designed to be under the control of the operator, to be steered in any direction.

WINDMILL.—George W. Haines, Adin, Cal. This invention provides means for regulating the windmill, whereby the wheel will be kept turning at a regular speed in all winds, high and low, and wherein the turn table will be constantly and automatically lubricated.

WIRE TIGHTENER.—Shapley P. R. Taylor and Stephen S. Clark, Denison, Texas. This is a simple tool for taking up the slack of wire in wire fences, and has a peculiar construction and arrangement of a twisting nipper, in which a bar having a forked end bent to form hooks is combined with a lever handle fulcrumed to the bar, and having its end extended between the hooks to form a discharging device for the wire.

SHOEING STAND.—John J. Halstead, Kesler's Cross Lanes, West Va. This is an apparatus designed to save the horsehoer from the strain of supporting the foot of the animal, and also provides for more firmly and more steadily supporting the hoof, so that the shoe can be more quickly put on, while it has a convenient tool box.

RENDERING.—Frederick Winter, Allegheny, Pa. This invention covers a novel process for the manufacture of neutral stock from crude animal fats, by first reducing the fat to a pulp, then passing it on to a body of heated water, next subjecting it to a stream of heated water from above, whereby the melting is completed, and foreign matters washed out, then, after settling, drawing off the clear fat.

SIFTER.—George H. Fountain, Plainfield, N. J. This invention provides a sifter with a perforated or reticulated drum having an automatically closing door, with means whereby a chute or slide may be expeditiously constructed to carry off the sifted products when desired, the construction being simple, durable, and economical.

WATCH BOW FASTENING.—Frank G. Faxon, Mount Morris, N. Y. Combined with the watch bow is a divided pendant, between whose members the ends of the bow are clamped, and which are relatively adjustable to bring them into closer relation, the bow being held in such manner as to render it impossible to accidentally detach it from the pendant.

FARE BOX.—Timothy L. Beaman, Knoxville, Tenn. This invention covers novel features of construction and combinations of parts in a fare box designed to be proof against robbing implements in the hands of the driver or other person, while the box is made strong and generally efficient for its purposes.

SIGNAL BOMB.—Reginald H. Earle, St. John, Newfoundland. This is a bomb designed to be used as a marine signal, and is so made as not to be affected by dampness, and so it can be ignited irrespective of the state of the weather, while in exploding it will send aloft a heavy volume of flame and smoke and give a heavy detonation.

STEREOSCOPE.—Adelbert E. Foutch, New Albany, Ind. This device has an endless series of view holders distended upon rollers, a set of journal plates arranged to slide horizontally in guides and carrying the rollers, toothed gears for adjusting the plates horizontally, and a sliding bevel gear connection with the roller for rotating the series of view holders, the views being arranged in endless series to be successively brought into focus of the lenses.

LUNCH HEATER.—Timothy O'Mahony, Felton, Cal. This is a cylindrical heater constructed of sheet metal and having an open top, with inwardly projecting arms for supporting a dinner pail, and notched lugs for connecting with studs on the pail.

PAPER BOX.—John F. Diemer, Elizabeth, N. J., and Paul E. Gonon, New York City. This is a knock-down paper box especially adapted for filing or storing papers, bills, etc., and is so made that when set up it is provided on each corner on the outside with an angular metallic strip, whereby the box body becomes very strong.

CHECK BOOK.—Henry R. Wilson, Brooklyn, N. Y. This invention covers an attachment for check books to be used as a stub holder and check cutter, and consists of a cutter bar and a flexible connection pivoted thereto and arranged for loose connection with the book cover.

FOOT SCRAPER.—William H. Tyler, David City, Neb. This scraper is formed of a single piece of sheet steel, having at the extremities of its scraping edge rounded ears for engaging the soles of a boot or shoe, and having feet formed by splitting the plate and bending the split portions in opposite directions.

TRUNK ATTACHMENT.—Joseph Ware, Brooklyn, N. Y. This is an attachment to secure the trunk when closed, and enable it to withstand severe handling and rough usage, and it consists of battens connected together to extend over the trunk, blocks and tackles connecting two of the battens together for tightening and securing the battens to the trunk.

REEL AND SPRINKLER.—Richard Wylie, Napa, Cal. This invention combines a tubular frame on wheels, having a handle, with a series of sprinkling nozzles on its front end, the tubular axle having a tubular connection with the sides of the frame, with a connecting hose wound on the reel, whereby, when the machine is pushed or drawn along, the passage of water through the axle and frame may be maintained.

GARMENT SUPPORT.—Charles R. Hollis, Pittsfield, Mass. This invention relates to supporters for holding up children's drawers and stockings from the waist, for which the invention provides a convenient and readily attachable spring device which permits of the free and easy movement of the child's body without any strain upon the drawers and the loops.

BUCKLE.—Sallie C. Tucker, Garnett, Kansas. This buckle consists of two parallel end loops connected at their lower outer corners by a cross bar, and also connected above the bar by a horizontal loop, the upper and lower bars of which are in vertical alignment, whereby two tape or strap passages cross each other, and either tape or strap may be adjusted without interfering with the adjustment of the one crossing it.

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4. Moving a house thirteen miles by water. From Wheeler's Mills, on the Housatonic River, above Stratford, Conn., to West Stratford, Conn. Full page of engravings showing the various stages of the operation, also floor plans of the building.
5. A beautiful residence lately built on Reynolds Terrace, Orange, N. J., from designs by architect John E. Baker, of Newark, N. J. Perspective and floor plans.
6. A villa near New York. Cost eight thousand dollars. Plans and perspective.
7. A Queen Anne cottage for three thousand five hundred dollars, lately erected at Richmond Hill, N. Y. Floor plans and perspective.
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15. Miscellaneous Contents: A lien law for grave-stones.—How to save ceilings when cracked, sagging, and ready to fall.—The Willer sliding blinds, illustrated.—Improved woodworking machine, illustrated.—An improved reversible ratchet brace, illustrated.—Canton, Ohio.—An improved dumb waiter, illustrated.—Water pressure regulators.

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Notes & Queries

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References to former articles or answers should give date of paper and page or number of question.

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Minerals sent for examination should be distinctly marked or labeled.

(570) S. V. asks how to color metal with aniline colors and produce the matte or dull effect as contrasted to the bright and polished. A. Try dissolving the colors in photographer's ground glass varnish. A simple application of the alcoholic solutions will leave a dead color on the metal, but this will not be permanent unless varnished, which of course will tend to brighten the surface.

(571) G. C. M. writes: Considerable sport is being had out of the horse question. The question is: A man sold a horse for \$80, bought him back again for \$70, and sold him a second time for \$100. What did he make in the transaction? A. The question is a "catch." At the end of the transactions the man was to be debited with \$180 and credited with a horse and \$70. If the horse was worth more than \$110, he lost the equivalent of the excess. If worth less than \$110, he made a profit equal to the difference.

(572) J. W. D. asks (1) how wire solder is made. A. Wire solder is made by punching small holes, from one-thirty-second to one-sixteenth inch diameter, in the bottom of a sheet iron pan along one side, holes to be one-half inch apart. Set the pan upon a flat plate of iron or a flat stone slab, pour in the solder, and tip the pan so that the solder will flow through the holes, drawing the pan along the slab fast enough