

Recent American and Foreign Patents.

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

SELF-LUBRICATING AXLE BOX.—J. B. G. M. F. Piret, Paris, France.—This invention relates to certain improvements in the construction and arrangement of axle and journal boxes, and consists more particularly in a novel construction of a winged lubricating wheel, and in the application to the axle box of a reservoir under the axle.

GANG PLOW.—John Alloways, Decatur, Ill.—This invention relates to certain new and useful improvements in gang plows, and it consists in a new and improved means for connecting the plow beams to the machine, whereby the former are allowed an adjusting movement independent of the axle, so that the rising and falling movement of the latter, caused by the wheels passing over uneven ground, will not affect the depth of the penetration of the plows in the earth.

CARRIAGE SPRING.—R. E. Walker, Dresden, Mo.—The object of this invention is to construct springs for carriages, wagons, and other wheeled vehicles, so that the same may be of equal service for heavy and light loads. The invention consists in forming a spring of one continuous piece of steel, in three layers, the layers being so formed as to constitute to a certain extent, separate, independent springs.

WIRE FILE FOR BILLS ETC.—F. C. Senseman, Philadelphia, Pa.—This invention has for its object to construct a file for bills, letters, etc., in such a manner that any one bill or letter can be reached and removed without requiring the separate removal and re-attachment of all those above it. The invention consists in the combination of a wire file with a tubular slotted holder, the parts being so arranged that the wire can be withdrawn with some of the bills, leaving the remainder on the holder.

GRATE FOR FURNACE.—William Kearney, Belleville, N. J.—This invention relates to a new manner of strengthening and brazing fire grates for boilers and furnaces of all kinds. The invention consists in a novel construction of brace, with a view of preventing longitudinal or transverse shrinkage of the grate.

VEGETABLE CUTTER.—John Lusher, LaPorte, Ind.—This invention relates to a new apparatus for slicing vegetables, such as potatoes, turnips, etc., into pieces of suitable thickness. The invention consists in constructing the cutting edges of a vegetable slicer by the turned out edges of slots that are formed through sheet metal plates.

CAKE PANS.—J. H. Smith, Brooklyn, N. Y.—This invention relates to improvements in cake pans, and consists in improvements in the manufacture of cake pans, whereby a press stamped octagonal pan, with nearly vertical sides, is produced from a disk of sheet metal.

PASSENGER-CAR REGISTER.—John Rhoads, Harrisburg, Pa.—This invention relates to improvements in apparatus for registering the number of passengers entering street cars or other vehicles, and consists in an arrangement of the doors on vertical pivots, to be revolved a part of a revolution by each person entering, and move a register, the said doors being provided with means to prevent moving too far, and to prevent turning backward—the door at one end being arranged for the entrance, and the one at the other end for the exit of the passengers.

COFFEE MILL.—John C. Milligan, Brooklyn, N. Y.—This invention relates to improvements in coffee mills of the class known as box mills, and consists in the arrangement of the nut-holding dog and spring, with the handle detachably connected to the top of the spindle, and with the nut thereon for adjusting the spindle for grinding fine or coarse, the said arrangement being intended to facilitate the adjustment, and to admit of readily detaching the handle for packing.

ACTION FOR STOPS ON CABINET ORGANS, ETC.—H. A. Clifford, Rockville, Conn.—This invention has for its object to furnish an improved attachment for cabinet organs and other suitable instruments which shall be so constructed that the whole power of the instrument can be brought on instantly by a slight movement of the knee, thus preventing any break in the music caused by delay in drawing the stops, and which will enable the power to be thrown off by another slight movement of the knee.

DITCHING MACHINE.—A. J. Stephens, Milford, Ill.—This invention has for its object to furnish an improved machine for forming open ditches which shall be so constructed as to enable a ditch to be opened of any desired depth and breadth, leaving the ditch so formed that a team may be conveniently driven across it when desired.

