

No. 35,628. Colter for Plows.*(Coutre de charrue.)*

Hugh Gourlay, Carp, Ontario, Canada, 18th December, 1890; 5 years.

Claim.—A colter having a straight stem A, a rearwardly and downwardly curved bend B, terminating in a point C, in alignment with the stem and having a barb or wing D, turned from the front upwardly and diagonally across the path of the curved portion B, toward the furrow side of the plow, and a beveled cutting edge from one side extending from the barb or wing to the point C, as set forth.

No. 35,629. Cross Welding Machine.*(Machine à souder.)*

George Ross Green, East Orange, New Jersey, U.S.A., 18th December, 1890; 5 years.

Claim.—1st. In a machine for cross welding skelps, the combination, with clamps for holding the skelps, of a movable carrier having an anvil fixed rigidly thereon, and a hammer vibrated to and from the anvil, as and for the purpose set forth. 2nd. In a machine for cross welding skelps, the combination, with clamps for holding the skelps, of a movable carrier having an anvil fixed rigidly thereon, a lower furnace fixed upon the carrier adjacent to the anvil, an upper furnace supported movably over the fixed furnace, and a hammer vibrated to and from the anvil, as and for the purpose set forth. 3rd. A cross welding machine, comprising a bed having clamps at opposite sides to hold the skelps, a carrier fixed to slide upon the top of the bed between such clamps, a lower furnace fixed upon the carrier near one end of the same, a fulcrum near the end of the carrier, an upper furnace with an arm and balance weight pivoted upon such fulcrum, a fulcrum bearing fixed upon the carrier near its opposite end, a hammer with arm having pivot projected at one side and fitted to such fulcrum bearing, and means connected with the movable carrier for vibrating the hammer arm, as and for the purpose set forth.

No. 35,630. Projectile. (Projectile.)

Daniel Baird Wesson, Springfield, Massachusetts, U.S.A., 18th December, 1890; 15 years.

Claim.—1st. A projectile, having a reservoir for a lubricant in its rear portion, and a duct leading from said reservoir to the outer surface of the projectile, and opening near the front of that part of the projectile which has a bearing on the walls of the gun, whereby pressure on the rear of the projectile may expel the lubricant during the passage of the projectile along the gun barrel, substantially as described. 2nd. A projectile, having in its rear portion a reservoir containing a lubricant, and one or more ducts communicating with said reservoir and with the exterior of the projectile, and provided with a cap fitting and movable forwardly in the rear of said reservoir and adapted to receive the impact of the firing charge, for the purpose set forth. 3rd. A projectile, having a lubricant reservoir therein, and one or more ducts communicating with said reservoir, and extending thence to the base of a recess in the surface of the projectile, combined with a movable cap closing the open end of said reservoir, substantially as set forth. 4th. A projectile, having a lubricant reservoir therein, and one or more ducts communicating with said reservoir and extending thence to the surface of the projectile, combined with a movable cap closing the open end of said reservoir, having a border extending at right angles to the plane of the cap, substantially as set forth. 5th. A projectile, having a lubricant reservoir therein, and one or more ducts communicating with said reservoir and extending thence to the surface of the projectile, combined with a movable cap closing the open end of said reservoir, having its central portion of convex form, and a border extending at right angles to the plane of the cap, substantially as set forth.

No. 35,631. Snow Shovel. (Pelle à neige.)

Victor Lemieux, Quebec, Province of Quebec, Canada, 18th December, 1890; 5 years.

Résumé.—La forme de la secoupe B, la forme du manche A, l'épaulement a découpé dans le manche A, et le dit manche A, vissé à la secoupe B, tel que montre et spécifié pour les fins décrites.

No. 35,632. Art of Preventing Oxidation of Metals. (Art d'empêcher l'oxydation des métaux.)

George Wyckoff Cummins and James Henry Coleman, both of New York, State of New York, U.S.A., 18th December, 1890; 5 years.

Claim.—1st. The hereinbefore described process of treating metals to prevent their oxidation while in a heated state, consisting of subjecting such metals in an air-tight vessel to an atmosphere composed of the gases derived from passing atmospheric air over incandescent carbonaceous material in a retort, after earlier gaseous products of distillation have been removed from said carbonaceous material, substantially as and for the purposes set forth. 2nd. The hereinbefore described process of treating metals to prevent their oxidation while in a heated state, consisting of subjecting such metals to an atmosphere composed of nitrogen and carbonic oxide, with or without carbonic acid, the carbonic oxide being in sufficient excess to overcome any tendency of the carbonic acid, if present, to oxidize the metal, substantially as set forth.

No. 35,633. Coupling for Pipes.*(Joint de tuyaux.)*

David Kennedy, Erie, Pennsylvania, U.S.A., 18th December, 1890; 5 years.

