

2nd. The combination of the tapered spindle, spiral faced die and tool carrier. 3rd. The combination of the tapered spindle and spiral faced die, having a conical central eye and means for adjusting the same. 4th. The combination of the tapering spindle *a*, die *c*, tool carrier *E*, and pulley *j* supported upon said tool carrier. 5th. The combination, with the tapered spindle and spiral faced die, of the tool carrier, provided with an adjustable plate having a grooved pulley. 6th. The combination, with the tapered spindle spiral faced die and tool carrier, of a plate *H* having a lateral movement on said tool carrier and provided with a grooved pulley capable of movement in a horizontal plane. 7th. The combination, with the tapered spindle, spiral faced die and tool carrier, of a plate *H* adjustably secured to said tool carrier and provided with a grooved pulley, capable of vertical movement on said plate. 8. The combination, with the tapered spindle, spiral faced die and tool carrier, of the plate *H* having the depending slotted arm *h*, adjusting screw *D*, the screw rod *J* with its nut, and pulley *j*.

No. 15,411 Improvements on Tables for Sewing Machines. (*Perfectionnements aux tables des machines à coudre.*)

The Gerald Sewing Machine Cabinet Company, New York, (assignee of Amos Fitz Gerald, Fairfield, Me.) U. S., 4th September 1882; for 5 years.

Claim.—1st. The combination, with a table or stand having a rail-like top portion, of a revolving top portion carrying a machine and pivoted within the rail-like top portion, a cover for the revolving top portion hinged to the same, a stop for supporting the cover, when the revolving portion is turned, to bring the machine right side up, a wheel for transmitting motion to the machine, whereby it will guide the cover to the stop when the revolving portion is turned, to bring the machine right side up, and a catch for retaining the revolving portion in position. 2nd. The combination, with a table or stand having a rail-like top portion, and a revolving portion pivoted within the same, of a machine or other article, fitted in an opening in the revolving portion and hinges, and a catch for securing the machine to said portion, so that it may be dropped through the opening, to enable the revolving portion to be turned and to carry it through the rail-like portion. 3rd. The combination, with a table having a rail-like top portion, of a revolving top portion, pivoted within the same, carrying a machine and provided with two openings through which a driving belt may pass and which form between them a bar on which the belt is supported, when thrown off the machine, and a cover hinged to said revolving portion and adapted to conceal it, the said revolving portion having a groove in its under surface for receiving the belt, when the said revolving portion is inverted. 4th. The combination, with a table having a rail-like top portion, and a revolving top portion provided with two openings for the passage of a driving belt, forming between them an intermediate bar on which the belt may be supported, when not in use, of a machine, or other article, fitted in an opening in the revolving portion, and hinges and a catch for securing the machine to said portion, so that it may be dropped down through the opening to enable the revolving portion to be turned to carry the machine through said rail-like portion, and a hinged cover for concealing the revolving portion when inverted, the said revolving portion having a groove in its under surface, in which the belt is received, when said portion is inverted. 5th. The combination, with a table or stand having a revolving top portion carrying a machine, of an oil-drip cup, which turns or revolves with said top portion, and has its edges reverted or turned inwards, so that, when turned upside down, its reverted or turned in edges will catch and retain the oil contained within it.

No. 15,412. Improvements on Vehicle Wheels. (*Perfectionnements aux roues des voitures.*)

Daniel Johnson, Combermere, Ont., 5th September 1882; for 5 years.

Claim.—1st. A carriage wheel having solid or tubular arms, or spokes *S* of steel, having a right handed screw at one end, and a left handed screw at the other, to screw respectively into the felloes and hub and being provided with a square *r* or other convenience, for the spanner. 2nd. A metallic hub *H* boxed with brass babbitt, or other anti-friction metal, to fit and run easy upon the axle *a* into which the arms or spokes *S* are screwed, in combination with the spokes *S* and felloes *F*.

No. 15,413. Improvements in Shingle Machines. (*Perfectionnements aux machines à bardeau.*)

Joseph A. Mumford, Avondale, N. S., 5th September 1882; (Extension of patent No. 7917.)

No. 15,414. Improvements in the Manufacture and Preparation of Plates for Electric Accumulators. (*Perfectionnements dans la fabrication et la préparation des plaques pour les accumulateurs électriques.*)

Thomas S. Sarney, Camberwell, and John M. Alprovidge, Herne Hill, Eng., 7th September 1882; for 5 years.

Claim.—The manufacture and preparation of electric accumulator or secondary battery plates.

No. 15,415. Improvements on Gate Hangings. (*Perfectionnements aux pentures des barrières.*)

Frederick J. Sheldon, Longwood, Wis., U. S., 7th September 1882; for 5 years.

Claim.—In a swinging gate, the bracket *b* constructed with arms *b3*, cross bar *b2* and having the chain *b1* secured to lugs *b4*, operating in combination with the post.