ADJUSTABLE LINK.—A. J. Dexter, North Foster, R. I.—This invention has for its object to furnish an improved adjustable link which shall be so constructed and arranged that it may be attached to and detached from its place conveniently and easily, and which when attached will be strong, durable, and not liable to become accidentally detached.

CORN AND COTTON CULTIVATING PLOW.—W. R. Blanchard, Hartford, N. C.—This invention has for its object to furnish a simple, convenient, and effective plow for cultivating corn, cotton, and other plants, which will do its work well and thoroughly, and may be easily adjusted for cultivating different sized plants.

SIFTING MACHINE.—George Sidey, Brooklyn, N. Y.—This invention relates to a new and useful improvement in machines for sifting, more especially intended for sifting paints, but applicable to other substances, and consists in a reel with revolving rollers thereon operating in a suitably constructed box with a circular bottom formed of wire gauze or wire cloth.

TUBE WELLS.—S. S. Ayers, Plainfield, N. J.—This invention has for its object to furnish an improved drive well which shall be so constructed and arranged as to prevent the well from being choked up with sand or gravel, and which will enable the tube to force its way through slaty rocks or soils.

PROCESS FOR MANUFACTURING PURE CARBONATE OF POTASH.—C. F. Moll, Kenton, Ohio.—This invention relates to a new and useful improvement in a process for manufacturing the granulated carbonate of potash, more generally known in commerce as pearl ash.

COTTON SEED PLANTER.—T. C. Garlington, Chambers Court House, Ala.—This invention relates to a new cotton seed planter in which a vertical screw is employed within a hopper for gradually and steadily feeding seed to the ground.

TRACTION AND LOCOMOTIVE ENGINES.—J. K. Lake, Chicago, Ill.—This invention relates to improvements in traction engines. The first part relates to the mode of applying the power and varying the speed of the driving wheels relatively to the engines, and consists in the employment with the driving axle to which the propelling engines are connected and with the driving wheels which are fitted loosely thereon, of friction clutches for making or breaking the connection with the engines, and in connection therewith, it consists in the employment of a secondary set of driving and auxiliary supporting wheels, of smaller diameter than the first, geared down by means of belts, chains, or it may be, gear wheels, working on loose drivers on the main driving axle, to be connected therewith for transmitting motion, also by friction clutches, the said secondary set of wheels being mounted on the frame in supports, wherein they may be vertically adjusted, so as to shift the burden of the carriage from the primary to the secondary set, or vice versa, without interrupting the forward motion of the carriage. The invention also comprises several other important improvements relating to the construction and arrangement of the operating gear.

SAWING MACHINE.—I. A. Elston, Elston Station, Mo.—This invention relates to a new sawing machine, which is so constructed that it can saw horizontally as well as vertically, through trees or logs of suitable thickness, and which can be adjusted to saw at any suitable height and in any desired position.

PROCESS OF SEPARATING FIBERS FROM CRUSHED COTTON SEED.—Jules Duval, New Orleans, La.—This invention relates to a new process by which an entire separation is effected of the fiber which adheres to the hull of the cotton seed after said seed has been crushed, in the production of the oil known as cotton seed oil.

FAUCET.—H. B. Tiffany, Medina, Ohio.—This invention relates to improvements in faucets, and consists in a combination with the hollow plug, through which the liquid is discharged, of a turning plate and operating devices therefor, to cover the hole at the end when the plug is closed, to prevent flies and other insects from entering (being attracted by the liquid) and being washed out with the liquid into the vessel receiving it when the faucet is opened.

CAKE PAN.—J. H. Smith, Brooklyn, N. Y.—This invention relates to improvements in pans for baking cakes, the shells of which are made in one piece of sheet metal, and with spiral corrugations, the grooves and ribs of which extend from the top, or near the top, to near the center, at the bottom, and the invention consists in an improved article of this character, formed by being struck up in dies, the shell being made in one piece.

