

Claim.—1st. The combination, in a Morse or lever telegraphic key, or circuit controlling instrument, of a lever or button to be moved by hand, or other equivalent means, a single set of contact points, and means interposed between the two for giving the movable contact a more rapid and a greater motion than that of the lever or button. 2nd. The combination, in a telegraph key, or circuit controlling instrument, of the button, the screw threaded spindle, the moving arm and circuit connections.

No. 12,879. Improvements on Railway Joints.

(*Perfectionnements aux joints des rail.*)

Robert E. Greenwell and James A. Brogan, Osage Mission, Kas., U. S., 30th May, 1881; for 5 years.

Claim.—1st. The combination, with the rails and fish plates, of the slotted bolts D D, the key C having its plane coincident with the plane of the axis of the bolt, and the gib E arranged behind the key, and connecting two or more of the separated bolts, so as to prevent the bending of the same from the entrance of the key. 2nd. The combination with the rails and the fish plates having an inclined outer surface, of the slotted bolts D D, the key C having its plane coincident with axis of the bolts, and the gib E passing through and connecting two or more of the slotted bolts, to prevent the binding of the same by the entrance of the key. 3rd. The combination, with the rails and the slotted bolts, of the double inclined fish-plate, the two keys having holes in their adjacent ends and obisel-edges, and gibs arranged behind the keys.

No. 12,880. Improvements on Apparatus for Boiling Beer. (*Perfectionnements aux appareils à bouillir la bière.*)

John Atkinson, Bolton, England, 30th May, 1881; for 5 years.

Claim.—The combination, with a beer boiler, of the false bottom d, funnel b and deflector C.

No. 12,881. Improvements on the Process of Fusing Iridium. (*Perfectionnements au procédé pour liquéfier l'iridium.*)

John Holland, Cincinnati, Ohio, U. S., 30th May, 1881; for 5 years.

Claim.—1st. The art or process of fusing iridium by subjecting the same to the action of heat and then adding phosphorus. 2nd. The method of fusing and moulding iridium for use in the arts by first raising the metal to a high heat then adding to it phosphorus in about the proportion specified, and finally passing the fused mass into suitably shaped moulds. 3rd. The method of fusing and moulding iridium for use in the arts, by first raising the metal to a high heat, then adding to it phosphorus in about the proportion specified, and, after the metal is cast, releasing the phosphorous by subjecting the metal to heat, in a bath of lime, chalk, or similar absorbent. 4th. As a new article of manufacture, iridium blocks or pieces, cast in sizes and shapes for use in the arts.

No. 12,882. Improvements on Churn Covers.

(*Perfectionnements aux couvercles des barattes.*)

Marvin O. Stoddard, Poughkeepsie, Vt., U. S., 30th May, 1881; for 10 years.

Claim.—1st. In combination with the detachable cover of a churn or other receptacle, the stationary plate secured to said cover and provided with uprights, which form the guides for the movable plate and, at the same time, afford a support for the axis of the operating cam located between said guides and hinged upon the axle bolt c extending between the guides. 2nd. The combination of the vertically movable plate, hinged axles secured therein, and the locking levers grooved upon their under sides, to fit said axles, the levers being detachable. 3rd. The combination of the adjustable plate carrying the ends of the locking levers, the rimmed cam and the hooks secured to said plate and engaged with the rims upon the cam. 4th. In a cover locking device, the combination, with the adjustable lever carrying plate, of the operating cam axled upon the horizontal bolt c which extends between the two uprights and being grooved or furrowed upon its bearing face to prevent slipping. 5th. In combination with the cam which controls the movement of the adjustable lever carrying plate, the handle embracing said cam and adjustable to engage in different notches cut in the edge thereof. 6th. The locking hook or ear connected with the open ring head, and provided with an overhanging flange inclined in the manner set forth. 7th. The combination, with the movable levers, of fulcrums therefor formed on the tangs connected with the cover rim. 8th. In a lever locking device, the combination of the vertically moving central plate, the detachable levers hinged thereto, the operating cam supported upon the axle bolt c and the adjustable handle having a common axis with the axle bolt c and the adjustable handle having a common axis with the cam, the several parts being stationary catch cars or hooks projecting therefrom, said catch cars or hooks being composed of separate parts and adapted to receive a cover fastening attached to a removable cover. 10th. In combination with the open ring head, the base pieces of the hooks or catch ears secured therein, and the hooks or ears mounted and secured upon the base secured therein. 11th. The combination, with the hook having the perforation and projecting side pieces, of the base piece recessed as explained, and carrying the projecting stud by which the two parts are rivetted. 12th. The combination of base pieces n having recesses projecting stud and dovetail, the open ring head c cast thereon, and the hook or ear piece o having projecting side pieces and perforation receiving the stud, the several parts being united.

No. 12,883. Improvements on Machines for Sewing Boots and Shoes. (*Perfectionnements aux machines à coudre les chaussures.*)

Joseph A. Safford, Boston (Assignee of Hannibal Folsom, Stoughton), Mass., U. S., 30th May, 1881; for 5 years.

Claim.—1st. In a sewing machine for stitching welts and soles, the work supporting plate i provided with the projecting lip gauges k l and arranged relative to the needle. 2nd. The flat work supporting plate i provided with the lip gauges k l and adjustably secured to the frame of the machine with

one of said lip gauges in front of the needle, and the other in rear of the needle. 3rd. A side-notched flat work support having lip gauges to bear against the side of the channel flap or lip, combined with an auxiliary pivoted presser arranged to bear on the welt in front of the awl and needle, and the main presser to bear on the said welt at the rear of the awl and needle.

