

Claim.—1st. The suspended frame adapted to travel a cable, in combination with the tray supported thereto on reels by metallic ribbons, and means, substantially as described, whereby said tray can be drawn down by the movement of the reels in opposite directions and, when released, drawn up by a reverse movement of said reels, as and in the manner described. 2nd. The frame composed of the hangers having grooved wheels journaled between their top ends, the rectangular base provided with the depending flaring guides, the upright standards D D, one of which is detachable and supporting therein a rod, in combination with the tray and the means described, whereby said tray can be drawn from its seat and restored thereto automatically, as set forth. 3rd. The combination of the frame described with the rod having reel G fitted to one end and adapted to turn therewith, the wooden thimble loosely fitting the rod at the same end with the coiled spring cylinder and reel G, a said cylinder being secured at one end to reel G and at the other end to the thimble, the reels having wound thereon metallic ribbons to the ends of which is suspended a tray, the whole to be operated substantially as set forth. 4th. The rod having the reel G tightly fitted thereto, the cylinder enclosing said rod and fitted to pulley G at the opposite end, in combination with the thimble and spring the whole arranged in a suitable frame suspended on a cable and supporting a tray, and adapted to be operated substantially as described. 5th. The combination of the frame and operating mechanism described, with the reels oppositely wound with metallic ribbons to the end of which is held a tray, said tray being supported at each end to reverse sides of its centre, as and for the purpose described. 6th. A combined check-block and bumper formed with the inclined plane N, rest O and bumper P, as described.

No. 17,163. Improvements in Sad Irons. (*Perfectionnements aux fers à repasser.*)

William Hilton and Eugene Chilson, Agency, Iowa, U.S., 2nd July, 1883; 10 years.

Claim.—In a smoothing iron, the body A, cover C and lever I spring i and bolt K, in combination with the removal heater B having slotted stud b, the whole constructed and operating substantially as and for the purpose set forth.

No. 17,164. Improvements in Boots and Shoes. (*Perfectionnements dans les Chaussures.*)

Hiram R. Adams, Boston, Norman W. Bingham, Somerville, William H. Kent, William P. Orne, Boston, Mass., U.S.; Charles C. Colby, Charles H. McIntock, Standstead, Walter M. Tomlinson, Sherbrooke, Que., and Guy C. Noble, St. Albans, Vt., U.S., 2nd July, 1883; 5 years.

Claim.—1st. A boot or shoe having an outer sole, inner sole and upper united by staples having holding projections 3 thereon, such as described, the said staples being inserted through the soles and upper with their cross bars next the inner sole, substantially as described. 2nd. That improvement in the art or method of manufacturing boots and shoes which consists in perforating the outer sole, inner sole and upper for the reception of the sole fastenings, inserting the sole fastenings through holes in the inner sole from its upper or tread face placing the perforated portions of the upper and the outer sole over the projecting ends of the sole fastenings, and forcing or pressing the soles and upper closely together, substantially as described. 3rd. The described method of connecting the inner and outer sole and upper of a boot or shoe, which consists in punching holes in the said soles and upper for the reception of the metallic fastenings, and subsequently inserting the metallic fastenings into the inner sole, holding the inner sole with its inserted fastenings upon a thin form f, placing the perforated portion of the upper over the fastenings, applying the outer sole to the said fastenings and then hammering or pressing the outer sole upon the fastenings and forcing the soles together, substantially as shown and described. 4th. The described staple provided with spiral projections, such as described, broadest at their upper ends, substantially as shown and described.

No. 17,165. Inclined Plane and Sled therefor. (*Plan incliné avec traîneau.*)

Robert Steel and Charles Mace, Philadelphia, Pa., U.S., 2nd July, 1883; 5 years.

Claim.—1st. The combination of the inclined plane A having sunken ways a, one or more walks H leading from the terminus B to the platform C, and having hand rails d supported by posts e, to assist persons in their ascent to the platform C, substantially as described. 2nd. In combination with the inclined plane A provided with sunken ways a, the sleds E having friction wheels G in their runners b, substantially in the manner described. 3rd. The combination of the posts f and ropes g, with the inclined plane A, substantially in the manner and for the purpose set forth.

No. 17,166. Black leaf Check Book.

(*Agenda à feuille noire.*)

The Grip Printing and Publishing Company, (Assignee of John R. Carter,) Toronto, Ont., 4th July 1883; 5 years.

Claim.—Two or more black leaves bound in between the leaves, at suitable distances apart, in combination with a waste leaf placed between each black leaf and memorandum leaf, substantially as and for the purpose specified.

No. 17,167. Combined Harness Snap and Buckle. (*Crochet à ressort et Boucle de Harnais combinés.*)

James A. Park and Charles J. Davis, Lansing, Mich., U.S., 4th July, 1883; 5 years.