GRAIN DELIVERER.—Franklin B. Isett, Hollidaysburg, Pa.—This invention relates to improvements in grain-delivering attachments for reaping machines, and consists in a combination with a grain-receiving platform or apron, on which the cut grain falls, or is delivered by a rake, of a pair of vibrating racks, a receiving and binding table, and certain operating gear for working the racks, so arranged that the said racks will, automatically, take the grain from the platform and deliver it on the table in gavels for binding.

CUT-OFF FOR ELECTRO-MAGNETIC INSTRUMENT.—F. M. Perry, Barton, Vt.—This invention relates to improvements in cut-off apparatus for electro-magnetic instruments, and consists in a platinum point, mounted on a line, pivoted adjustably to the brass plate of the relay, or machine, by means of a yoke and set screw, so arranged that the wire may be attached and the point may be adjusted relatively to the armature, without taking the machine out of circuit.

EXCAVATING MACHINE.—John A. Bailey, Detroit, Mich.—This invention relates to improvements in excavating machines, and consists in a combination with the horizontally-revolving platform for turning the scoop and the pivot thereof, of cylinders and pistons, so arranged that the turning may be effected by water, or other liquids, or air pumped or otherwise forced into the cylinders, and acting on the pistons. The invention also consists in a combination with the scoop, and the pistons and cylinders heretofore used for working the scoop, of other pistons and cylinders, arranged to aid in forcing the scoop into the earth; also, for turning the scoop on its axis while filling, and for discharging it; and the invention also consists in an improved arrangement of tripping and closing apparatus for the bottom of the scoop, made to open and discharge thereat.

WIND WHEEL.—J. C. Coleman and Geo. Strayer, Clinton, Kansas.—This invention relates to improvements in horizontally-revolving wind wheels, and consists in an improved arrangement, at the ends of horizontal arms, on a vertical shaft, of pairs of vanes, one above and the other below the said arms, and hinged to swing vertically in frames, and hinged to swing horizontally on vertical rods, supported in the arms, the said frames being attached by rods to springs on the next arms behind, to resist the action of the wind, and the vanes being connected by cords to weights rising and falling near the shaft to hold them against the action of the wind, and to allow them to rise and present less surface thereto when it blows too strong. The arrangement is such, that the vanes are held diagonally on the returning side, so as to obtain a reactionary effect of the wind, while it is acting directly on the other side.

ANIMAL TRAP.—Samuel Arnold, Silver Springs, Wilson County, Tenn.—This invention relates to an improvement in traps for catching rats and other animals.

JOINT FOR TONGS, ETC.—W. E. Clark, Troy, N. Y.—This invention relates to a new joint for force and other tongs, and similar devices, being particularly adapted to tongs made of wire, although it may also be used on articles made of different material.

FOLDING CHAIR.—Asahel C. Boyd, Worcester, Mass.—This invention relates to certain improvements in folding chairs whose front legs extend upward, and are jointed at their upper ends to the chair-back. The invention consists in the combination of the seat and longitudinally-slotted back legs, with the side posts of the chair-back, provided near their lower extremities with pins which enter the slots in the back legs; also in the combination of the above with the jointed ones with bars, whereby when the chairs are folded together, the back may slide upward in the slots of the legs, and, by means of the connecting bars, raise the chair-bottom until it becomes parallel with, and stands in close proximity to, the back; and when the chair is opened, the back may slide downward in the slots in the legs, and, by means of the connecting bars, draw the chair-bottom downward into a horizontal position.

CEPHALIC METER.—Horace Bonham, Philadelphia, Pa.—This invention consists of a band of lead or such other material as can be readily bent to conform to the shape of the head, and such as retains any form which may be given it; such band being covered with leather, and combined with a socket furnished with a set screw, and attached to one end of the band, and with a graduated tongue fastened to the other end of the band, which tongue enters the socket, and may be clamped therein by the set screw, so as to retain the measurements after they have been obtained.

