

pendently of each other, and supports which provide rigid lateral bearing for the tiltways, when the latter are respectively released from engagement with said shifting device. 25th. The combination, with two independent tiltways and a shifting device, of set screws which provide adjustable lateral bearings for the tiltways, as the latter are respectively disengaged from said shifting device. 26th. The combination, with two independent tiltways, of a shifting bar disconnected from both the same and adapted to be longitudinally moved, the ends of said shifting bar having free bearing respectively against the tiltways. 27th. The combination, with a shingle bolt carriage, of a table located below the latter and provided with tiltways, a depending standard supporting the table, and a set screw which vertically adjusts said standard to move the table to or from the carriage. 28th. The combination, with a shingle bolt carriage and a table located below the latter and provided with tiltways, of mechanism which adjusts the table in horizontal inclination lengthwise with the machine and thereby moves the rear portion of said table to or from the carriage. 29th. The mechanism which adjusts the table in horizontal inclination with the carriage, and a spring which tends to maintain the table normally parallel with said carriage. 30th. The combination, with a standard depending from the table on which the tiltways are mounted, of a spring connected to the bearings in which the standard is supported, and a set screw which adjusts the standard in a vertical inclination lengthwise with the machine. 31st. A parallel bar provided with bearings in which the standard is fitted, and a spring which connects the upper extremity of said parallel bar to a support. 32nd. The combination, with a standard depending from the saw end of the table on which the tiltways are mounted, a parallel bar provided with slide bearings in which the standard is fitted, and a spring which connects the upper extremity of the parallel bar to a support of a horizontal set screw which adjusts said bar forward or rearward in vertical inclination, and a vertical set screw which adjusts the standard up or down in its slide bearings. 33rd. The combination, with tiltways and a shifting bar which moves them, of a tilting handle provided with a slot, a movable device fitted in the latter, and a spring connected to the movable device, said handle and shifting bar being connected by intermediate mechanism. 34th. The combination, with a catch projecting from the machine frame and provided with notches, and a horizontal cam roller provided with a depending rod, of a pivotal lever whose inner extremity connects with the shifting rod, and whose outer extremity has frictional engagement with the cam roller, said depending rod being adapted by engagement with the catch notches, to lock the shifting bar against movement. 35th. The combination, with a saw, of a carriage whose head block is provided with a glass roller mounted on its lower side and adapted to prevent injury to the saw, in case the latter should tend to come in contact with the head blocks. 36th. The combination, with a shingle machine carriage and actuating mechanism, of a shifting rod provided with a handle pivoted to the machine frame, and a cam roller adapted to lock said handle by frictional engagement therewith. 37th. The combination, with a carriage provided with a series of tripping dogs, of a shifting rod, or its equivalent, connected with the carriage driving mechanism and adapted to be engaged by the dogs, certain ones of said dogs, according to the width of the shingle bolt, being engaged by said bolt, and thereby operated so as to cause the shifting rod, or its equivalent, to automatically determine the length of stroke of the carriage. 38th. The combination, with a carriage head block provided with a series of tripping dogs, of a shifting rod or its equivalent connected with the carriage driving mechanism and adapted to be engaged by the outer extremities of the dog, certain ones of said dogs, according to the width of the shingle bolt being adapted to have their outer extremities engaged by the shingle bolt, and thereby operating their outer extremities so as to cause the shifting rod, or its equivalent, to determine the stroke of the carriage. 39th. The combination, with a carriage head block provided with a series of transverse vertical slots, of dogs fitted in the latter, and a shifting rod, or its equivalent, connected with the carriage driving mechanism. 40th. The combination, with a shingle bolt carriage, of a vertically moving spalt clearer and connecting mechanism, adapted to be operated by the carriage in its return movement, and thereby actuate the spalt clearer in an upward throw. 41st. The combination, with a spalt clearer and an operating rod, of a connecting device adapted to be thrown by said rod into engagement with the shingle bolt carriage as the latter is on its return movement, and thereby actuate the spalt clearer in its upward throw. 42nd. A link connected to the spalt clearer and adapted to limit it in its upward throw. 43rd. The combination, with a carriage, of steam driving mechanism adapted to actuate said carriage in its feed and return movements. 44th. The combination, with a vertically vibrating spalt clearer provided with an arm, of an operating rod provided with an arm which connects with the spalt clearer arms, said rod and arm being adapted to be engaged by the carriage on its return movement, and thereby actuate the spalt clearer in its upward throw. 45th. A carriage frame composed of single pieces of angular wrought metal having two sides and one end, said frame being formed with an outwardly projecting flange having curved corners O.

**No. 14,119. Improvements on Feather Renovators.** (*Perfectionnements aux renouveleurs de la plume.*)

Edmund B. Dufort, Toronto, and Henry Eldridge, Clarke, Ont., 6th February, 1882; for 5 years.

