plate are rotatively connected, of stopping mechanism controlled by a reel stand, whereby when the reel stand is unduly displaced, the stopping mechanism slides the bolt and causes a disconnection of the drum and clutch plate.

No. 10,652. Improvements on Floor Covering.

(Perfectionnements au pavement.)

George P. Chiles, London, England, 17th November, 1879, for 5 years.

Claim.—In the formation of a covering for floors, walls or other surfaces by cementing or otherwise fastening thereto, geometrically cut pieces of linoleum or other similar substances to give a firm and rigid surface and to produce the effect of parquetry, pannelling or tessalated pavements.

No. 10,653. Improvements in Oil Press Plates.

(Perfectionnements aux plaques des moulins à

George W. Campbell, West New Brighton, N.Y., U.S., 17th November, 1879, for 5 years.

Claim.—Corrugated oil press plates provided with the projections as and indeutations as or short grooves as.

No. 10,654. Improvements on Electric Lamps.

(Perfectionnements aux lampes électriques.)

Thomas A. Edison, Menlo Park, N. J., U. S., 17th November, 1879, for 5 years.

Claim.—lat. An electric lamp for giving light by incandescence consisting of a filament of carbon of high resistance and secured to metallic wires; 2nd. The combination of carbon filaments with a receiver, made entirely of glass, through which the leading wires pass and from which receiver the air is exhausted; 3rd. A coiled carbon filament or strip arranged in such a manner that only a portion of the surface of such carbon conductor shall radiate light; 4th. The method of securing the platina contact wires to the carbon filament and carbonizing of the whole in a closed chamber.

No. 10,655. Improvements in Hair Pins.

(Perfectionnements aux broches à cheveux.)

Edward Kelly, Baby's Point, Ont., 17th November, 1879, for 5 years.

Claim.—The combination of the hair pins A A constructed in pairs secured together by clastic connections B B.

No. 10,656. Improvements on the Prerv 2ation of Boned Hams. (Perfectionne-

ments dans la conservation des jambons désossés.)

Alexander Warner, New York, U.S., 17th November, 1879, for 5 years.

Claim.—1st. An improved method of preparing boned hams and shoulders, the same consisting of binding together the meat of such hams or shoulders by placing one or more bands or ties around them under the rind thereof, and then fastening the ends of the said bands or ties; 2nd. A boned ham or shoulder having the portions of its meat which have been cut for the removal of the bone secured together by one or more ties or binders which pass around the ham or shoulder, beneath the skin or rind thereof and which have their ends fastened.

No. 10,657. Improvements on Bolt Heading Machines. (Perfectionnements aux ma-

chines à entêter les boulons.)

Charles D. Rogers, Providence, R. I., U. S., 17th November, 1879, for 15 years.

Claim.—lst. In a machine for heading bolt or screw blanks, the combination and arrangement of the griping jaws, a rocking saddle upon which the said jaws are mounted, a lever connected with said saddle and a cam upon the main shaft; 2nd. The combination of the griping jaws, a rocking saddle upon which the same are mounted, a lever connected with said saddle, a cam upon the main shaft, and the tubular block through which the wire is fed; 3rd. The combination of the block to which the heading hammer is attached, the socket in the sliding head containing such block, (when such block and socket are constructed with inclined faces), a wedge or inclined plane upon which the said block is seated and rack and pinion gears, combined with the block and wedge, respectively, whereby the said block and the hammer attached thereto can be adjusted, both vertically and laterally; 4h. The combination of the vibrating gauge W, the rocking shaft to which such gauge is attached, and the adjustable reciprocating slotted plate Y and the operating cam, for timing the movements of the gauge; 5th. The combination and arrangement of the slotted plate Y adjustable on an arm which is moved by a cam, the arms xx and the rocking shaft to which the gauge W is attached, whereby the face of the gauge may be adjusted relatively to the faces of the jaws without disarranging the times of the movements of the gauge.

No. 10,658. Means of Attaching Stove Legs.

(Système d'ajustage des pattes des poèles.)

Charles M. Morris and John Clark, Jr., Albany, N. Y., U. S., 17th November, 1879, for 5 years.

Accember, 1019, 1019 years.

Claim.—1st. The base plate A, having overhanging lugs a with spiral curved or turbinated faces, in combination with the leg B formed with head C and ears b, having spiral curved or turbinated ends or faces to correspond with the lugs, and a suitable locking device for holding the head C placed against the lugs; 2nd. The base plate A, having overhanging lugs a with spiral curved or turbinated faces, and the recess d, in combination with the leg B formed to correspond with the lugs and the shoulder c.

