

Claim.—1st. In a device for regulating the flow of fluids through pipes, in combination with a steam generator and pipes for conducting said fluid, a valve body formed with a valve seat and provided with a valve proper for said seat, and a barrel or inclosure connected with the interior of said steam generator containing a movable piston or part, the same being connected with said valve, substantially as and for the purpose set forth. 2nd. In a device for regulating the flow of fluids through pipes, in combination with a steam generator and pipes for conducting said fluids, a valve-body formed with a valve seat and provided with a valve proper for said seat, and a barrel or inclosure connected with the interior of said steam generator containing a movable piston, the same being connected with said valve, the axes of said piston and valve being in the same straight line, substantially as shown and described. 3rd. In a device for regulating the flow of fluids through pipes, in combination with a steam generator and pipes for conducting said fluids, a valve body formed with a valve seat and provided with a valve proper for said seat, reaching out of said body, a barrel or inclosure communicating with the interior of said generator containing a piston and a stopper for the outer open end of said barrel, a spiral spring within the barrel for said piston, the outer end of the latter being formed with a cavity in which the outer end of said valve enters, substantially as described. 4th. In a device for regulating the flow of fluids through pipes, in combination with a steam generator and pipes for said fluids, a valve body formed with a valve seat, and provided with a valve for said seat, a barrel communicating with the interior of said steam generator containing a movable piston formed with a cavity at its outer end, in which to receive the outer end of said valve, and a spring placed with said cavity to bear against said valve, substantially as and for the purpose set forth. 5th. In a device for regulating the flow of fluids through pipes, in combination with a steam generator and pipes for conducting said fluids, a valve body formed with a valve seat and provided with a valve proper for said seat, and a barrel or inclosure connected with the interior of said steam generator containing a movable piston formed with a cavity at its outer end in which the end of said valve rests, a spring placed within said cavity and an adjuster for said valve, substantially as and for the purpose set forth. 6th. In a device for regulating the flow of fluids through pipes, in combination with a steam generator and pipes for conducting said fluids, a barrel or inclosure connected with the steam space within said generator containing a movable piston, a lever for said piston to bear against a valve placed within said pipe, and a connecting rod for said valve and lever, substantially as shown and described.

No. 26,385. Anti-Friction Roller for Waggon Reaches. (*Rouleau anti-frottant d'avant-train de wagon.*)

John Q. Grant, George T. Dell and Frank P. Secor, Longmont, Col., U.S., 4th April, 1887; 5 years.

Claim.—1st. The combination of a waggon-reach, a pair of brackets notched so as to fit the said reach, and in which are journaled, so as to be free to rotate, a pair of rollers with the sway-bar, substantially as and for the purpose set forth. 2nd. The combination of the coupling-pole of a waggon, two brackets having notches adapted to fit the reach bolts securing said reach and brackets together, and a pair of double conical or centrally-swelled rollers journaled in said brackets with the slide-bar of a waggon, substantially as and for the purpose set forth. 3rd. The combination of a waggon-reach or coupling-pole, a pair of brackets secured to said reach or pole, and one or more double-conical or centrally-swelled rollers supported in said brackets with a slide or sway bar of a waggon, substantially as described. 4th. As a new article of manufacture, a pair of brackets adapted to be fitted to the reach of a waggon, and one or more double-conical or centrally-swelled rollers adapted to be journaled therein, substantially as described and for the purpose set forth.

No. 26,386. Woven Fabric. (*Tissu.*)

David B. Kerr, Philadelphia, Penn., U.S., 4th April, 1887; 5 years.

Claim.—The combination of two or more wefts, each of a different color with figuring warp-threads, and a binder warp-thread between the two figuring warp-threads of each pair, as shown, described, and for the purpose specified.

No. 26,387. Letter Blank and Envelope.

(*Enveloppe-Papier à Lettre.*)

Arthur Cox, Toronto, Ont., 4th April, 1887; 5 years.

Claim.—1st. A sheet of paper folded in the form of a triangle, in combination with an envelope to contain the said sheet when folded, and having a slit made in it through which the apex of the triangle may protrude, substantially as and for the purpose specified. 2nd. A sheet of paper connected to and forming part of an envelope and folded in the form of a triangle, in combination with the said envelope having a slit made in it through which the apex of the triangle may protrude, substantially as and for the purpose specified. 3rd. A sheet of paper connected to and forming part of an envelope, but made narrower than the said envelope and folded in the form of a triangle, in combination with the said envelope having a slit made in it through which the apex of the triangle may protrude, substantially as and for the purpose specified.

No. 26,388. Punch. (*Emporte-Pièce.*)

Albert Burrowes, Toronto, Ont., 4th April, 1887; 5 years.

Claim.—A punch A, having a portion of its wall a surrounding its cutting edge removed, substantially as and for the purpose specified.

No. 26,389. Machine for Making Lard Tablets. (*Machine à Faire les Palettes de Sain-doux.*)

Henry H. Fearman, Hamilton, Ont., 4th April, 1887; 5 years.

