

d, d, and frame E, consisting of channelled side pieces F, F, having cover pieces G, G, with scraping edges g, g, for the purposes set forth. 2nd. In combination with the axle box C, and axle A, disc M, frames E and K, compression spring L, and loose springs D, D, for the purposes set forth. 3rd. The combination, with axle box C having chamber C<sub>1</sub> and axle A having groove a, of disc M channelled side frames F, F, and loose springs D, D, all substantially as herein set forth. 4th. The combination, with the axle box C having chamber C<sub>1</sub>, of front plate C<sub>2</sub> with opening fitted with bars, or grating T, door with rim, and spring for holding door closed, and means for securing said plate C<sub>2</sub> to axle box, all substantially as herein set forth.

### No. 30,067. Saw Sharpening Machine.

(Machine à affûter les scies.)

Milo Covei, Chicago, Ill., U.S., 30th October, 1898; 5 years.

*Claim.*—1st. In a saw sharpening machine, the combination, with the supporting frame, of the head-piece B, the bracket a<sub>1</sub>, said head-piece being pivoted to said bracket at one side and provided in the other side with a segmental slot, and an adjusting bolt passing through said slot, whereby said head-piece may be given a greater or less degree of inclination, substantially as and for the purpose set forth. 2nd. In a saw sharpening machine, the combination, with the cam C rigidly mounted on the driving shaft, of a curved feed arm having a roller journalled in the lower end which has frictional contact with said cam, and provided in the upper end with an elongated slot, a feed-finger secured to said feed-arm and adjustable in said slot, a rock-shaft upon which said feed-arm is rigidly mounted, and a spring coiled on said rock-shaft, whereby the lower end of said feed-arm is normally held in contact with the teeth of the saw in regular order of succession, substantially as and for the purpose set forth. 3rd. In a saw sharpening machine, the combination, with the saw contacting end, of the feed-finger provided with the downward projecting lip b of the stationary plate b<sub>1</sub>, substantially as set forth. 4th. In a saw sharpening machine, the combination, with a feed-finger, of the bracket a<sub>1</sub>, the adjustable stop b<sub>2</sub> and the adjusting bolt b<sub>3</sub>, having a screw-threaded engagement with said stop, substantially as and for the purpose set forth. 5th. In a saw sharpening machine, the combination of the bracket B, the bar D<sub>1</sub>, the screw-threaded shaft D<sub>2</sub>, the hinge-plate d pivoted at its lower end to said bracket, the clamping-plate d<sub>2</sub> provided with elongated slots, and adjustably secured to said hinge-plate, and the spring d<sub>3</sub>, substantially as and for the purpose set forth. 6th. In a saw sharpening machine, the combination, with the bracket D, of the cam locking lever D<sub>1</sub> pivoted to said bracket, the back-plate d<sub>3</sub>, and the spring p, whereby the saw is locked against a back movement only, substantially as set forth.

### No. 30,068. Metallic Strap Fastener.

(Joint de courroie métallique.)

Ephraim Latham, Washington, D.C., and Ethau A. Sawyers, Brownsville, Oregon, U.S., 30th October, 1898; 5 years.

*Claim.*—1st. A metallic strap fastener 10 consisting of frame 12 having stud 13 and loops 11, as described and shown. 2nd. A metallic strap fastener 10, in combination with the loop 22, substantially as and for the purpose hereinbefore set forth.

### No. 30,069. Thermostat. (Thermostat.)

George W. Blake and Enoch Rutzler, New York, N.Y., U.S., 30th October, 1898; 5 years.

*Claim.*—1st. The combination, with a steam or hot-water pipe and a damper or valve, of a support connected with said pipe, a rigid bar having one end connected with said support, a lever having its fulcrum at the other end of said bar and bearing against said pipe, a flexible bar applied lengthwise between said support and lever, and a connection between said flexible bar and the damper or valve, substantially as herein described. 2nd. The combination, with a steam or hot-water pipe, and a damper or valve, of a flexible bar connected with the latter, two supports for the ends of said flexible bar connected with the pipe at distant points, one of the said supports being a lever against which said pipe expands lengthwise, and a rod or link forming a direct connection between said lever and the other support for the flexible bar, the connection of said rod or link with the lever being on the opposite side of its fulcrum to that on which it supports the flexible bar, substantially as herein described. 3rd. The combination, with a steam or hot-water pipe and a damper or valve, of a flexible arm connected with said pipe, a rigid bar having one end connected with said arm, a lever having its fulcrum at the other end of said bar and bearing against said pipe, a flexible bar applied lengthwise between one arm of the said lever and the said flexible arm, a connection between the opposite arm of said lever, and the said flexible arm, and a connection between said flexible bar, and the damper or valve, substantially as herein described. 4th. The combination, with a steam or hot-water pipe, and a damper or valve, a support connected with said pipe, a rigid bar having one end connected with said support, a lever having its fulcrum at the other end of said bar and bearing against said pipe, and two flexible bars, the flexure of which is in opposite directions applied lengthwise between said lever and support, of a lever fulcrumed on one of said flexible bars, a connection between said lever, and the other of said flexible bars, and a connection between said lever and damper or valve, substantially as and for the purpose herein described.

### No. 30,070. Machine for Sharpening Harrow Disks. (Machine pour aiguïser les disques des herse.)

Edward A. Sloat, C. P. Rood, La Fargoville, N.Y., U.S., 30th October, 1898; 5 years.

