

and ends chambered out and fitting over sections of the felly, the plate *a*, the follower *E* and the screw *f* with the felly of a wheel. 2nd. The combination, with the spokes and felly, of the ferrule *H* having threaded extension *h*, the screw cap *J* and the clip *L* having stud *h* and enlargement, with the socket *l*.

### No. 15,050. Improvements on Sewer Traps.

(*Perfectionnements aux trappes des puits.*)

Thomas Guérin, San Francisco, Cal., U. S., 5th July, 1882; (Extension of Patent No. 7046.)

### No. 15,051. Improvements on Machines for Casting Printer's Leads.

(*Perfectionnements aux machines pour couler les blancs et les interlignes.*)

Lyman B. Benton, Milwaukee, Wis., U. S., 5th July, 1882; for 5 years.

*Claim.*—1st. The mould segment *C* having a concave shape when cold, whereby it becomes plane when heated in use. 2nd. The combination of mould segments *B* and *C* with the heaters *D D*. 3rd. The combination of the mould segments *B* and *C* with the heaters *D D* and the jointed smoking jet or torch *I*. 4th. In combination with a mould for casting printers' leads, a heater composed of separate burners *D D D* constructed so as to be capable of being extinguished separately, and arranged in such position relatively to each other, and to the mould, as to permit the heating of a portion only, of the mould segment whenever desired.

### No. 15,052. Improvements on Carpet Sweepers.

(*Perfectionnements aux balayuses des tapis.*)

Charles L. Travis, Minneapolis, Minn., U. S., 5th July, 1882; for 5 years.

*Claim.*—1st. In a carpet sweeper, the combination of the traveling body *a* rotary brush therein, dust collecting pans hinged to the body at one end, and arranged to swing downward endwise therefrom. 2nd. The combination, of the travelling body, the rotary brush and the dust collecting pans hinged at one end to the body and provided with a fastening device adapted to be disengaged by the foot. 3rd. In combination with the travelling body *A*, the brush *C* therein, the dust collecting pans sustained by means of the wire frame hinged at one end to the body, and provided at the opposite end with the extension *p*. 4th. In a portable carpet sweeper, the combination, with the body and the rotary brush, of the two traction rolls, both connected to the brush, having the enlarged ends covered with elastic material. 5th. The combination of the body, the non-rotating journals, and the rotary brush supported as shown, with an annular space *e* around the journals. 6th. In combination with the body and the rotary brush, the wire sustaining frame *O* and dust pans *E* attached thereto, and provided with the lips *a* constructed and arranged to engage over the edges of the body with a yielding pressure. 7th. In combination with the body and the rotary brush, the tubular journals *b* surrounded by the annular space *e*, and the driving shaft extended through said journals and seated rigidly in the roll.

### No. 15,053. Improvements in Compound Saw Dressing Tools.

(*Perfectionnements aux outils combinés pour affûter les scies.*)

George Walsh, Brockwayville, Penn., U. S., 5th July, 1882; for 5 years.

*Claim.*—1st. The tooth setting notch *a* of the form described. 2nd. The point or projection *B* jointly with the screw *C*. 3rd. The file *D* and the device for clamping it jointly with screw *C*. 4th. The series of graduated projections or shoulders *F* on the flat side of the bar. 5th. The offset or shoulder *H* on the end of the bars, for the purpose and to be used in the manner described.

### No. 15,054. Improvements in Saw Jointers.

(*Perfectionnements aux appareils pour affûter les scies.*)

George Walsh, Brockwayville, Penn., U. S., 5th July, 1882; for 5 years.

*Claim.*—1st. The contrivance of the T-shaped frame *D K* together with the frame on the top of it constructed of the pieces *L L* and *M*, for holding a file in place over the teeth at right angles to the side of the saw. 2nd. The contrivance of the T-shaped frame *D K* jointly with the frame *L L M M* on the top of it, and with the slide *I* holding the file. 3rd. The contrivance of the rabbeted slide *I* jointly with the gripping devices *F G*, for holding the file and guiding it across the frame.

### No. 15,055. Improvement in Vehicle Springs.

(*Perfectionnements aux ressorts des voitures.*)

Phaon J. Kerry, Frankfort, Ind., U. S., 5th July, 1882; for 5 years.

*Claim.*—1st. The transverse lever springs *G* connected to the side bars and to the ends of longitudinal springs *E* secured to bearings on the body of the vehicle. 2nd. The combination, with the side bars and the longitudinal springs *E* secured to the central portion of the body of the vehicle, of the transverse springs *G* pivoted to the body and connecting the ends of the longitudinal spring to the side bars. 3rd. The combination, with the side bars and body, of the longitudinal springs *E*, longitudinal bearing *D* and the transverse lever springs *G*.

### No. 15,056. Improvement in Ball and Socket Joints.

(*Perfectionnement des joints à rotule.*)

Otis C. White, Hopkinton, Mass., U. S., 5th July, 1882; for 5 years.