Claim.—1st. A machine for making lard tablets, consisting of the combination of the sheet metal mould A, handle B, plunger C, rod a, substantially as and for the purpose specified. 2nd. The combination of the sheet metal mould A, handle B, plunger C, rod a, hole e, knob b and vent f, substantially as and for the purpose specified.

No. 26,390. Sewing Machine.

(*Machine à Coudre.*)

The Pentucket Variable Stitch Sewing Machine Company, Haverhill (assignee of Erastus Woodward, Somerville, Mass., U.S., 4th April, 1887; 5 years.

Claim.—1st. The combination of the stitch-forming mechanism, the feeder, the arm and rock shaft carrying the feeder, the adjustable mechanism for oscillating said rock shaft, a lever pivotally connected to the rock shaft, a movable fulcrum for said lever, a second lever by which said lever is supported, adjustable mechanism, substantially as described, whereby said fulcrum may be either oscillated or held stationary, and adjustable mechanism, substantially as described, for oscillating said lever, as set forth. 2nd. The combination of the stitch-forming mechanism, the feeder, the arm and rock shaft carrying the feeder, the adjustable mechanism for oscillating the rock shaft, the lever E pivotally connected to the rock, the movable fulcrum G for said lever, the lever K₁ supporting said fulcrum, the adjustable fulcrum L₁ for said lever, and means, substantially as described, for oscillating said levers, as set forth. 3rd. The combination of the stitch-forming mechanism, the feeder, the arm and rock shaft carrying the feeder, the adjustable mechanism for oscillating said rock shaft, the lever E pivotally connected to the rock shaft, the fulcrum G and its operating mechanism, the slide I to which the lower end of said lever is connected, the lever J pivoted to said slide, the adjustable fulcrum for said lever, the cam whereby said lever is oscillated, as set forth. 4th. In a sewing machine, of the class described, having a universally movable automatic work feeder, the combination, with the needle shuttle automatic work feeder, and a tension device adapted to produce a constant tension on the thread, of automatic thread-holding and releasing devices, substantially as described, whereby the needle-thread is held while the shuttle is entering the needle loop, and released while the work is being moved by the work feeder, as set forth. 5th. The thread grasping and releasing device, composed of the fixed plate having an orifice for the needle thread, and the reciprocating plate which alternately covers and exposes said orifice, as set forth. 6th. The combination of the needle, the shuttle, the work feeder, an automatic thread grasping and releasing device, and a tension device, all arranged and operating substantially as and for the purpose specified. 7th. The combination, with the feeder carrying arm or slide, and the feeder loosely pivoted thereto, of a frictional connection between said arm or slide and the pivot of the feeder, whereby the latter is prevented from swinging with too much freedom, substantially as set forth. 8th. The combination, with the feeder carrying slide r₁, and the feeder k₁ having the pin a₁ rigid therewith, of the split socket b and one or more set screws for compressing said socket against said pin, whereby the feeder is prevented from swinging on said slide with too much freedom, substantially as set forth.

No. 26,391. Centrifugal Amalgamator for use in Connection with Crushed Ore, Sand, etc., containing Precious Metals. (*Amalgamateur Centrifuge pour le Minerai Broyé, le sable, etc., contenant des métaux précieux.*)

William White, Mount Vernon, N. Y., U.S., 5th April, 1887; 5 years.

Claim.—1st. The combination, with a pan, and means for revolving the same, of a disk provided with riffs arranged to break joint, substantially as described. 2nd. The combination, with a pan, provided with a discharge orifice or tube, of a disk arranged above the pan riffs secured to the disk and projecting downward therefrom, said riffs being practically concentric with the axis of the pan, and arranged so that they break joint, as and for the purpose stated.

No. 26,392. Device for Trimming Cartridge Shells. (*Appareil pour Ébarber les Enveloppes des Cartouches.*)

Rollin White, Lowell, Mass., U.S., 5th April, 1887; 5 years.

Claim.—1st. The combination of a die, provided with an annular knife surrounding the die opening, a punch having a conical lower end, provided with splitting knives and a trimming punch, substantially as described. 2nd. The combination of a die, provided with an annular knife surrounding the die opening, a splitting-punch, provided with splitting knives, and a trimming-punch having an annular groove on its lower surface, as and for the purpose specified. 3rd. The combination of a trimming-die, provided with an annular knife surrounding the die-opening, and a punch adapted to press the open end of a shell upon said knife, substantially as set forth. 4th. The combination of a trimming-punch, having a groove in its lower surface, and a trimming-die having a knife surrounding the die-opening. 5th. The combination of a die and a punch, said punch having a conical enlargement above the cylindrical portion, or downwardly-projecting teat, as and for the purpose specified. 6th. The combination of a die and a punch, having radial conical-shaped knives, and a cylindrical portion or teat projecting below said knives, as and for the purpose specified. 7th. The splitting-punch, having its lower end tapered or bevelled off, and provided with radial conical-shaped knives, as and for the purpose specified. 8th. The combination of a trimming-punch, having its lower surface extended laterally beyond the part which forms the anvil, and a trimming-die having a surface without the knife, upon which surface the extended surface of the punch may rest, as and for the purpose specified.