No. 15,416. Lever Collar Block Press.

(*Presse à levier pour former les coliers.*)

Edward L. Brazenor, Hamilton, Ont., 7th September, 1882; for 5 years.

Claim.—1st. The press plate *D* with the rim clamps *C* hinged to it underneath, in connection with the lever *B*, staple *G* and collar block *I*. 2nd. The eccentric shaped lever *B* with its curved point *L*, in connection with the staple *G*, press plate *D* and slot *E*.

No. 15,417. Improvements on Moulding Machines. (*Perfectionnements des machines de moulage.*)

William H. Law, Peterborough, Ont., 7th September, 1882; for 5 years.

Claim.—1st. A table designed to support one or more moulding flasks, in combination with a cross-head or beam, located above the table and so arranged that the beam and table may be adjusted towards each other for the purpose of compressing sand in the flask resting on the table. 2nd. In a table designed to support one or more moulding flasks and provided with downwardly projecting sleeves to fit over hollow columns situated at either end of the table, in combination with tubular pitman rods, located within the hollow columns, the top end pressing against the underside of the table and the other end resting on the spherical ends of the cranks attached to or forming part of a shaft passing through the hollow columns and provided with a handle or lever. 3rd. In a machine designed to compress sand in a moulding flask between the table supporting the flask and a cross-head located above it, the combination of rods pivoted on the shaft and arranged to support the cross-head in such a manner, that it may be swung clear off the table when not required for use.

No. 15,418. Improvements on Hydrants.

(*Perfectionnements aux bornes-fontaines.*)

William H. Law, Peterborough, Ont., 7th September, 1882; for 5 years.

Claim.—1st. A water hydrant provided with a cut-off valve operated by a spindle, a valve seat located at a point between the water main and main cut-off valve, in combination with an auxiliary valve held to the said seat by a spiral spring and operated by the spindle of the main cut-off valve. 2nd. In a water hydrant provided with a cut-off valve operated by a spindle, the combination of a valve seat formed for the cut-off valve, at the end of a tube suspended with, and from, the top of the outer jacket of the hydrant, so that the valve seat and valve may be removed without disturbing the joints at the base of the hydrant. 3rd. In a water hydrant provided with a cut-off valve operated by a spindle, the combination of a stuffing box designed to form the nut of the spindle and to close an aperture made in the top of the hydrant, sufficiently large to permit the removal of the valve and spindle.

No. 15,419. Improvements on Lager Beer Refrigerators. (*Perfectionnements aux réfrigérants à lager bière.*)

John Alexander, Toronto, Ont., 7th September, 1882; for 5 years.

Claim.—1st. A lager beer refrigerator in which the keg, when placed in position, is provided with a faucet extending through the outer panel of the refrigerator, a double door hinged on either side of the aperture through which the keg is inserted and having the centre edge of the door recessed on either side of the faucet. 2nd. In a lager beer refrigerator in which the ice chamber is placed above the chamber containing the keg or kegs and the floor, or supporting, joists of the latter chamber is flush with the bottom of the aperture through which the keg is inserted, the combination of a vertically hinged door, having a notch or hole cut through it, for the passage of the faucet in the keg.

No. 15,420. Fire-Box. (*Boîte à feu.*)

Cyrus K. Vilas, Alstead, N. H., U. S., 7th September, 1882; for 5 years.

Claim.—The combination, with the spherical or globe-shaped fire-box or chamber, adapted to revolve and having the slotted or apertured covers, of the stove or heater, provided in its bottom with an opening having the upper bevelled edge.

No. 15,421. Improvements on Gang Saws. (*Perfectionnements aux scies verticales alternatives.*)

Sanford Adams and Sanford Adams, jr., Rome, N.Y., U. S., 8th September, 1882; for 5 years.

Claim.—The combination, in a sawing machine, of a gang of saws, with a plate *f* adjustable lengthwise of, and parallel with the table and provided with the fingers or projections *l*, which extend in between the saws, so as to form a support for the lumber.

No. 15,422. Improvements on Wire Coiling Machines. (*Perfectionnements aux machines à rouler le fil de fer.*)

La Fayette Wildermuth, Columbus, Ohio, U. S., 8th September, 1882; for 5 years.

Claim.—1st. The wire coiling mandrel *C1* provided with the hook *c* cast thereon, or made part thereof, ledge *d1* and guide *e*, whereby the wire is held firmly on the mandrel during the coiling operation. 2nd. The wire coiling mandrel *C*, abutment *d1*, segmental guide *e*, all cast thereon or made part thereof, whereby the wire clasp and loop is raised over on to the smaller part of the mandrel by the turning of the mandrel forward, without being bent or injured. 3rd. The mandrel *C* provided at its rear, or spring-finishing end, with a spring