

Declined.

Communications upon the following subjects have been received and examined by the Editor, but their publication is respectfully declined:

AERIAL NAVIGATION.—C. M.
 DIVINING ROD.—H. E. F.—I. N. B.
 FORCE AND COUNTER FORCE.—J. S.
 FRUIT JELLIES.—I. D. T.
 PETROLEUM AND THE PRECIOUS METALS.—J. H.
 PRODUCING MOTION.—A. U.
 PROPULSION ON CANALS.—P. J. D.—C. A. W.
 ROTARY MOTION OF THE PLANETS.—P. R.
 SCIENTIFIC RELIGION.—C. B.
 THE FIRST STEAM RAILROAD.—D. M.
 THE FLIGHT OF BIRDS.—R. O. D.
 THE RUBBER TIP PATENT.—R.
 VELOCITY OF LIGHT.—C. E.
 WATER METERS.—F. G. W.
 ANSWERS TO CORRESPONDENTS.—A. G. B.—K. L.—N. W. H.—J. F. K.—J. G. M.
 NOTES AND QUERIES.—J. A. S.—F. O. H.—P. C. L.—J. D. P.

Recent American and Foreign Patents.

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

CANAL LOCK.—Israel Townsend, Caperville, Va.—The object of this invention is to economize water in taking boats through canal locks. This object is accomplished by the employment of a side reservoir, into which about half of the water from the full lock is drawn off to lower the boat. The passage between the lock and reservoir is then closed, and the remainder of the water in the lock is let off at the lower gate as usual. When it is desirable again to fill the lock, another passage from the reservoir is first opened and the lock is partially filled therefrom, thus using that portion of the water, twice, and thereby saving a proportionate amount of water.

IRON FENCE PANELING.—Floyd G. Brown, Chapel Hill, Texas.—The invention consists in manufacturing a fence or fence paneling of hoop iron, so that it may be sold in sections, of any desired length, rolled up in a compact form, easily and cheaply transported to any distance, and put up by the farmer with rapidity and facility.

CHAIR SEAT FRAME.—Henry Buchter, Louisville, Ky.—The invention consists in improving the construction of a chair seat frame by using metallic corner pieces to connect the ends of rounds, whereby great strength and durability is given to that part of the chair which is subject to most strain.

BAG STRING INSERTER.—William J. Cussen, Richmond, Va.—The invention consists (1st) in a horizontal needle, having eye near the front and thread guide near the rear end; whereby a child can insert the gathering thread in a tobacco bag in one fourth the time in which it can be done with the hand by an adult. (2nd.) It consists in providing such a needle with a spring that not only guides but subsequently clamps the thread, so that it can be held taut while being cut off at the desired length. (3d.) It consists in providing a lever which shall simultaneously and by a simple movement place in position both clamp and cutter. (4th.) It consists in connecting the same lever that carries the thread cutter in front and finishes up the work, with a registering mechanism in the rear, by which the exact amount of work that has been done is always indicated.

FIRE ENGINE.—Jacob B. Van Dyne, Louisville, Ky.—The invention consists in arranging cylinders, provided with chemical ingredients which are mixed by the inversion of said cylinders, on pivots in the frame of a wheeled vehicle, and holding them in position by a latch. It also consists in providing the sides of frame with hooks upon which the ladder may be conveniently hung.

PROCESS FOR COATING IRON WITH ZINC.—John A. Grey and John Lippincott, Baltimore, Md.—This invention is an improvement on the common process of coating iron articles with zinc by dipping the articles in a bath of melted zinc resting on a stratum of melted lead within a pot of suitable size. By this process, no dross is deposited, and the wear of the article dipped will be practically nothing.

OYSTER CAN.—John A. Tillery, Baltimore, Md.—The invention relates to half square or narrow rectangular cans which are used in the trade for raw oysters, and it consists in forming a raised annular rib, about the channel in which the downward flange of the cap is soldered, for the purpose of preventing said channel from being, to a greater or less extent, filled by solder flowing from the joint between the top and body.

PEANUT THRESHER AND SEPARATOR.—John H. Walker, Walker's Landing, Tenn.—The invention consists in a machine whereby the peanuts and vines are thrust down an incline, caught by a revolving cylinder (whose teeth act in concert with those of a concave, to tear the vines to pieces and from the nuts), and transferred over an endless sieve to a reticulated cylinder, where the merchantable nuts are effectually separated from the vines and light nuts. By this machine, the nuts can be threshed, cleaned, and prepared for market, at a very small cost and with great economy in time.