*Claim.*—1st. The combination of the double walled semi-cylinder provided with pipes for the introduction of steam, the double walled cover J having ventilating apertures at top and side, and the fan F enclosed by the semi-cylinder and cover, whereby the feathers are moistened by steam, the semi-cylinder and cover heated by steam to dry the feathers and the impurities removed from the feathers, by the fan creating a ventilating current and transfer the feathers to the tick. 2nd. The double walled cover J having ventilating apertures provided with doors K L and doors M N at the side, in combination with a semi-cylinder A and fan F, for creating a ventilating current. 3rd. The double walled cover J having at the side a spouted aperture O, for discharge of the feathers, in combination with a revolving fan F and semi-cylinder A. 4th. The semi-cylinder A constructed of unbro-

ken double walls provided with steam pipes B B C C, the pipes B discharging into the semi-cylinder and pipes C discharging between the wall, the outer wall having a waste steam pipe D. 5th. The semi-cylinder A having at top a chamber J with ventilating apertures and discharge apertures O in the side, in combination with a rotary fan F, for creating a current to remove the impurities and transfer the feathers to the tick.

**No. 14,120. Improvements in Car-Couplings.**

(*Perfectionnements aux accouplages des chars.*)

Daniel P. Prescott, Vernon, Vt., U.S., 6th February, 1882; for 5 years.

*Claim.*—1st. The draw bar D having a horizontal chamber in the rear of its mouth to receive a pin lifting lever and a pin supporting latch, the lever b pivoted within said draw-bar and having its free end extending near to the rear side of the coupling pin hole therein, the latch h pivoted to hang at the rear side of the draw-bar mouth and to swing therein, the pin c having the slotted arm r, and appliances for swinging lever b up and down. 2nd. In combination, the shaft d having the arm n thereon, lever b, rod e, pin c and the link a. 3rd. The coupling pin c having the slotted arm r thereon, the lever b to engage with said slotted arm, and appliances for lifting said lever b. 4th. In combination, shaft d having arm n thereon, spring r, rod e and lever b. 5th. In combination, the curved pivoted latch h, draw-bar D, pin c and link e. 6th. In combination with the draw-bar of a car-coupling having oblong coupling pin holes therethrough, the flat sided coupling pin c provided with the slotted arm r. 7th. In combination, the draw-bar D having the projection n on the rear curved side of its mouth, and the fulcrum block m on the lower front edge thereof, and the link e.

**No. 14,121. Improvements on Compositions of Matter for the Prevention and Removal of Incrustations in Steam Boilers.** (*Perfectionnements aux composés pour empêcher ou enlever les incrustations dans les chaudières à vapeur.*)

Hugo Kolker, Breslau, Prussia, 6th February, 1882; for 5 years.

*Claim.*—A solution of chestnuts applied as incrustation preventive.

**No. 14,122. Apparatus for Separating Petroleum Products.** (*Appareil pour séparer les produits du pétrole.*)

James Cole, jr., Cleveland, Ohio, U.S., 6th February, 1882; (Extension of Patent No. 7155.)

**No. 14,123. Explosive Compound.**

(*Composé explosible.*)

Egbert Judson, San Francisco, Cal., U.S., 6th February, 1882; (Extension of Patent No. 7148.)

**No. 14,124. Apparatus for Separating Petroleum Products.** (*Appareil pour séparer les produits du pétrole.*)

James Cole, jr., Cleveland, Ohio, U.S., 7th February, 1882; (Extension of Patent No. 7155.)

**No. 14,125. Explosive Compound.**

(*Composé explosible.*)

Egbert Judson, San Francisco, Cal., U.S., 7th February, 1882; (Extension of Patent No. 7148.)

**No. 14,126. Improvement in Barber and Dental Chairs.** (*Perfectionnement des chaises de barbiers et de dentistes.*)

George W. Archer, Rochester, N.Y., U.S., 7th February, 1882; (Extension of Patent No. 7292.)

**No. 14,127. Improvements in Can Stoppers.**

(*Perfectionnements aux bouchons des bidons.*)

William H. Rodden, Toronto, Ont., 7th February, 1882; for 5 years.

*Claim.*—1st. In combination with the neck of a can or vessel provided with a spout B and vent aperture a in opposite sides thereof, a turning stopper C provided with channels c d on either side reaching from the bottom of the same above the said spout outlet and vent aperture, and a chain D swivelled to the said stopper and attached to the can neck, or a spiral spring attachment F provided with guard or stop links i attached to the stopper and the can, so as to hold the one closely in the other. 2nd. The spring hook or catch E on the can, in combination with the turning stopper C and holding chain D. 3rd. The spiral spring attachment F provided with guard or stop links i, in combination with the turning stopper C.

**No. 14,128. Improvements on Compounds for Sewer Pipes, Sidewalks, etc.** (*Perfectionnements dans les agglomérés à tuyaux d'égout, trottoirs, etc.*)

Daniel H. Dorsett, Clinton, Iowa, U.S., 7th February, 1882; for 5 years.

*Claim.*—A composition of asphaltum, sand, paraffine, black oxide of manganese, black lead and sal ammoniac.