

drum, which latter retains the wire at any desired degree of tension by means of a pawl and ratchet. 13th. The combination, with the L-shaped arm provided with an adjustable holder for holding the mould in position. 14th. The combination, with the tempering mill B, receiver B and dies M, of the shaft C, cam P, yoke O, arm Q, holders R and mould L. 15th. The combination, with the mill B, receiver D and dies M, of the shaft C, cam P, yoke O, arm Q, holder R, mould L, bell crank T, yoke N, wire W.

No. 14,531. Improvement on Draft Adjusting Devices for Harness. (*Perfectionnement des harnais pour régulariser le tirage.*)

James Hugill, Woodbridge, Cal., U.S., 3rd April, 1882; for 5 years.

Claim.—The box A containing the spring actuating block E, in combination with the notched or corrugated bar G secured to the harness, and passing through an opening in the front of the box A.

No. 14,532. Improvements in Cigarette Machines. (*Perfectionnements aux machines à cigarettes.*)

Parley P. Pratt and Matthew G. Raffington, Columbus, Ohio, U.S., 3rd April, 1882; for 5 years.

Claim.—1st. A portable device for forming cigarettes, consisting of a mandrel upon which to roll the wrapper, a casing to support the wrapper while being filled, and a tubular mouth-piece or sleeve to clamp the wrapper in the mouth of the casing and permit insertion of tobacco. 2nd. The tubular mouth-piece B adapted in connection with the mandrel, to support the wrapper while the latter is being rolled into cylindrical form and having its end bevelled to facilitate taking up tobacco. 3rd. In combination with a tubular casing to sustain a cigarette wrapper, a tubular mouth piece having a scoop-shaped end to take up tobacco and deliver it into the wrapper. 4th. A portable pocket implement consisting of a casing to sustain a cigarette wrapper, and a stem or mandrel adapted both to compress the tobacco within said casing, and to receive and carry a writing-point, whereby the device is caused to serve both as a cigarette former, and as a writing instrument. 5th. The method of forming cigarettes by rolling the wrapper upon the end of a tube, into cylindrical form, inserting the wrapper so formed into a sustaining casing and there clamping its end, supplying tobacco through the tube, and finally compacting the tobacco to the desired degree.

No. 14,533. Improvement on the Manufacture of Compressed Fuel. (*Perfectionnements dans la préparation des agglomérés combustibles.*)

George Walker and Edward W. Rathbun, Deseronto, Ont., 3rd April, 1882; for 5 years.

Claim.—1st. The destructive distillation of saw dust in a close retort, to remove the watery acids, and obtain a tarry distillate or substance, and effect the carbonization of the saw dust, then mixing the tar and carbonized sawdust together and compressing the mass, with or without the admixture of other combustible substances, into blocks for fuel. 2nd. As an article of commerce, a block of compressed fuel consisting of carbonized sawdust or charcoal, and tar, with or without the addition of other combustible substances.

No. 14,534. Improvements on Car Journal Boxes. (*Perfectionnements aux boîtes à graisse des chars.*)

Thomas S. Phillips, George D. Briggs and Warren E. Miller, Buffalo, N.Y., U.S., 3rd April, 1882; for 5 years.

Claim.—1st. The device for holding the lubricant C consisting of the box or receptacle A with side walls b b, the rounded out rear end d d and the front hinged end e, and mounted on suitable springs. 2nd. In combination with an enclosed journal E and a rail road journal box D, the rectangular follower A, for holding the lubricant C in contact with the journal, consisting of the bottom a, vertical sides b b, extension leather sides b b, leather end d d, hinged front e and springs B B.

No. 14,535. Improvements on Paddle Wheels. (*Perfectionnements aux roues à aubes.*)

William C. Thompson, Tipton, Penn., U.S., 3rd April, 1882; (Extension of Patent No. 7311)

No. 14,536. Bag-Holder. (*Acroche-sac.*)

Edward Collins, (Assignee of John Wagstaff,) Dundas, Ont., 3rd April, 1882; (Extension of Patent No. 1408.)

No. 14,537. Improvements in Double Cylinder Steam Engines. (*Perfectionnements aux machines à vapeur à deux cylindres.*)

Henry Monk and William Monk, Hadlow Cove, Que., 4th April, 1882; for 5 years.

Claim.—1st. In a double cylinder high and low, or adjustable high pressure engine operated by one valve with steam way L, and the combination of the steam chest and cylinder, which are angled to each other so that they are in direct line with the main shaft together with the fork connecting rod D D, which couples both pistons to one crank. 2nd. The steam port L with the arrangement and combination of steam chest and cylinders.

No. 14,538. Improvement in Freight Car Doors. (*Perfectionnement des portes de chars à fret.*)

Herbert H. Hewitt and Francis G. Susemihl, Detroit, Mich., U.S., 3th April, 1882; for 5 years.