WATER METER.—Edward Marsland, of Sing Sing, N. Y.—This invention relates to a new water meter, in which the water is conveyed in spiral jets against the recessed edge of a wheel, revolving the same in exact rot to the volume brought against it, and balancing it at the same time to reduce friction. The invention consists, principally, in the arrangement of the wheel and the chamber whence the water emanates, and also in the application of projecting wings or fans to the wheel and case, for regulating its motion and making it conform to the head of water.

COUNTERSINK.—Lewis H. Hunt, of Saxton's River, Vt.—This invention consists in the construction of countersinks for wood. It consists in constructing the tool of a solid shank and pad, and a detachable cutter fastened by a screw.

CIRCULATION VALVE.—Robert Pallett, of New York city.—This invention enables the man at the end of the hose of a fire engine or of the discharge pipe of a pump to shut off the discharge at any time without endangering the mechanism of the engine or pump, and without its being necessary to stop the pump. The construction is of such a nature that the increased pressure in the discharge pipe, consequent on shutting off the discharge, forces a plunger into a chamber fixed on the pipe. The movement of the plunger raises a valve which covers the mouth of a passage leading back into the receiver of the pump, and by these means the water is returned and circulated without danger to the pump or hose pipe.

DRAFT ATTACHMENT TO PLOWS.—Sylvester H. Dalley, of Olcott, N. Y.—This invention relates to a new draft attachment to plows, and consists in the application to the draft rod of a guide wheel which is self locking and serves in place of a clevis. The guide wheel runs in a strap which is suspended by sleeves loosely from the draft pin. When draft is applied, these sleeves are pulled forward, and notches in one of them are made to engage with projections from the draft pin; this locks the wheel strap in a vertical position. When turning corners, etc., the strap is unlocked by the action of a spiral spring which encloses the draft pin.

FERTILIZER.—James P. Crutchfield, of Fayette Corner, Tenn.—This invention furnishes an improved manure distributor of very simple construction. It consists of the box or body of an ordinary wagon, so arranged as to allow the manure to fall easily through holes in its bottom. The holes are provided with slides to regulate the quantity of manure released, and under each is suspended a spout to convey it to the furrow. The spout is made adjustable as to its angle of inclination, so as to let the manure pour out at whatever rate may be required.

DISH WASHER.—Safford D. Moxley, of Keeseville, N. Y.—This invention consists of any suitable tub, pail, or bucket, with vertical pumps on the opposite sides. There are two pumps by preference, although one would suffice, which have large openings at their bottoms. The piston rods extend upward through the tops, and are connected by bent bars with a rocking lever which is pivoted to the sides of the tub and provided with handles for working the pistons; by which means the water is alternately taken into the pumps and forced out again with great intensity, calculated to wash the dishes, vegetables, or other articles in the tub very quickly.

TOY PISTOL.—Benjamin Haviland and George P. Gunn, Herkimer, N. Y.—This invention relates to the construction of toy pistols, and consists in a peculiar arrangement of the air cylinder and its piston in the stock, combined with a charging rod, to depress the piston and charge the pistol.

PHOTOGRAPHIC LENS.—Richard Morrison, Brooklyn, E. D., assignor to Scovill Manufacturing Company, New York city.—In this improved lens, which is designed for a wide angle view lens, the front combination is composed of a plano-convex lens of plate glass, cemented to another plano-concave lens of flint glass, of such curves as to produce a combined lens sufficiently over corrected for actinic rays to properly correct the back combination, which is chromatic, and is composed of two lenses of plate glass, the first, or interior one, being a plano-convex, or double convex of the same focus as the second or exterior, which is a meniscus of nearly the same radii as the front combination.

CULTIVATOR.—Asa Bennett Springsteen, Schodack Landing, N. Y.—This invention furnishes a simple, convenient, and effective plow for cultivating corn and other crops planted in rows; it may be readily adjusted to scrape the soil toward or from the plants, as may be desired. It consists in attaching, adjustably, a surface scraper to the plow standard, which scraper is made triangular with its rear edge curved downward, so as to scrape the soil to one side. The scraper is followed by a leveler, also secured to the standard, which is provided with a downwardly projecting tooth. This stirs up the soil near the plants, and roots up any weeds, etc., that may be growing near them, and, also, smooths the surface.

