

No. 37,315. Dead Eye. (*Cap de mouton.*)

Warren Henry Carr, Charles Albert Hooker and David James Tabor, all of Bath, Maine, U.S.A., 4th September, 1891; 5 years.

Claim.—1st. An improved dead-eye, consisting of a block or body portion having a plurality of openings made therein, and blocks rigidly secured in said openings, substantially as shown and described. 2nd. An improved dead-eye, consisting of a block or body portion having a plurality of openings, the openings being concaved the bottoms being straight and recessed, a plurality of blocks arranged in the openings the upper surface being concaved the lower surface being straight, and provided with projections and the tie-rod, all arranged as described. 3rd. As an improved article, a dead-eye having a plurality of openings, each having a concaved top and recessed bottom, the blocks of lignum vital arranged in the openings, each having a concaved top and bottom with a projection the tie-rod, the metallic band and bolt, all arranged and adapted to operate, substantially as shown and described.

No. 37,316. Key Attachment for Musical Instruments. (*Instrument de musique à clé.*)

Annie Dixon, (assignee of Robert Emmanuel Bell), both of Toronto, Ontario, Canada, 4th September, 1891; 5 years.

Claim.—1st. In a key instrument, a series of levers arranged between the key-board and sounding mechanism of the instrument, in combination with mechanism by which the said levers may be adjusted so as to bring a higher or lower toned note in connection with the key in which the piece is written, substantially as and for the purpose specified. 2nd. In an organ, a series of levers arranged between the sticker pins and key-board, and connected to a flexible frame pivoted on the centre line of the sticker pins, in combination with mechanism by which the said flexible frame may be adjusted so as to bring a higher or lower toned note, in connection with the key in which the piece is written, substantially as and for the purpose specified. 3rd. In an organ, a series of levers arranged between the sticker pins and key-board and connected to a flexible frame pivoted on the centre line of the sticker pins, and supported on a tilting frame, in combination with mechanism arranged to first tilt the levers clear of the buttons on the keys, and then adjust them so as to bring a higher or lower toned note in connection with the key in which the piece is written, substantially as and for the purpose specified. 4th. In an organ, a series of levers arranged between the sticker pins and key-board, and connected to a flexible frame, in combination with a series of levers one resting on each coupler wire and arranged in connection with the adjusting levers so that the octave will remain correct, notwithstanding the adjustment of the said levers, substantially as and for the purpose specified.

No. 37,317. Sheaf Carrier and Means for Attaching and Working the Same. (*Porte-gerbe et lieuse.*)

William Wallace Norton, Adelaide, and Peter Sinton Mitchell, Mount Gambier, both in South Australia, Australia, 4th September, 1891; 5 years.

Claim.—1st. In the construction of reaping and binding machines the forming a sheaf carrier whose arms are in one length attached at or about the middle to a single, double or multiple band or frame, such as F, provided at its upper ends with a pair of pivot hinges such as F¹, F², which allow the same to tip and deposit the sheaves on the field, as and when required. 2nd. In reaping and binding machines, the double lever P, by which in conjunction with the cord or chain M, the sheaf-carrier is held in its required position to receive the sheaves, the essential feature of such lever being that when the cord is above the pivot or fulcrum the carrier is held in position for filling, and the lever is readily depressed by the driver pushing the same with his foot, which releases the cord or chain, and allows the sheaf carrier to tip and discharge. 3rd. In reaping and binding machines, the spring K, attached by one end to a lever or projection, of the sheaf-carrier, and by the other to a regulating screw such as K¹, or to a fixed portion of the machine for the purpose of tipping and discharging the sheaf-carrier when the holding cord or chain is released by the driver. 4th. In reaping and binding machines, the combination and arrangement of a sheaf carrier hinged on one central axis or pair of pivots, forming an axis with a clutch or lever such as P, actuating a cord or chain or rods to hold the sheaf carrier in position, and a spring K, and lever piece F³, to tip and empty the sheaf carrier when the holding cord or chain is released by the drivers foot, substantially as described and illustrated in the drawings.

No. 37,318. Coin-Freed Apparatus for Delivering Goods. (*Appareil actionné par une pièce de monnaie pour livrer les marchandises.*)

Samuel S. Allin, Bedford Park, Middlesex, England, 4th September, 1891; 5 years.

Claim.—1st. The combination of a set of circularly arranged knobs or pulls, and their feathered stems with a notched ring caused to turn partly round by the weight of introduced coins, substantially as and for the purposes herein set forth. 2nd. In combination, with the pulls and notched ring above referred to, a balanced arm or set of balanced arms supporting the lever carrying the coin or coins, and so determining the position of the ring until the movement of the ring effected by the sloped feather of the pull causes the coin or coins to be discharged, substantially as described. 3rd. In coin feed delivery apparatus, a measuring vessel for liquids constructed in cylindrical form with inlet openings in its side near, one end capped and provided with an outlet near the other end, and having a piston,