Claim.—1st. In a freight car having a door seat in a plane within that of the exterior of the side of the car, the combination of a sliding door, an upper guide strap, a lower guide track and shoes connecting the door with said strap and track, the strap and track running in oblique and parallel lines with reference to the size of the car, whereby the door may be drawn obliquely from its seat before being slid open to a position parallel with the side of the car as specified. 2nd. In a freight car, a sliding door combined with supporting and guiding devices consisting of an upper guide strap and a lower guide track, said strap and track running in oblique and parallel lines with reference to the side of the car, and shoes connecting the door with the strap and track, the upper edge of the door being confined between the strap and car and the shoes on the lower edge of the door riding on the guide track, whereby the door is adapted to be opened and closed by lateral and end movement. 3rd. The side of the car A with rabbeted door posts h h l, the guide track e and guide strap f attached to side of car A, in combination with the door D provided with the shoes a b c d. 4th. The side of car A having the guide track e formed with notch m, in combination with the door D provided with the shoe b. 5th. The side of car A having the guide strap f formed with notch n, in combination with the door D provided with the shoe e.

No. 14,539. Improvements on Tire Machines. (*Perfectionnements aux machines à bandages des roues.*)

George R. Libby, Lehigh, Iowa, U. S., 5th April, 1882; for 5 years.

Claim.—1st. In a tire bending device having removable rolls F of any desired size, in combination with the main permanent roll F and all working over a depression having a slotted opening n. 2nd. The sliding piece I having a removable punch i and combined with lever E and the intermediate mechanism, and also with guard plate G having removable face m. 3rd. In a tire machine having shears G cutting against the edge g, the table or bed A and punch I in connection with block m m, bending rolls F F and tire shrinker E E worked as explained, all constructed and combined in a single machine. 4th. The tire upsetter consisting of sliding pieces B mounted on ways b in openings a of table or bed A, on which pieces B are pivoted the movable clamping jaws E having serrated faces, in combination with shaft C, links D and vertical crank shaft e.

No. 14,540. Improvements on Car-Coupling. (*Perfectionnements aux attelages des chars.*)

Jacob H. Hunt and Frederick W. Jones, Spartenburgh, S. C., U. S., 1882; for 5 years.

Claim.—1st. In a draw-head formed in two parts, which are united upon a vertical central longitudinal line and are adapted to yield to lateral pressure and release the link. 2nd. The draw-head A divided longitudinally and vertically into two sections with the lines of division at the upper and lower sides of said head in front of the coupling pin B extended from relatively opposite sides of the slot a. 3rd. A draw-head provided with a semispherical socket and vertical longitudinal groove, in combination with a coupling pin which has a spherical head that is contained with said socket, whereby said coupling pin is adapted to swing in a line with the draft. 4th. In combination with the draw-head A provided with the recesses a, slot a and semispherical recess a, the coupling pin B having the segmental form shown and provided with the spherical head b. 5th. In combination with a draw-head, a plate or block adapted to drop in the rear of and to hold the link in longitudinal position, when said link is engaged by the coupling pin. 6th. The car-coupling in which the parts are constructed and relatively arranged in the manner and for the purpose shown.

No. 14,541. Improvements on Double Furrow Ploughs. (*Perfectionnements aux charrues faisant double raie.*)

George McSherry, Ingersoll, Ont., 5th April, 1882; for 5 years.

Claim.—The ratchet lever and arc B C, connecting rod D, bent arm E and wheel G, when applied to a double furrow plough.

No. 14,542. Improvement on Gas Engines. (*Perfectionnements aux machines à gaz.*)

Richard T. Jeffery, Toronto, Ont., 5th April, 1882; for 5 years.

Claim.—1st. The pin a with the arrangement of steps r and t, the latch cam n, bolt P and spring g, in combination with the hub H and sleeve I. 2nd. The combination of the gas valve m in the valve cover D. 3rd. The combination of base a, cover b, needle i, collars c c, spring k, rubber collar j, nipple d, adjuster e, drip f, drip pan h and rock arm w, with the modes of operating shown, as a single and with duplicate working parts shown as a double automatic adjustable lubricator.

No. 14,543. Improvements in Car Door Fasteners. (*Perfectionnements aux fermetures des portes de chars.*)

Richard H. Briggs and James H. Dougherty, Whistler, Ala., U. S., 5th April, 1882; for 5 years.

Claim.—1st. The combination of the horizontal latch D, the latch frame G and swinging pivoted locking latch and the frame being provided with the perforated bars or flanges in which the lock or seating wire is secured. 2nd. The combination of the horizontal latch D, the latch frame G and the swinging locking latch having a notch P in its