

No. 35,542. Composition for Making Matches. (*Composition pour faire les allumettes.*)

Ludwig Oltozy (assignee of Johann Lutz), both of Vienna, Lower-Austria, Empire of Austria-Hungary, 2nd December, 1890; 5 years.

Claim.—1st. A match without a visible head, consisting of a splint of wood having one end impregnated with a solution adapted to be ignited by friction upon a specially prepared friction surface. 2nd. A match without a visible head, consisting of a splint of wood having one end impregnated with a solution of chlorate of soda, sulphate of ammonia, and a carbon-hydrate, as and for the purposes specified.

No. 35,543. Cutter for Bolts and Rods.

(*Cisailles pour couper les barres et boulons.*)

Alexander C. Watt and William G. Mathew, both of Gananoque, Ontario, Canada, 2nd December, 1890; 5 years.

Claim.—1st. The combination, with the cutting jaws A, B, of the connecting straps N, O, and fulcrum bolts P, Q, passing through said jaws and straps, and a friction roller S, intervening said jaws in alignment with said bolts, as set forth for the purpose described. 2nd. The combination, with the jaws A, B, having circular recesses or bearings T, in a roller or cylinder seated in said bearings, straps N, O, connecting said jaws and covering the ends of the roller and bolts P, Q, passing through said jaws and straps, as set forth, said roller preventing one jaw forging ahead of the other, and preserving the equalization of both jaws when operated, as described.

No. 35,544. Poke for Horses. (*Carcan pour chevaux.*)

William W. Huntoon, Norridgewock, Maine, U.S.A., 2nd December, 1890; 5 years.

Claim.—A device for restraining a horse's head and neck, consisting of a smaller forward collar, a larger rearward collar, and a series of rigid rods or bars extending from the one collar to the other, substantially as set forth.

No. 35,545. Strainer for Tea and Coffee Pots. (*Couloir pour théières et cafetières.*)

Charles Bean, George Washington Watson, Mowry Ballon Cole, all of Pawtucket, Rhode Island, U.S.A., 2nd December, 1890; 5 years.

Claim.—1st. A strainer for tea or coffee pots, comprising a pail-shaped body having a spout near its bottom, a detachable strainer proper adapted to be inserted in the mouth of said body, and mechanism for securing said body to the pot-nose, substantially as described. 2nd. A strainer for tea or coffee pots, comprising a pail-shaped body provided with a spout near its bottom and a hood or guard at its rim, a detachable strainer proper adapted to be inserted in the mouth of said body, and mechanism for securing said body to the pot-nose, substantially as described. 3rd. A strainer for tea or coffee pots, comprising a pail-shaped body having a spout near its bottom and a lug at its opposite side, a detachable strainer proper adapted to be inserted in said body, and an attaching spring adjustably secured in said lug, substantially as described. 4th. The body provided with the spout and hood, in combination with the strainer proper, and the wire loop C, adjustably clamped to said body, substantially as described. 5th. The body provided with the spout and clamp, in combination with the strainer proper and the wire spring loop C, substantially as described. 6th. The combination of the body provided with the spout with the strainer proper, and an attaching spring adjustably secured to said body, said spring comprising a wire bent or folded upon itself to form a loop for the pot-nose, substantially as described. 7th. The strainer B, comprising the body f, provided with the spout g, and clamp z, the strainer proper D, and attached to spring C, arranged, substantially as described. 8th. The body f, provided with the spout g, clamp z, and hood h, in combination with the strainer D, and attaching spring C, arranged to operate, substantially as described.

No. 35,546. Sash Balance. (*Contre-poids de croisée.*)

The Marshall Improved Window Furniture Co., San Francisco, California, U.S.A., 2nd December, 1890; 5 years.

Claim.—1st. In a sash balance or analogous device, the torsional spring herein described, consisting of a single coiled piece returned within itself, having one of its ends fixed to a non-rotary bearing, and the other secured to a piece that has a rotary movement. 2nd. In a sash balance or analogous device, an axially moving rod, and a rack and pinion for operating the same, in combination with a torsional spring returned within itself, having one of its ends secured to the axially moving rod, and the other fixed to a non-rotary piece, substantially as described.

No. 35,547. Machine for Forging Horse Shoe Nails. (*Machine pour forger le clou à cheval.*)

Ann Maria Putnam, Boston, Massachusetts, U.S.A., and George Nichols Fletcher, Detroit, Michigan, U.S.A., 2nd December, 1890; 5 years.