packed loosely, and piston rod, a cross head, a valve, and springs, the said piston and valve respectively being normally held in such position as to allow said inlet openings to communicate with the interior of the cylinder and to shut off or close the outlet, and afterwards, by the movement of said piston rod, to first shut off the inlet openings, and subsequently open the outlet valve. 4th. In coin feed delivery apparatus, a measuring vessel for liquids constructed in cylindrical form with inlet openings in its side near one end, and capped, and provided with an outlet near the other end and having a piston rod and two loosely packed pistons, one of which is mounted rigidly and the other loosely on such rod so that this latter can slide through the loose one, springs for holding said pistons normally apart and in such positions relatively to the inlet and outlet openings as to allow the former to communicate with the interior of the cylinder, and the latter to be shut off therefrom, the movement of said piston rod serving to first shut off the inlet openings, and subsequently allow the contents of the cylinder to pass through the outlet. 5th. Applying to the end of a cistern heated by gas, a spring connected to the gas cock so that on the contents of the cistern becoming considerably reduced the gas supply is reduced or cut off, substantially as described. 6th. In coin feed delivery apparatus, the appliance for delivering paper cups and the like, which embraces an endless chain with supporting wheels, and having project-spring clips in which said cups are carried, ratchet and pawl mechanism for imparting a step by step movement to one of said wheels, means whereby the purchaser may operate said ratchet and pawl mechanism, a pair of inclined arms for freeing said cups from the clips and an inclined shoot for guiding it to a delivery mouth. 7th. In combination with a case containing packets or solid articles, a spring arranged to act in aid of the counterweight, and the pawl for delivering the uppermost article, as herein described.

No. 37,319. Straight Knitting Machine.

(*Machine à tricoter.*)

Joseph Bendor, Philadelphia, Pennsylvania, U.S.A., 4th September, 1891; 5 years.

Claim.—1st. In a knitting machine of the class recited, the combination, with the needle bed, its needles and the cam-frame of the slide plate transversely movable within said frame, the needle actuating cams mounted upon the slide-plate, the longitudinal slide-bar and provisions whereby it is connected with said plate and adapted to reciprocate the same to throw the cams into or out of action, substantially as described. 2nd. In a knitting machine of the class recited, the combination, with the needle-bed, the needles therein contained, and the cam frame, of the transverse slide-plate arranged within said frame carrying thereon the needle actuating cams, and provided with inclined face-slots and the longitudinal slide bar having studs which engage with said slots, substantially as described. 3rd. In a knitting machine of the class recited, the combination, with the needle bed, the needles therein, and the cam frame, of the transverse slide-plate arranged in said frame and carrying the needle actuating cams, the longitudinal slide-bar provided with the edge notches or recesses, provisions whereby said bar is connected with the slide-plate and adapted to reciprocate the same to throw the cams into or out of action, and the spring controlled locking pin adapted to engage with said notches or recesses successively, substantially as described. 4th. In a knitting machine of the class recited, the combination, with the needle-bed, the needles therein, and the cam frame, of the transverse slide plate arranged in said frame and carrying the needle actuating cams, the longitudinal slide bars provisions, whereby it is operatively connected with said plate and adapted to reciprocate the same so as to throw the cams into or out of action with the needles, the cam regulating bar, the inclined tooth and notch arranged with opposite relation to each other, in said regulating bar and slide plate, and the screw for adjustably securing said regulating-bar in position, substantially as described. 5th. In a knitting machine, the combination, with the cam frame the notched slide-plate therein, and the needle-actuating cams supported upon said plate, of the adjustable toothed bar disposed in the path of said slide plate and the adjusting screws, substantially as described. 6th. The combination, in a knitting machine with the cam frame, the notched slide plate therein, and the needle-actuating cams supported upon said plate, of the movable toothed bar provided with the slotted end-lug, and the flanged set screw engaging said slotted lug and working in the cam frame, substantially as described. 7th. In a knitting machine of the class recited, the combination with the cam frame, the slide-plate therein, the longitudinal slide-bar provisions, whereby said plate and bar are operatively connected and the needle actuating cams supported upon said slide plate, of the needle-controlling cam d', supported below said cams, substantially as described. 8th. In a knitting machine of the class recited, the combination, with the cam frame, the slide-plate therein, the longitudinal slide-bar provisions, whereby said plate and bar are operatively connected and the needle-actuating cams and needle-controlling cam-bar supported upon said plate, of the sliding safety-cam loosely secured to the cam frame below said slide-plate, substantially as described. 9th. In a knitting machine of the class recited, the combination, with the needle-bed, the needles therein, the reciprocating cam-frame, the mechanism for reciprocating the latter, the sliding needle-cam supporting plate within said frame, the slide-bar and provisions, whereby it is operatively connected with said plate, of the fixed end stop, the laterally-movable end stop or block, the rock-arm supporting said block, the rock-shaft, the arm on the extremity of the latter, the measuring device such as the described chain with which said latter arm engages and by which it is actuated, and means, such as the cam and pawl and ratchet mechanism, for operating said measuring device, substantially as described. 10th. In a knitting machine, the combination, with the needle-bed, the needles therein, the reciprocating cam-frame, the mechanism for reciprocating the latter, the sliding needle cam-supporting plate in said frame, the slide bar and provisions whereby it is operatively connected with said plate, of the fixed end stop, the laterally-movable end stop or block provided with the offset or stop thereon, the rock arm supporting said block, the rock shaft, the arm on the extremity of the latter, the measur-