

No. 37,757. Apparatus for Milking Cows.*(Appareil pour traire les vaches.)*

William Murchland, Kilmarnock, Ayr, Scotland, 9th November, 1891; 10 years.

Claim.—1st. In apparatus for milking cows, the combination of two tanks situated at different levels and connected by a pipe, an air pipe leading from the top of the higher tank, and a branch and main pipes from said air pipe leading respectively to a pump and to the several cow stalls, flexible branch pipes provided with stop cocks and connected with said main pipes, a milk receptacle to which said flexible branch pipes are connected, and mouth pieces or cups, provided with stop cocks, for application to the cows' teats, and connected with said milk receptacle, as shown and described. 2nd. In milking apparatus, the connecting of a pipe from air exhausting apparatus to a milk receptacle or collector which is separated, connected to the teat cups, combined with the application of a liquid column to regulate the degree of exhaustion, substantially as hereinbefore described. 3rd. In apparatus for milking cows, a milk receptacle or collector having a body and neck, the latter centrally apertured and closed by a glass dish resting on a rubber ring or washer held in such neck, nozzles communicating with said neck below the central aperture and its stopper, and a suspending strap adapted to pass over the cows' back, and be hooked to the body of the receptacle, as shown and described. 4th. In apparatus for milking cows, a teat cup or mouth-piece having an outer metal shell provided with a stop cock close to the top lip of the cup, and an inner perforated elastic tube of less diameter than the outer shell, and furnished with a thin perforated metal ring to which it is attached, and which serves to support it from the inner open end of said shell, as set forth.

No. 37,758. Seal. (Seau.)

Andrew Jackson Phelps, Syracuse, New York, U.S.A., 10th November, 1891; 5 years.

Claim.—1st. A package seal, consisting of a spherically tubular body, open at its upper and lower ends, and having prongs at its lower end, and a screw inserted through said openings, and having its head within the tubular body. 2nd. A package seal, consisting of a spherically tubular body, contracted at its upper and lower ends, and open thereat, a screw inserted vertically through the open ends, and a filling inserted into the body and compressed to fill it.

No. 37,759. Skate. (Patin.)

Ubel Wierda, Winsum, Groningen, Holland, 10th November, 1891; 5 years.

Claim.—1st. The combination in a skate, of a body having an upwardly turned heel plate, of a latch device at the heel plate adapted to engage a projection on the side of a shoe heel, substantially as described. 2nd. The combination in a skate, of a body, a reversible blade detachably held thereto, and pivotal stays for bracing said blade, substantially as described. 3rd. The combination in a skate, of a body having laterally-projecting studs B¹, having radial projections b, of a blade having apertures a¹ with lateral slots a² communicating with said apertures, substantially as described. 4th. The combination in a skate, of a body having laterally-projecting studs, and a blade having openings for receiving said studs, and a key for engaging said studs, substantially as described. 5th. The combination with a skate, of a latch having an opening for receiving a projection or pin on a boot or shoe, substantially as described. 6th. The combination, with a skate, of a wing screw having an eye to pass over a pin or stud, and provided externally with screw threads adapted to engage a countersink in the heel of a boot or shoe, substantially as described. 7th. In a skate, the combination of the blade having perforations adapted to receive studs, the body having studs adapted to pass through perforations in said blade, and means for locking, substantially as set forth. 8th. In a skate, the combination of a blade A, having perforations a¹, a skate body B, having slotted studs B¹, and a key C having thickened point c¹, substantially as set forth. 9th. In a skate, the combination of a body having downward projections adapted to receive a detachable blade, said projections provided with lateral studs, with means of securing said blades, a blade having each edge different from the other, and having perforations to receive studs on the body, said perforations being nearer one edge than the other, substantially as set forth.

No. 37,760. Feeder and Band Cutter for Thrashing Machines. (Appareil à couper les harts et alimenter les machines à battre.)

Victor E. Calderwood and Arthur Le Sueur, Arvilla, North Dakota, U.S.A., 10th November, 1891; 5 years.

Claim.—1st. The combination of the feeder-casing, the longitudinally-reciprocating feeder-bars having downwardly-extending flanges and provided with longitudinal guide-bars upon their under sides near their front ends, the crank-shaft having arms or cranks journaled in boxes or bearings upon the under sides of said feeder-bars, and a hinged plate having suitably-arranged boxes or bearings for the guide-bars at the rear ends of said feeder-bars, substantially as and for the purpose set forth. 2nd. The combination of the feeder-casing, the longitudinally-reciprocating feeder-bars having downwardly-extending flanges, a shaft having arms or cranks journaled in boxes arranged between the flanges upon the under sides of said feeder-bars, the longitudinal guide-bars at the front ends of said feeder-bars, and a feed-board arranged adjustably at the rear end of the feeder-casing and having boxes or bearings for the said guide-bars, substantially as set forth. 3rd. The combination of the feeder-casing, the longitudinally-reciprocating feeder-bars having guide-bars, a feed board at the rear end of the casing, a