No. 12,884. Improvements on Car-Couplers.

(*Perfectionnements aux accouplages des chars.*)

William Scott, Faulkner (Malden), Mass., U. S., 30th May, 1881; for 5 years.

Claim.—1st. Car-coupling draw heads, each constructed with an upper and lower jaw D E having an opening between them, and each draw head provided with a swinging link hung thereto, in combination with a suitable shackling pin in each, adapted in itself and the said jaws to hold the shackling link, which is in and between such jaws, against escape. 2nd. The combination of a draw head, having a pin L provided with an inclined front face or rib, with the coupling link H pivoted to, and embracing said draw head and normally supported in an inclined position by lateral supports on the draw head, and adapted to operate in conjunction with a draw head similarly constructed and arranged on an adjoining car. 3rd. The combination of a draw head having a pin L provided with an inclined front face, with a coupling link, which is pivoted to, and embraces and normally is supported in an inclined position, by lateral supports on the draw head, and has its depending front end bevelled and adapted to operate in conjunction with a draw-head similarly constructed and arranged on an adjoining car. 4th. The draw head a constructed with jaws D E and link H pivoted to said draw head, and embracing the lower jaw and with a rest on the lower jaw for the link, in combination with the shackling pin L having the forward projecting rib f inclined on its under edge. 5th. The draw head constructed with upper and lower jaws D F, the upper projecting beyond the lower link H pivoted to and embracing the lower jaw of said draw head and rest K on lower jaw, in combination with the shackling pin L having the forward projecting rib f inclined on the under edge. 6th. The shackling pin L having a rib projection, in combination with the upper and lower coupling jaws arranged in relation to said pin and its projection. 7th. The shoulder or rest M in the upper coupling jaw D for a shackling pin L. 8th. The shoulder or pin M in the upper coupling jaw D, in combination with a shackling pin. 9th. The upper coupling jaw D constructed for the play of the shackling pin through it and provided with recesses or cored out portions n to reduce the frictional and contact surfaces between it and the pin. 10th. The upper coupling jaw D constructed on its upper side, to shield the shackling pin and its connecting chain, so that a shackling link can pass without hindrance over the upper side of the coupling jaw. 11th. The raised bearing edge or boss q, upon the sides of the draw head, in combination with a shackling link H hung to said draw head. 12th. The draw head A having upper and lower jaws D E, the upper of which is made upwardly flaring as at S.

No. 12,885. Improvements on Hoists.

(*Perfectionnements aux ascenseurs.*)

John Fensom, Toronto, Ont., 30th May, 1881; for 5 years.

Claim.—1st. In hoists, the car provided with a counter balance weight adapted to lift the car and an average load, in combination with the check rope, or its equivalent, connected to the brake and to operating machinery in such a manner that, by the movement of the check rope, a given distance, the brake is thrown off, which the continuation of the said movement throws into gear with the hoist auxiliary operating machinery. 2nd. In combination with a hoist provided with an ordinary hand rope, and in which the counterbalance to the car is adapted to lift the car and an average load, an auxiliary motor arranged so that it can be thrown into gear with the hand rope by the check rope after the said check has first thrown off the brake. 3rd. In combination with a hoist provided with an ordinary hand rope, and in which the counter-balance to the car is adapted to lift the car and an average load, friction mechanism operated by the check rope, and arranged to grip the hand rope simultaneously with the starting of an auxiliary motor operated by the said check rope, for the purpose of imparting motion to the friction mechanism subsequent to the releasing of the brake, also operated by the check rope referred to. 4th. The revolving spindle A held in stationary bearings, and having keyed, or otherwise fastened, to it the grooved pulley B situated opposite to the hand rope C, a spur wheel D fastened to the spindle A and meshing with the spur wheel E which is fastened to the pivoted spindle F, the grooved pulley G secured to the spindle F and situated in a position corresponding with the pulley B, in combination with mechanism connected to the check rope H by the movement of which the spindle F is adjusted upon its pivots so as to cause the ground pulleys B E to grasp the rope C on whichever side of the hoist it may be necessary to apply power to the said rope, for the purpose of raising or lowering the car, as the case may be. 5th. In combination with a hoist provided with an ordinary hand rope, and in which the counter balance to the car is adapted to lift the car and an average load, an auxiliary motor so arranged in connection with the hand ropes that it can be applied thereto for the purpose of assisting in either elevating or lowering the load.

No. 12,886. Improvements on Car Axle Oilers.

(*Perfectionnements aux boîtes à graisse des chars.*)

William H. Burden and Frederick C. Burden, Cleveland, Ohio, U. S., 30th May, 1881; for 5 years.

Claim.—1st. The combination of car axle journal L with the conical wheels F F connected by a hollow square or angular shaft G, the spiral spring or its equivalent C and the chain H. 2nd. The combination of the oil receptacle A with the chain H, the spring C and the rod E, and the conical wheels F F connected by a hollow square or angular shaft G.

No. 12,887. Machines for Making Napped Fabrics. (*Machines pour faire les étoffes à poil ras.*)

Harriet F. Strong, (Assignee of L. W. Whipple), New York, U. S., 30th May, 1881; (Extension of Patent No. 6,375.)