Claim.—1st. In a pipe coupling, the combination, with the heads

or collars *a*, each provided at its outer end with a suitable packing, of movable coupling sleeves surrounding said heads and provided at its outer end with a series of projecting segments, the segments on one of said sleeves interlocking with the segments on the opposing sleeve, whereby the two sleeves are held from turning in opposite directions, and which form together a continuous sleeve enclosing both heads with its joint overlapping the meeting end of the two heads, said sleeves being free to turn on said heads, when coupled, and having a limited lengthwise movement thereon, and a locking lever pivoted to one of said sleeves and engaging with the opposing sleeves, whereby the two sleeves are drawn together, substantially as set forth. 2nd. In a pipe coupling, the combination, with the heads or collars *a*, each provided at its outer end with a suitable packing, of coupling sleeves surrounding said heads, and provided with interlocking segments which together form a continuous sleeve, enclosing both heads, a connecting shank formed on each sleeve, and engaging between lugs formed on the opposing sleeve, and locking levers pivoted to each sleeve and engaging with the shank of the opposing sleeve, whereby the two sleeves are drawn together, substantially as set forth. 3rd. The combination, with two adjacent pipes, provided at their ends with heads or collars *a*, of the coupling sleeves *D*, surrounding said heads, a shank or connecting bar *h* arranged on one of said sleeves and engaging between two jaws on the opposing sleeve, and a locking lever *J*, attached to said last-mentioned coupling sleeve and bearing against the connecting shank *h*, substantially as set forth. 4th. The combination, with two adjacent pipes provided at their ends with heads or collars *a*, of the coupling sleeves *D* surrounding said heads, and each provided on diametrically opposite sides with a connecting shank *h*, and a pair of jaws or lugs *i*, and with a cam lever *J*, pivoted between said jaws, substantially as set forth. 5th. The combination, with two adjacent pipes, each provided at its end with a head or collar *a*, of coupling sleeves *D*, *D*, respectively surrounding the heads and provided with interlocking segments *d*, a pair of jaws *i* arranged on one side of each coupling sleeve, a cam lever *J* pivoted between said jaws, a connecting shank *h* and recessed lug *k*, arranged on the opposite side of the coupling sleeve, and a spring catch, whereby the cam lever *J*, of one coupling sleeve is attached to the lug *k*, of the opposite coupling sleeve, substantially as set forth. 6th. In a pipe coupling, the combination, with the heads *a* and coupling sleeves *D* surrounding said heads, of a connecting shank *h* secured to each sleeve and engaging between a pair of jaws *i*, formed on the opposing sleeve, and a cam lever *J*, pivoted to each sleeve between said jaws, and provided with an adjustable wear plate which bears against the shank of the opposing sleeve, when the sleeves are secured together, substantially as set forth.

No. 35,634. Stretcher for Curtains.*(Mettier à rideau.)*

David Eastman, Detroit, Michigan, U.S.A., 18th December, 1890; 5 years.

Claim.—1st. A frame, consisting of crossing rails, and means for locking the rails at the crossing points, said rails having a channel in their upper faces, and a pocket communicating therewith, a rod suspended over the channels, and a series of hooks loosely mounted on said rod, as and for the purpose specified. 2nd. A frame, consisting of the crossing rails *R*, *B*, and means for locking said rails at the crossing point, the channels and pockets formed in the upper face of the rails, the rods suspended over the channels, the hooks on said rods and plates covering said pockets, substantially as specified.

No. 35,635. Road Cart. (Désobligeante.)

George Henry Fowler, Faughannock Falls, New York, U.S.A., 18th December, 1890; 5 years.

Claim.—1st. In a vehicle, the combination, with the axle, thills, and body, with seat attached, of the double-armed crank-rod, having their central longitudinal portions journaled in bearings attached to the vehicle body, in order to support said body, the ends of their front arms journaled in bearings secured to the thills, and the rearwardly bent projections of their rear arms journaled in bearings attached to the axle, substantially as specified. 2nd. In a vehicle, the combination, with the axle, the thills, the vehicle body and the bearing irons *I*, *J*, secured to said body at suitable points, and respectively provided with the bearing slots *i* and *j*, of the boxes or blocks *G*, clipped to the axle at the inner sides of the thill-irons and provided with the bearing openings *g*¹, the bearing brackets *K* secured to the thills on the inner sides thereof, and the crank rods *H*, having the central longitudinal parts *h*, journaled in the slots *i*, *j*, of the bearing irons, the arms *h*¹, provided with the journals *k*, mounted in the brackets *K*, the arms *h*², and the rearward projections *h*³, journaled in the boxes *G*, substantially as specified. 3rd. In a vehicle, the combination with the axle, the thill, the body, and the bearing irons *I*, *J*, secured to the body at proper points, of the bearing boxes *G*, secured to the axle, the bearing brackets *K* secured to the thills, the crank rods *H*, journaled in the bearing irons *I*, *J*, and in the boxes *G* and brackets *K*, and consisting of a central portion *h*, the front arm *h*¹, having the journals *k* and the rear arm *h*², having the extension *h*³, and the spring *f*, with its ends looped and attached to the extensions *h*³, and its central part clipped to the spring bar, secured to the back of the vehicle body, substantially as specified.

No. 35,636. Wind Mill. (Moulin à vent.)

Evert DeWitt, Hanford, California, U.S.A., 18th December, 1890; 5 years.

Claim.—1st. In a wind mill, the combination, with the frame, having an upright *U*, a lever *H*, pivoted between its ends to said upright, and the pump-rod *H*¹ connected to the inner arm of said lever, of the wind-wheel, the crank-shaft *M*, rotated thereby, the pitman rod *P*, connected at one end to the crank of said shaft, a yoke *X*¹, embracing the outer arm of said lever, and having boxes *h*,