*Claim.*—1st. In a machine for sharpening harrow disks, bearing B

carrying cog wheel O, pinion P, and crank Q, chuck M, support bearings C, C having spurs E, hooked bar D secured through cross-beams a, a by turn-screws E, substantially as described and for the purposes set forth. 2nd. In a machine for sharpening harrow disks, a knife-support G bent at one end, hinged lever bar J, weight I, serrated plate L and pivoted knife standard K carrying a knife G<sub>1</sub>, substantially as described and for the purposes set forth. 3rd. In a machine for sharpening harrow disks, the combination of the knife support G, hinged lever bar J, weight I, serrated plate L, knife standard K with a bearing B, cog wheel O, pinion P, crank Q, chuck M, bearings C, C having spurs E, and hooked bars D secured through cross-beams a, a, by turn-screws E, all substantially as described and for the purposes herein set forth.

### No. 30,071. Padlock. (Cadenas.)

William F. Frost, Samuel R. Slaymaker and John F. Barry, Lancaster, Penn., U.S., 30th October, 1898; 5 years.

*Claim.*—1st. The combination, with the case having slots to receive the journals of the tumblers and filling-plates to keep said journals in place, of the tumblers having journals at one end, and springs bearing upon the inner faces of said tumblers to force the vibrating ends of the same apart, substantially as and for the purpose specified. 2nd. The combination, with the case having slots to receive the journals of the tumblers and filling plates to keep said journals in place, of the tumblers journalled at one end in said slots, and curved springs passing around the journalled bearing lips of said tumblers, and having their ends resting against the inner faces thereof to force the vibrating ends of the same apart, substantially as and for the purpose specified. 3rd. The tumblers journalled in the case at their inner ends, and having inwardly projecting arms interlocked at the other, with a space between said arms to receive the key to draw those ends of said tumblers together, and springs connected with said tumblers to force the vibrating ends of the same apart, substantially as and for the purpose specified. 4th. The combination, with the case and shackle, of tumblers extending lengthwise between the top and bottom of the shell or case, and having projections on the sides or faces thereof to engage notches in the shackle, and means for forcing the tumblers into engagement with said shackle, the tumblers being constructed to be disengaged from the shackle by a key, for the purpose specified. 5th. The combination, with the case and shackle, of tumblers C, C journalled in the top of the case extending toward the bottom thereof, and provided on their outer faces with projections adapted to engage notches b<sub>2</sub> in the arms of the shackle, a spring bent around arms D projecting inwardly from the upper ends of the tumblers and bearing against the inner faces of said tumblers, and rectangular arms G projecting inwardly from the lower ends of the tumblers and lapping each other so as to form an opening to admit the key, all constructed and operating, substantially as specified. 6th. The combination, with the case provided with a slot in the side of one of the openings in which the shackle is inserted, of the shackle having one end b provided with a head at its outer end, and having a recess cut therein above one side of said head, said side of the head being constructed to be bent inward to lessen the size of the mouth of said recess, substantially as and for the purpose specified. 7th. The combination, with the bottom plate provided with a ward k, of the tumblers and the lips having the recesses 5 cut in the inner faces thereof, substantially as and for the purpose specified. 8th. The combination, with the bottom plate K having the ward k, of the guide plate 6 rigidly fastened on the inner edge of the lip l, substantially as and for the purpose specified.

### No. 30,072. Extension Lamp Fixture.

(Monture de Lampe.)

Frank Rhind, and Edward Miller, Meriden, Conn., U.S., 30th October, 1898; 5 years.

*Claim.*—1st. In a hanging lamp fixture, the combination of a hanger adapted to be secured to the ceiling and so as to prevent its rotation, a frame hung to said hanger upon an axis and so as to rotate thereon, a spring-actuated drum arranged upon an axis in said frame, two or more chains wound upon said drum and running therefrom at opposite sides over supports in the frame, a lamp support below hung to the free ends of said chains, the said frame adapted to receive a rotative movement upon its axis from the lamp support through the chains, and mechanism, substantially such as described between the fixed hanger, the rotating frame and drum adapted to interlock the frame and drum, substantially as specified, and whereby under the rotation of the said frame in one direction imparted thereto from the lamp support below through the chains, the said drum and frame are disengaged to permit the rotation of the drum independent of the frame or by the rotation of the frame in the opposite direction, the frame and drum are interlocked. 2nd. In a hanging lamp fixture, the combination of a hanger adapted to be secured to the ceiling and so as to prevent its rotation, a frame hung to said hanger upon an axis and so as to rotate thereon, a spring-actuated drum arranged upon an axis in said frame, two or more chains wound upon said drum and running therefrom at opposite sides, over supports in the frame, a lamp support below hung to the free ends of said chains, the said frame adapted to receive a rotative movement upon its axis from the lamp support through the chains, a dog between said frame and drum arranged to interlock the one with the other, and mechanism between the hanger and frame, substantially such as described, whereby under the rotation of the said frame imparted thereto from the lamp support below through the chains, the said dog is thrown out of its engaging position to permit the rotation of the drum independent of the frame. 3rd. In a hanging lamp fixture, the combination of the hanger adapted to be secured to the ceiling and so as to prevent its rotation, a frame pivoted upon said hanger and so as to rotate thereon, a spring-actuated drum arranged upon an axis in said frame, two or more chains wound upon said drum and running therefrom at opposite sides over supports in the frame, a lamp support below hung to the free ends of said chains, a dog hung to the frame and adapted to engage the said drum so as to prevent the rotation of the drum spring, a projection from said dog and a corresponding cam stationary upon said hanger with which cam the