No. 10,659. Smoke Consuming Furnace for Boilers. (Fourneau fumivore pour les

chaudières.)

Stephen M. Brinton, Covetsville, (Assignee of Cyrus Smith, Irwin's Station, Penn., U. S.), 17th November, 1879, for 5 years.

Claim.—1st. The partition o in combination with smoke box n, for covering the air opening p and separating the air from the gas until the air is heated; 2nd. The fan H, having the sleevef, and the fan I, in combination: 3rd. The combination of the fan H, the conduit K and trunk g, having the gate r, with a boiler furnace and air chamber F, and divided smoke box n; 4th. The ash pit of the boiler furnace and their chamber F separated by an apertured partition D combined with the fan H and conduit K; 5th. The sah pit of the boiler furnace divided by a vertical partition I and having the wide beare b, in combination with the air chamber F separated from the ash pit by the apertured partition D; 6th. The ash pit doors m fitted with plates m_{K} , combined with the ash pit fitted with the inclined plates h and the apertured partition D of the air chamber F.

zo. 10,660. Improvements on Millstone Dri-

vers. (Perfectionnements aux anilles des meules.)

Arthur B. Cropley (Assignee of William T. Duvall), Georgetown, D.C., U.S.)-17th November, 1879, for 5 years.

17th November, 1879, for 5 years.

Claim.—1st. A head A, a bail C and an intermediate driving plate B-provided with and connected by ribs extending in two directions, at right angles to each other, said ribs serving the double purpose of fulcrums, for the parts to rock upon, and of driving devices to transmit rotary motion from the head to the bail; 2nd. In a millstone driver, the combination of the spindle head A, the bail C and the intermediate supporting and driving plate B, having the grooves c and arms d in one and the same horizontal plane; 3rd. The combination of a driving head, a bail and an intermediate driving plate provided with vertical interlocking studs and recesses, so as to both sustain and drive the parts and permit a universal movement of the bail, wholly upon rolling joints or bearings.

No. 10,661. Plant Box. (Boite à plantes.)

Charles P. Chisholm, Oakville, Ont., (Extension of Patent No. 4077), 18th November, 1879, for 5 years.

No. 10,662. Improvements on Carriages.

(Perfectionnements aux voitures.)

Harlon M. Welch, Cowansville, Que., 19th November, 1879, for 5 years.

Claim.—1st. The combination of the crank shaft F, reaches D D and side springs E E, to cause a uniform depression of the body H; 2nd. The body H of the carriage hung, between side springs E E, by cleats or projecting pieces I I secured to the sides of the body and bearing on the top of the springs, whereby a portion of the body will be below the top of the side springs.

No. 10,663. Improvements in Shoes. (Perfection.

nements aux souliers.)

Joseph Tebo, 2nd, Marlborough, Mass., U. S., 21st Nov., 1879, for 5 years.

Claim.—1st. The pattern for shoe uppers composed of the vamp 1 and quarters 2.2, cut in one piece and having the cross slit b which partially separates the vamps from the quarters; 2nd. The vamp and quarters, cut in one piece and partially separated by the slit b, combined with the instep g.

No. 10,664. Improvements on Tallow Cups.

(Perfectionnements aux godets à suif.)

David H. Seymour and Henry R. A. Boys, Barrie, Ont., 21st November 1879, for 5 years.

Claim.—The gas escape and the gauge without regard to what description of tallow cup the same may be applied to.

No. 10,665. Improvements on Camera Shutters. (Perfectionnements aux fermetures des chambres.)

Ferdinand Gross, Montreal, Que., 21st November, 1879, for 5 years.

Claim.—The air cylinder H and plunger J, having rod K, in combination with an elastic bulb x^i and shutter V.

No. 10,666. Improvements in Grain Cleaners.

(Perfectionnements aux nettoyeurs des grains.)

James A. Maloney and Gustavus Ricker, Washington, D. C., U. S., 21st November, 1879, for 5 years.

Claim.—1st. Subjecting the grain to the action of flying sand, however propelled, when forced against or through the grain; 2nd. In a machine for cleaning grain, when sand is used, the combination of the fan B, air conveying pipe C, sand supply pipe and cleaning chamber E together with the diaphragm F; 3rd. The combination of the fan B, air conveying pipe C and its sand supply pipe, cleaning chamber E, wire diaphragm F, exhaust box G, with its inclined bottom I and outlet spout H; 4th. The combination of the elevator K and shaking soreen L.

No. 10,667. Improvements in Boiler Feeders. (Perfectionnements aux alimentateurs des chau-

dières.)

Francis McGuire, Toronto, Ont., 21st November 1879, (Extension of Paten No. 4,163), for 5 years.