*Claim.*—1st. The combination of the ball, made contractile or in sections, with a contractile socket piece, provided with means of clamping or contracting it upon the ball. 2nd. The ball contractile, or made in sections, and perforated diametrically, in combination with the slide rod extended through the ball, and with the contractile socket piece provided with means of contracting, or clamping it on the ball. 3rd. The ball socket provided with annular or belt-shaped bearings to rest against the ball, and with an intervening annular space to be out of contact with the ball. 4th. The ball contractile, or made in sections, and perforated diametrically, to receive the slide rod, in combination with the socket piece socketed to receive the ball, and having to the socket, flaring mouths.

### No. 15,057. Improvements on Electric Cables.

(*Perfectionnements aux câbles électriques.*)

Patrick B. Delany, New York, N. Y., U. S., 5th July, 1882; for 15 years.

*Claim.*—1st. An electric cable composed of one or more conducting wires, and a series of contiguous perforated insulating buttons, having radially sloping surfaces and strung upon said wire or wires. 2nd. An electric cable composed of an assemblage of conducting wires, and a series of contiguous perforated insulating buttons, having radially sloping surfaces and strung upon said wires, which pass through their perforations, said perforations being at a proper distance apart and from the perimeters of the buttons, to keep the wires from contact with each other and outside objects. 3rd. An electric cable composed of one or more conducting wires, and a series of contiguous non-combustible perforated insulating buttons strung upon said wire or wires. 4th. In an electric cable, the combination, with a series of contiguous perforated insulating buttons, having radially sloping surfaces and a conducting wire or wires arranged through the perforations of said buttons, of an inclosing sheath surrounding said buttons. 5th. An elastic cable composed of one or more conducting wires, and a series of loose perforated insulating buttons strung upon said wires, the adjacent surfaces of said buttons diverging radially from each other, and arranged to turn upon each other when the cable is bent. 6th. An electric cable composed of one or more conducting wires and a series of loose perforated non-combustible buttons strung upon said wire or wires. 7th. The combination, with a cable composed of one or more electrical conducting wires run through perforations, in a series of insulating buttons strung upon said wire or wires, of a strain or supporting rope, connected with and arranged to bear the entire weight of the said cable. 8th. An electric cable composed of the central supporting and strengthening rope or cable, the perforated buttons of insulating material, tapering from centre to periphery and strung upon said rope or cable, and the conducting wires arranged through the perforations of said buttons. 9th. The combination, with the central rope and the buttons, of suitable sleeves for separating or limiting the movement of the buttons. 10th. The combination, with a cable composed of the central rope, tapering buttons and conducting wires, of an inclosing pipe. 11th. The combination, with an electric cable composed of one or more wires, a series of insulating buttons strung upon said wire or wires, and an inclosing sheathing or tube, of a supporting, or strain rope, wire or cable connected with said sheathing, and arranged to be suspended from suitable supports.

### No. 15,058. Improvements on Iron Fences, Gates and Gate Latches.

(*Perfectionnements aux clôtures, barrières et loquets, en fer.*)

Samuel W. Martin, Springfield, Ohio, U. S., 5th July, 1882; for 5 years.

*Claim.*—1st. As an improvement in the construction of gates and fences, the combination of the vertical standards, the horizontal rails and the couplings, the latter arranged to sustain the rails upon the standards, and secured by screwing the rails into them against the standards. 2nd. In combination with the vertically adjustable gate frame *C*, the threaded horizontal bar *B* and the threaded coupling or socket *C* having the hinged arm formed thereon, whereby the vertical adjustment of the gate frame with reference to the hinge, is permitted. 3rd. The improved fence consisting of the vertical posts, the couplings mounted thereon, and the horizontal rails screwed at one end into a coupling against the posts and seated at the opposite end loosely, in a coupling upon a second post. 4th. A fence panel consisting of a post, two or more couplings or collars mounted thereon, and provided with threaded openings in one side, and unthreaded openings on the opposite side, and fence rails screwed into the threaded side of said couplings against the post. 5th. In combination with the rail supporting coupling provided with an ear or socket, *f*, and a rosette provided with a lip seated in said socket. 6th. The rosette for sustaining the pickets of an iron fence constructed with the lip at one side, the slot in the opposite side, and the hook or arm upon the back. 7th. As a new article of manufacture, a latch operating device consisting of a forked frame, provided with central bearing, and a hand piece adapted for application thereto. 8th. The combination of the gate provided with sockets, with the latch spring, the forked or U-shaped latch frame provided with inside trunnions, and the hand piece applied to and securing the ends of the frame.

### No. 15,059. Improvements on Wire Fences.

(*Perfectionnements aux clôtures en fil métallique.*)

Abner Wesson, Memphis, Tenn., U. S., 6th July, 1882; for 5 years.

*Claim.*—1st. The combination, with the metal posts having slits and tongues, and the wires *B*, of the soft metal piece *c*, which are wrapped around the wires and secured in place by the clamping action of the aforesaid tongues.