THREE HORSE EQUALIZER.—Adam Lafayette Thomas, George James Thomas, and Thomas Newton Thomas, Lee's Summit, Mo.—This invention furnishes an improved three horse equalizer, and is so constructed that it may be readily adjusted so that the three horses may all have an equal amount to pull, or so that either the single horse or team may have the advantage, as may be desired; it consists in the arrangement of adjustable bars, which are pivoted to the tongue, and connected by chains so as to adapt them to receive the whiffletrees.

HAY ELEVATOR AND CARRIER.—John H. White, Columbus City, Iowa.—This invention relates to a new arrangement of carriage for elevating and conveying hay, straw, and other material for stacking or other purposes. The carriage runs, suspended by pulleys, on a rope stretched between two posts, and by means of various ingenious contrivances is made to take up its load in one spot, and to deposit it in another.

EARTH AUGER.—Xenophon Earle, Depere, Wis.—The boring part of this improved post hole auger consists of two scoops, which are shaped like half cones; they are connected by a scissors joint in such a manner that they may be securely shut together—thus completing the cone. When shut, one edge of each scoop projects beyond the opposing edge of the other, forming a cutter to dig into the earth, and leaving a space through which the dirt passes into the interior of the cone. The dirt is discharged by opening the cone. By this construction, the auger is readily and quickly forced into the ground, and when filled is drawn out easily, the dirt dug out by the auger being carried inward and packed into the cavity or space between the scoops, instead of being packed around the outer part of the bore or hole.

FUEL WATER HEATER FOR STEAM BOILERS.—Joseph Rodgers, Clarington, Ohio.—This invention has for its object to economize fuel in the heating of water in steam boilers, and to insure a more thorough result from the heat.

TILTING MACHINE.—Bowen Mathews, Keyport, N. J.—The object of this invention is to furnish a machine for the amusement or exercise of children, invalids, and others, designed as a substitute for the rotating swivel, etc., now in vogue. A couple of pulleys or rollers are attached to a ceiling or horizontal beam at some distance apart, and over them is passed a band, from each end of which is suspended a chair. The length of the band is adjustable. The chairs are made to rise and fall alternately by their occupants.

STALK CHOPPER.—This invention has for its object to furnish a simple, convenient, and effective machine for cutting or breaking up corn stalks and cotton stalks so that they may be conveniently turned under by the plow. It consists of a roller, made of any material possessing the requisite weight, which carries knives or cutting plates attached to its periphery, and is suspended, free to revolve, in the draft frame. By this construction, as the machine is drawn forward, the roller breaks down the dry stalks, and the knives cut or break them into pieces, longer or shorter, according to the distance apart of the knives, so that they will not interfere with the plowing.

SWITCH FOR PRINTING TELEGRAPHS.—Patrick Kenny, of New York city.—The object of this invention is to enable the operator, when working with several telegraphic printing instruments, to use them, one after another, without changing the different keys or using a separate battery for each. It consists in the employment of an electromagnetic switch instrument which is connected with the magnet and printing lever of each printing instrument in a manner to insure the following operation: As long as its printing lever is at rest, that printing instrument which is connected by metallic contact with the switch wheel of the switch has a current established through its magnet and can be worked in the usual way. Only one instrument at one time can be electrically connected with the switch wheel, as the springs belonging to the others are then resting on insulated portions of the wheel. Whenever the printing lever is raised, the circuit through the printing magnet is interrupted and metallic connection with the magnet of the switch is made. This enables the operator to establish, by touching an appropriate key, a current through the switch magnet which causes the switch wheel to rotate and brings the spring belonging to another printing instrument into metallic contact with it, while it breaks contact with the first. The key of the switch magnet is touched as often as is necessary to bring the right instrument into circuit, supposing more than two are connected with it. If, during the elevation of the printing lever, the key is not touched, the printing instrument connected with it will be in circuit on its descent.

TUG BUCKLE.—James C. Barrows, of Centerville, Iowa.—This invention furnishes an improved tug buckle, which does not wedge the tug so as to injure it; and which is easily adjusted and effective in operation. It consists of an ingenious arrangement of various parts which could not be explained without drawings.