WASHING MACHINE.—Jeremiah A. Morelock, Silver Run, Md.—This invention consists in a box with a corrugated or furrowed bottom, combined with a rubber having a vertical slot in each of its side plates, and a crank-shaft, whose offsets pass through said slots, and which is supported in the sides of the box; the rotation of the shaft causing the rubber to slide back and forth owing to the pressure of the offsets alternately against each side of the slots; the rubber being provided with feet for turning over the clothes.

WAGON SEAT.—R. O. Knowles, Coolville, Ohio.—This invention consists of a perforated metal plate attached to the upper surface of one side of a wagon body, combined with a wagon seat, furnished with clasps for embracing said plates, and with a spring-pin for fastening the seat at any desired point on the plates.

STAND AND WAITER.—George Gill, Taunton, Mass.—This invention relates to a waiter combined with a stand for holding water pitchers, or other vessels that require to be inclined in order to discharge their contents, the stand being therefore provided with a swinging frame in which the vessel is placed; said improvements consisting mainly in details of construction, and the addition of wings to the waiter for the purpose of increasing its capacity.

SPOON, CUP, AND BELL.—Thomas Leach, Taunton, Mass.—This invention consists in providing a call bell of that class in which the tongue is driven against the sounder by the operation of a sprung, with a threaded bolt projecting from the top of the sounder, and forming a stem upon which a cup of any sort may be screwed.

HAY LIFTER.—William H. Misner and G. E. Marker, Heyworth, Ill.—This invention relates to new and useful improvements in machines for gathering hay from the swathe and conveying it to the stack; and it consists of a three-wheeled carriage with a rake mounted on the axle of the two wheels which are arranged in advance of the other, by which the machine is guided, the horses being hitched between the rear and front wheels, on each side of the connecting bar, over which the long arm of a lever projects rearward, which lever is arranged to vibrate the rake and rake support, to lift the hay when gathered from the swathe to carry it away.

GRAIN BRINDER.—W. H. Payne, Janesville, Wis.—This invention relates to improvements in machines for attachment to harvesters for receiving the grain from the apron, separating it into gavels, and binding the said gavels, and it consists in the combination on a horizontal shaft, and working beneath a shield open at the top to admit the grain thereto, of two or more sets of securing and holding arms, and two or more compressing arms, arranged to receive the grain, separate it into gavels, move it to the place for the action of the binding head, or twister, and compress and hold it while binding, at which time another set of receiving arms is brought to the place of receiving for the next gavel, the separating and compressing arms being arranged to hold and guide the wire supplied mainly from one side and suspended across the receiver, placed so that the grain being delivered to the receiving arms will drop upon it.

HARVESTER.—Isaac H. Palmer, Lodi, Wis.—This invention consists in an inclined platform, so placed in a harvester frame as to conduct the cut grain from the sickle to the tilting table, in combination with a spring rake head on the revolving reel, which, pressing upon the platform, as it is drawn over it, allows more of the cut grain to slip under it as it ascends the platform.

Official List of Patents.

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For copy of Claim of any Patent issued within 30 years.....\$1
A sketch from the model or drawing, relating to such portion of a machine as the Claim covers, from.....\$1
upward, but usually at the price above-named.

- 105,877.—PAPER BAG.—Alfred Adams, Chagrin Falls, Ohio.
105,878.—TWINE AND THREAD CUTTER.—S. W. Adams, Providence, R. I., assignor to T. B. Doolittle, Bridgeport, Conn.
105,879.—GANG PLOW.—John Alloways (assignor to himself and W. Cummings) Decatur, Ill.
105,880.—ANIMAL TRAP.—Samuel Arnold, Silver Springs, Tenn.
105,881.—PEAT MACHINE.—Aime N. N. Aubin, Portland, Conn.
105,882.—TUBE WELL.—S. S. Ayres (assignor to himself and Abram Sebring), Plainfield, N. J.