Claim.—1st. The combination, with the snap provided with an end tuck loop, of a clamping bail or loop hinged to the snap and provided

with means for engaging a strap, substantially as set forth. 2nd. The combination, with the snap provided with an upturned end tuck loop, of a clamping bail or loop provided with a projecting lip and a pin for engaging a strap, substantially as set forth. 3rd. The combination, with the snap provided with a perforated seat for a strap, and an upturned end loop, of a loop or bail hinged to the snap and provided with a projecting lip, and a pin adapted to enter the perforation of said seat, substantially as set forth.

No. 17,168. Improvements in Seeding Machines. (*Perfectionnements aux Semoirs.*)

Jessie O. Wisner, Wareham S. Wisner and Edward L. Goold, Brantford, Ont., 4th July, 1883; 5 years.

Claim.—1st. In a seeding machine in which the gear for operating the feed is cut off by raising the hoes off the ground, a cam-shaped lifter attached to the pivoted roll-casting, in combination with the lever resting in the cam-shaped lifter. 2nd. In a seeding machine in which the gear for operating the feed is cut off by raising the hoes, a dog or lever pivoted in proximity to the roll casting and provided with one or more notches arranged to support the said casting, as described, in combination with a latch pivoted over each notch, substantially as and for the purpose specified. 3rd. In a seeding machine in which the gear for operating the feed is cut off by raising the teeth clear of the ground, the combination of the lifter D attached to the roll casting E and so shaped that the lever supported by it will not be raised, till the teeth connected to the roll-casting have been raised clear of the ground.

No. 17,169. Improvements in Horse Powers. (*Perfectionnements aux manèges.*)

George B. Ellis, (assignee of John Ellis,) Pottstown, Pa., U.S., 4th July, 1883; 5 years.

Claim.—1st. The combination of the chain, the links of which have plates d, with the supporting wheels J having groovel or U-shaped rims with flanges h, as set forth. 2nd. The combination of the chain, the links of which have plates d, with the supporting wheels J having grooved rims, and the intermediate supporting wheels H, as set forth. 3rd. The combination of the chain having links with plates d and ribs s, and the wheels adapted to support the plates d and form lateral guides for the ribs s, as set forth. 4th. The combination of the links having interlocking lugs p n, with connecting pins having recesses t, as set forth. 5th. The combination of the links having lugs k with the transverse lugs or strips X bearing against said lugs k, as set forth. 6th. The combination of the transverse lugs or strips X having recesses in the under side, with the links having ribs m adapted to said recesses, as set forth. 7th. The combination of the endless chain with the sprocket wheels having sprockets b, with guard plates v on the outside, as set forth. 8th. The fly-wheel having hollow spokes of V-shaped cross-section, as specified. 9th. The combination, in a fly-wheel, of the hub M having tapered and undercut recesses, the spokes N having plates x adapted to said recesses, and plates y at the outer ends, and the rim P bolted to said plates y, as set forth. 10th. The combination of the hub M having tapered recesses and a rib z, and the spokes N having plates x adapted to said recesses, and held in place therein by upturned portions of the rib z, as set forth.

No. 17,170. Improvements in Door Locks.

(*Perfectionnements aux serrures des portes.*)

William Rowe and John A. Clarke, Haverhill, Mass., U.S., 4th July, 1883; 5 years.

Claim.—1st. The combination, with a tumbler K having the pin n, of the end-forked lever, and the shaft carrying the cross arm P, as and for the purpose specified. 2nd. The combination, with the sliding bolt A, of the united tumblers D arranged on opposite sides of the bolt, and the independent tumblers K K pivoted to the opposite sides of a central partition L, below the bolt, substantially as shown and described, and for the purpose set forth. 3rd. The combination, with the bolt A, of the united tumblers D arranged on opposite sides of the bolt, the independent tumbler K pivoted to the partition L, and the springs M for locking the tumblers K in position, substantially as shown and described, and for the purpose set forth. 4th. The combination, with the bolt A, of the united tumblers D arranged on opposite sides of the bolt, the spring E, the partition L and the independent tumblers K, substantially as shown and described, and for the purpose set forth.

No. 17,171. Improvements in Barbed Wire Fences. (*Perfectionnements aux clôtures en fil de fer barbelées.*)

Andrew Dillman and Edward R. Knowlton, (assignees of John W. Nadelhoffer,) Joliet, Ill., U.S., 4th July, 1883; 5 years.

Claim.—The combination, with the cable A, composed of strands a, of crossing each other at intervals and not twisted together, of the barb b, having its prongs b¹ b² passing down between the strands on opposite sides of the point of crossing, and bent entirely around one of the strands, and brought to same side of cable and projecting in opposite directions, substantially as described.

No. 17,172. Improvements in Car-Couplings.

(*Perfectionnements aux accouplages des chars.*)

Lee Anderson and Edward M. Hornstadt, Paris, Texas, U.S., 4th July, 1883; 15 years.

Claim.—The car-coupling consisting of the forked draw-head, having the lateral branches B and the rear under-bevelled bearing D, the pivotal shaft F, and the coupling bar having the inclined rear end H, the longitudinal slot S between the heel and point, and the central hook-lugs K, of less width than the slot, and having the lateral bearings P, substantially as specified.