MACHINE FOR FINISHING DRAIN TILES.—Andrew L. Brown, of London, Ohio.—This invention furnishes an improved machine for beveling one end and recessing the other end of lengths of drain tiles so as to form a joint. Its principal features are: An automatic carrier which receives the tile, holds it while its ends are operated on, and discharges it when finished; and the leveling apparatus, which consists of two wire cutters, set parallel with each other, and carried on two movable shafts between which the tile is placed to have its ends cut.

SEED PLANTER.—Augustus Richards, of Anderson, Texas.—This invention furnishes a simple, convenient, and reliable machine for planting corn, cotton seed, and other seeds, which is so constructed that it may be conveniently adjusted to plant less or more seed, as may be desired. The seed dropper is barrel shaped and is carried between the wheels of the machine. It has a band around its center which is pierced with discharge holes through which the seeds fall to the ground. These discharge holes are shut or opened by slides which are adjusted so as to regulate to a nicety the quantity of seed dropped. There are a furrowing plow and other attachments, which we have not space to describe.

ELEVATOR.—Alfred B. Darling and James Bones, of New York city.—The object of this improvement is to prevent the falling of the elevator platform in case of the breakage of the main lifting rope. This is accomplished by an ingenious arrangement of various devices.

SEWING MACHINE CASE.—Gustav Heckel, of Belleville, Ill.—This invention furnishes an improved sewing machine case and table. The case consists of a back piece, which is hinged within a slot along the rear side of the table, and a front piece, connected by a flexible top. The twosides are hinged to the back piece. When closed, the sides form a support for the flexible top. A prominent feature of the invention is an adjustable piece which fills in the slot behind the hinged back so as to preserve the symmetry of the table when the case is closed.

WATER METER.—Hezekiah Olney, of New York city, assignor to himself and Lucius R. Townsend, of Malone, N. Y.—This invention consists in making the meter in two compartments, one for receiving, the other for discharging the liquid, so that from the latter vessel the water may flow continuously. The water flows through a pipe into the receiving compartment, on filling the same to a certain height, raises a float which operates a valve attached to the pipe. The movement of the valve shuts off the flow of water into the receiving compartment and, at the same time, opens a channel between that and the discharging compartment. When the water has passed from one compartment to the other, the float falls and the operation is repeated. Other devices are connected with the apparatus, which space prevents us describing in detail.

FENCE.—Andrew A. Garver, of Albion, Iowa.—This invention consists mainly in arranging the cross slats of the panel diagonal to the rails of the same to admit of a better connection of the panel with the double brace than in other portable fences. The fence consists of panels composed of rails connected together by upright slats placed in an inclined position, so that the upper rail will project six inches, more or less. The lower ends of the slats project down below the lower rail. In the lower edge of the lower rail are notches, just inside of the uprights. These notches and the arrangement of the slats allow the upper and the lower rails of the panel to engage with the brace of the fence.

DAMPER FOR FIRE PLACE.—Joseph Bridgman, of New York city.—This invention relates to a new damper for fire places, to be used in chimneys above grates for regulating the draft. It consists in providing the damper with projecting pivot pins and stops at the ends, and in the use of metallic sockets for its support built into the wall.

PACKING.—George Tetley and Charles D. B. Fisk, of Providence, R. I.—This invention relates to an improvement in metallic packing for piston and valve rods, and for all similar purposes. The packing is made in sections; each section consisting of two parts, which are made to fit each other and the rod they enclose. The sections are laid one above the other, reversing the position of the two parts in each alternate section, and are kept pressed against the rod by two springs placed between them and the ox. The boxes may be circular, rectangular, or of other form.

BALLASTING VESSELS IN PORT.—Francesco Demartini and John Chertizza, of Brooklyn, N. Y.—Under the present practice, when a vessel arrives in port and discharges her cargo, ballast must be immediately taken in to prevent careening and consequent injury to herself or other crafts. To avoid the loss of time and expense attending this course, this invention employs ballast logs, connected with the vessel by ropes or chains, that lie alongside and float in the water. The logs are not intended to hold the vessel down in the water, but merely to act as counter or balance weights when she attempts to keel over from any cause.