plate hinged to said feed-board and having boxes or bearings in which the guide-bars of the feeder-bars are slidably mounted, and the shields mounted at the front and rear ends of the casing, substantially as set forth. 4th. The combination of the feeder-casing, the feed-board at the rear end of the same, the supplemental board hinged to the said feed-board, the longitudinally-reciprocating feeder-bars having their front ends connected with cranks upon a revolving shaft, and the guide-bars upon the under sides of the rear ends of said feeder-bars, mounted slidably in boxes upon the hinged supplemental feed-board, substantially as and for the purpose set forth. 5th. In a feeding device for thrashing-machines, the combination, with a suitable casing, of the longitudinally-reciprocating feeder bars having their rear ends mounted slidably in a feed-board which is adjustable in said casing, substantially as herein set forth. 6th. In a feeding device for thrashing-machines, the combination of a suitable casing, the longitudinally-reciprocating feeder-bars provided at their front ends with boxes journaled upon the cranks of a shaft mounted transversely in said casing, and a longitudinally-adjustable board having a hinged supplemental board with which the rear ends of said feeder-bars are slidably connected, substantially as set forth. 7th. The combination with the main feeder-casing provided at the upper edges of its side pieces with longitudinal shafts, of the carrier-frames hinged upon said shafts and having curved slots, the arms pivoted upon the ends of said shafts, the knife-carrying shafts journaled at the outer ends of said arms, and means for transmitting motion to the said knife-carrying shafts, substantially as and for the purpose set forth. 8th. The combination of the main feeder-casing having the longitudinal shafts at the upper edges of its side pieces, the carrier-frames hinged upon said shafts and provided at their outer ends with longitudinal shafts, the endless carriers mounted upon the shafts at the inner and outer ends of the carrier-frames, and the pivoted arms having the revolvable shafts provided with spirally-arranged serrated knives or cutters, substantially as and for the purpose set forth. 9th. In a band-cutting attachment for thrashing-machine feeders, the herein-described knife-carrying shafts mounted in pivoted arms and having spirally-arranged serrated knives or cutters, in combination with suitably-arranged springs to force the said knife-carrying shafts into engagement with the sheaves, substantially as set forth. 10th. The carrier-frames having the endless carriers, the pivoted end boards, and the pivoted spring-actuated boards or deflectors, substantially as and for the purpose herein set forth. 11th. The combination, with the carrier-frames having vertically-movable spring-actuated shafts provided with spirally arranged knives or cutters, of the pivoted end boards and the spring-actuated deflectors arranged below and in front of the said cutter-shafts, substantially as and for the purpose set forth.

No. 37,761. Jet Apparatus. (Appareil à jet.)

Louis Schutte, Philadelphia, Pennsylvania, U.S.A., 10th November, 1891; 5 years.

Claim.—1st. In a jet apparatus, and in combination with its actuating nozzle and one or more mixing nozzles, a throttle to control the delivery from the actuating nozzle and a vacuum mechanism to control the throttle communicating with the interior of the apparatus and exhausted by the current passing therethrough. 2nd. In a jet apparatus, a throttle to control its actuating jet, a pipe leading into the interior of the apparatus in position to be exhausted by the outgoing current, and an intermediate mechanism substantially as shown through which the vacuum is applied to operate the throttle. 3rd. In a jet apparatus, comprising the actuating and mixing nozzles the throttle, the weight or its equivalent tending to close the throttle and the vacuum mechanism to open the throttle, constructed and arranged to be exhausted by the current passing from the nozzles. 4th. In a jet apparatus, the throttle to control the actuating jet, its rack bar, the pinion, pinion shaft, and crank on the shaft, and the pipe connected at one end to the cylinder and exposed at the other end to the passing current in the apparatus. 5th. In a jet apparatus the exhausting nozzle, the final mixing nozzle, the support for a second nozzle, and the support for the external casing all cast in one piece as described and shown.

No. 37,762. Road Cart. (Desobligeante.)

John Vandyke, Sr., Grimsby, Ontario, Canada, 10th November, 1891; 5 years.

Claim.—1st. In a road cart, the combination, with the shafts and axle, of equalizing bars pivoted to clips or braces on the axle under or above it, substantially as and for the purpose specified. 2nd. In a road cart, the combination with the shafts and axle, of two half springs A, A, equalizing bars D, D, connected together by cleaves or the equivalent, all constructed and arranged substantially as and for the purpose specified. 3rd. In a road cart, the combination of axle B¹, shafts A¹, A¹, springs A, A, equalizing bars D, D, clips b¹, lugs b, and cleaves E, or the equivalent, substantially as and for the purpose specified.

No. 37,763. Machine for Boring Soil Under Water. (Appareil à percer la terre sous l'eau.)

James Canan, Port Colborne, Ontario, Canada, 10th November, 1891; 5 years.

Claim.—1st. A casing arranged to contain a turbine fixed to a vertical shaft suitably supported and extending through the bottom of the said casing and a pipe constructed and arranged to supply water under pressure to and downward through said casing, substantially as and for the purpose specified. 2nd. A casing arranged to contain a turbine fixed to a vertical shaft suitably supported and extending through the bottom of the said casing, which casing is provided with upwardly directed openings for the escape of the water forced into it, and a pipe constructed and arranged to supply water under pressure to said casing whereby it is driven through said