Claim.—1st. The combination, with the hammers arranged to operate alternately in pairs, of the cam-wheel D, adapted to actuate the hammers in both directions and having a groove e, for the reception of the hammer-helves provided with recesses or enlargements f, whereby the hammers are released from the control of the cam

previous to giving their blow, and left free after striking the heated nail-rod to instantly rebound or recede from the same before being again brought under the control of the cam, substantially as and for the purpose set forth. 2nd. The combination, with the lower vertical sliding cutter-bar t, provided with a lug or plate c', having a cam slot b', of the oscillating head K, carrying the feed rolls and their connected shafts, and having a pin a' fitting within the cam-slot b', of the lug c', whereby the movement of the sliding cutter-bar t, is communicated directly to the oscillating carrier-head K, substantially as and for the purpose described. 3rd. The combination, with the reciprocating bar M, having at its front end an enlarged portion or cam-plate L, provided with two oppositely-inclined cam-slots u, v, of the vertically-sliding cutter-bars s, t, carrying the cutters q, r, and provided at their lower ends with screws or pins 18, 20, fitting within the slots u, v, of the cam-plate L, all operating, substantially in the manner and for the purpose set forth. 4th. The combination of the hammers and their operative cam-wheel D, the vertically sliding cutter bars s, t, and their cutters q, r, the feed rolls g, g, with their connected shafts and oscillating carrier-head K, the latter connected directly with the lower cutter-bar t, by a pin a', and cam-slot b', the horizontal reciprocating bar M, with its notch h', connected with and operating the cutter bars s, t, the rocker lever P, adapted to engage the notch h', of the bar M, the cam N, on the driving shaft B, engaging with the rocker lever P, the lever i', connected with the bar M, by a spring p', the cam n', on the shaft q', the ratchet wheel r', on said shaft q', and its actuating pawl s', pivoted to the lever P, all operating substantially in the manner and for the purpose described.

No. 35,548. Wrench. (*Cle à écrou.*)

Daniel Robert Porter, Chelsea, and John Thomas Blades, Boston, both of Massachusetts, U.S.A., 2nd December, 1890; 5 years.

Claim.—1st. A wrench, comprising in its construction, a movable jaw and its shank, a fixed jaw and handle, a shoe provided with ears, a fulcrum and retaining bar pivoted to one of said ears and provided with a shoulder or abutment and an adjusting nut and encircling the shank of the movable jaw and the said bar, as set forth. 2nd. A wrench, comprising in its construction, a movable jaw, having a screw threaded shank provided with a groove, a fixed jaw and handle, a shoe provided with ears, a fulcrum and retaining bar pivoted to one of said ears and provided with a rib adapted to operate in the groove of the shank of the movable jaw, said bar being also provided with a shoulder or abutment, and an adjusting nut encircling the shank of the movable jaw and the said bar, as set forth. 3rd. A wrench comprising in its construction a handle or lever provided with ears i, and having a jaw c, a jaw a, and its screw threaded shank, and adjusting nut f, engaged with said shank and adapted by its rotation to move the shank endwise and in operating as a wrench to bear on the ears i, and a bar or lever pivoted to the said ears and engaged by the said nut, as set forth. 4th. A wrench, comprising in its construction, a handle or lever provided with ears i, and having a jaw, a jaw a, and its screw threaded shank, a bar connected with said ears, and an adjusting nut constructed and arranged to engage said bar and screw threaded shank to move the latter and the jaw a, as set forth.

No. 35,549. Apparatus for Straightening Teeth of Burr Cylinders. (*Appareil pour redresser les dents de cylindre à ébarber.*)

Furgus Oswal Groves Newton, Lower Falls, and Joseph Sykes Cording, Boston, both of Massachusetts, U.S.A., 2nd December, 1890; 5 years.

Claim.—1st. A device for straightening the teeth of burr-cylinders, burr-doffers, etc., consisting of a handle or support and a plurality of blades c, adapted to pass the spaces existing between the lines or rows of the teeth of the cylinder, as the latter is revolved, substantially as set forth. 2nd. A device for straightening the teeth of burr-cylinders, burr-doffers, etc., a handle provided with a socket, alternate blades c, and spacing pieces e, secured in the said socket, as set forth.

No. 35,550. Brake Beam. (*Sommier de frein.*)

William Augustus Pungs, Detroit, Michigan, U.S.A., 2nd December, 1890; 5 years.

Claim.—1st. A metallic brake beam, having the brake lever passed through the beam at an oblique angle and secured by a bolt passed through lugs on the beam, substantially as described. 2nd. A metallic brake beam having its ends provided with fittings so shaped as to be adapted to receive the ordinary brake head such as is applied to wooden beams, substantially as described. 3rd. A metallic brake beam provided at its middle with a fitting through which the brake lever is passed at an oblique angle with the beam, said lever secured by a bolt passed through the lever at substantially right angles, and engaged in a lug on the fitting, substantially as described.

No. 35,551. Apparatus for Operating Covers of Ink Wells, etc. (*Appareil pour fermer et ouvrir les couvercles d'encrier et autres.*)

James Hubbard Hayden and Henry Bliss Hayden, both of Colorado Springs, Colorado, U.S.A., 2nd December, 1890; 5 years.

Claim.—1st. A self closing cover for ink-wells and the like, the same closing the opening in the well, by means, substantially as herein set forth. 2nd. A device for closing ink-wells or other receptacles, consisting of a lid attached to the outer end of a gravitating bar, substantially as described, whereby the lid is caused to as-