STOVE PIPE FITTER.—William Volk, of Buffalo, N. Y.—The object of this invention is to provide a simple, durable, and effective device for fitting stove pipes together, as, for instance, where the two parts are of the same size, or where bruised or out of shape. It consists of a frame which has two jaws, with lugs for two levers. One jaw is corrugated or serrated, and the other is smooth. Each jaw is provided with a lever of corresponding form, confined by fulcrum pins to the lugs. By the application of the serrated jaw and lever to the pipe, the latter is made to partake of the form of the jaw, and its end is consequently reduced in diameter. When the other jaw and lever are applied, the tendency is to expand and smooth out the pipe. When the two parts of the pipe are operated upon in this manner—that is, one corrugated or serrated, and the other expanded—they will fit together and may be joined without difficulty.

SAND AND GRAVEL SEPARATING MACHINE.—Nicholas J. Keller, of East Birmingham, Pa.—This invention relates to a new machine for separating sand and gravel or other materials from the matter elevated by dredging machines. The framework of the machine is coupled by a dredge boat or dredging apparatus, from which an endless chain or apron extends over one end of the separator. This apron or chain conveys in its buckets all the matter raised by the dredge on to an inclined sieve or perforated spout, which is securely fixed at one end of the frame. Water is conveyed to the spout by another endless chain or apron, and serves to so loosen the mud that all gravel and sand passes through, but all other matter is discharged. What passes through the sieve is carried toward the inner part of the separator into the higher end of an inclined perforated cylinder. This cylinder, being covered with wire screen and revolved by suitable mechanism, separates the sand and gravel by letting the sand pass through its finer meshes into a box, and the gravel through the larger meshes at the lower part into another receptacle. All extraneous matter or refuse is discharged overboard through the lower end of the cylinder, which is open.

Inventions Patented in England by Americans.

(Compiled from the Commissioners of Patents' Journal.)
 From May 14 to May 20, 1872, inclusive.

CAR COUPLING.—C. L. Horack, Winona, Minn.
ELECTRIC SIGNALS.—E. A. Calahaw, of Brooklyn, N. Y., London, Eng.
FOUL AIR TRAP.—J. Daniels, Washington, D. C.
HUB.—W. Lyman, East Hampton, Mass.
MAGIC LANTERN.—L. J. Marcy, Philadelphia, Pa.
MAKING PINS.—T. B. De Forest, of Birmingham, Conn., London, Eng.
PAPERING PINS.—T. B. De Forest, of Birmingham, Conn., London, Eng.
PAVING BLOCKS, ETC.—F. A. Luckenbach, New York city.
PIANOFORTE.—C. F. T. Steinway, New York city.
PROJECTILES, ETC.—J. G. Butler, Fortress Monroe, Va.
PROPELLING SHIPS.—L. B. Bruen, New York city.
SEAT AND DESK.—H. W. Curtis, New York city.
SEEDING FRUIT.—G. L. Taylor, D. Holland, Springfield, Mass.
SHEET IRON.—W. Rogers, Apollo, T. J. Burchfield, Allegheny, Pa.
SHOEMAKING MACHINERY.—W. J. B. Mills, Philadelphia, Pa., D. W. C. Taylor, Elizabeth, N. J.
SLIDE VALVE.—G. Westinghouse, Jr., of Pittsburgh, Pa., London, Eng.
STEEL.—T. Brooks, Minerva, Ohio.
TIMEKEEPER.—H. B. James, Trenton, N. J.
VEHICLE FOR PAINTING.—E. Densmore, New York city.
WOOD CUTTING MACHINERY.—J. Richards, Philadelphia, Pa.

FOREIGN PATENTS—A HINT TO PATENTEES.

It is generally much better to apply for foreign patents simultaneously with the application in the United States. If this cannot be conveniently done, as little time as possible should be lost after the patent is issued, as the laws in some foreign countries allow patents to any who first make the application, and in this way many inventors are deprived of valid patents for their own inventions. It should also be borne in mind that a patent is issued in England to the first introducer, without regard to the rights of the real inventor; therefore, it is important that all applications should be entrusted to responsible agents in this country, who can assure parties that their valuable inventions will not be misappropriated. The population of Great Britain is 31,000,000; of France, 37,000,000; Belgium, 5,000,000; Austria, 36,000,000; Prussia, 40,000,000; and Russia, 70,000,000. Patents may be secured by American citizens in all of these countries. Mechanical improvements of all kinds are always in demand in Europe. There will never be a better time than the present to take patents abroad. We have reliable business connections with the principal capitals of Europe. A large share of all the patents secured in foreign countries by Americans are obtained through our Agency. Address

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