

valve chamber provided with a double acting valve and seatings held in position with locking rings or equivalent device, one such locking ring having a strainer or filter attached which will be withdrawn from its position when the valve chamber is taken out of the faucet as described and for the purposes set forth. 2nd. In a tapping cock as described in claim 1, the use of an outer casing or faucet (either with or without a self acting air vent) provided with a driving cap and the alternative or separate use of a cap and union, and cap or bib cock, as described and shown and for the purposes set forth. 3rd. In tapping cocks the use of a removable double acting valve and chamber in combination with a strainer or filter, alike applicable for beer engines, pumps, and bib cocks as described and shown. 4th. In tapping cocks the use of a self acting air vent as described and shown.

No. 41,194. Wrench. (Clé à écon.)

William Forgie, Washington, Pennsylvania, U. S. A., 12th December, 1892; 6 years.

Claim.—1st. The combination with a bar having a stationary wrench mounted thereon, of a carriage movable on the bar and a wrench mounted on said carriage. 2nd. The combination, with a bar having a fixed bearing for a wrench handle, of a carriage mounted on a bar and also having a bearing for a wrench handle and devices substantially as described, for moving the carriage on the bar, for the purpose set forth. 3rd. In an apparatus for operating the couplings of drill rods for well boring apparatus, the combination of a segmental rack bar, a carriage fitted thereon and having mechanism, substantially as described, arranged to engage the rack bar and feed or move the carriage by a step by step motion, a stationary wrench and a movable wrench fitted on or connected to the carriage to be moved by the latter, substantially as and for the purpose described. 4th. In an apparatus for operating the couplings of drill rods for well boring apparatus, the combination of a segmental rack bar, a carriage fitted thereon, a lever fulcrumed in the carriage, the feeding pawls pivoted to the lever on opposite sides of its fulcrum and arranged to engage the rack bar to feed the carriage with a step by step motion and the wrenches, substantially as and for the purpose described. 5th. In an apparatus for operating couplings of drill rods for well boring apparatus, the combination of a segmental rack bar, substantially T-shaped in cross section, a carriage fitted on said rack bar, and having the inwardly extending flanges, which fit in the recesses in the sides of said bar, a lever fulcrumed in the carriage, the feeding pawls pivoted to the lever on opposite sides of the fulcrum, and arranged to engage the rack bar to feed the carriage with step by step motion, and wrenches, substantially as and for the purpose described. 6th. In an apparatus, for operating the couplings of drill rods for well boring apparatus, the combination, with a segmental rack bar and the wrenches of a travelling carriage, a lever, the feeding pawls carried by the lever, and mechanism, substantially as described, for controlling the feeding pawls to permit them to be temporarily disengaged from the rack bar, when the lever is operated, and allow the carriage to be forced backward a limited distance, under the pressure of the wrenches, substantially as and for the purpose described. 7th. In an apparatus for operating the couplings of drill rods for well boring apparatus, the combination with a rack bar and the wrenches, of a carriage, a lever, the feeding pawls, a supplemental pawl carried by each feeding pawl, and a reversing plate arranged to be lifted vertically to control the supplemental pawls to such an extent that they lift both feeding pawls to temporarily out of engagement with the rack bar during a portion of each movement of the lever, substantially as and for the purpose described. 8th. In an apparatus for operating the coupling of drill rods for well boring apparatus, the combination with the rack bar and the wrenches, of a carriage, a lever carrying the feeding pawls, a reversing plate having cam surfaces, as described, and a spring controlled supplemental pawl carried by each feeding pawl, and riding against one of the cam surfaces on the reversing plate, substantially as and for the purpose described. 9th. In an apparatus for operating the coupling of drill rods for well boring apparatus, the combination, with a rack bar and the wrenches, of a carriage, a lever carrying the feeding pawls, a supplemental pawl pivoted to each feeding pawl, a spring intermediate of the feeding and supplemental pawls, a pivoted reversing plate, having the cam surfaces, against which ride the heels of the supplemental pawls, and an eccentric for lifting the reversing plate vertically, substantially as described. 10th. In an apparatus, for operating the coupling of drill rods for well boring apparatus, the combination of a segmental rack bar, the wrenches, a carriage fitted on the rack bar, a lever fulcrumed in the carriage, the upper and lower feeding pawls pivoted to the lever on opposite sides of its fulcrum, and a lift pin projecting laterally from the lower feeding pawl, substantially as described. 11th. The combination, with a bar, a movable carriage or its equivalent, and a lever having means, substantially as described, which engage said bar to move the carriage, of the supplemental pawls, and a plate against which said pawls ride or impinge, for the purpose set forth, substantially as described. 12th. The combination, with a bar, a movable carriage or its equivalent, and a lever having feeding devices, substantially as described, which engage said bar to move the carriage thereon, of an adjustable plate connected to said carriage, the supplemental pawls attached to the feeding devices on the lever, and riding or bearing against the adjustable plate, as and for the

purpose set forth. 13th. The combination, with a rack bar, a sliding part or carriage, and a lever suitably supported on said sliding part or carriage, of the feeding pawls and mechanism, substantially as described, for controlling the movement of said feeding pawls, so as to allow the sliding part or carriage to be moved in either direction by swinging the lever on its fulcrum, as and for the purpose described.

No. 41,195. Machine for Making Paper Bags. (Machine à faire des sacs en papier.)

Samuel Cupples, assignee of James West, both of St. Louis, Missouri. U.S.A., 12th December, 1892; 6 years.

Claim.—1st. The combination with the devices for forming tubular bag sections, of bottoming rolls provided with a creaser blade and gripper devices, substantially as and for the purpose set forth. 2nd. The combination of the tube forming devices of a paper bag machine, of bottoming rolls, one carrying a transverse creaser blade and the other provided with transverse gripper jaws, and means for opening and closing said jaws to receive grip and release a fold of the paper, substantially as set forth. 3rd. The combination with the tube forming devices of a bag machine, of two bottoming rolls, one carrying a creaser blade and the other provided with a recess, and with a blade movable across said recess, and devices for moving the blade to or from one end of the recess, substantially as and for the purpose set forth. 4th. The combination with the tube forming device of a bag making machine, of bottoming rolls, one provided with a transverse blade and the other with gripper jaws, a lever connected with the movable jaws, and adjustable contacts arranged to act upon said lever at different points of the revolution of the roll, substantially as described. 5th. The combination with the devices for forming the tube, of bottoming rolls, one of which is provided with a transverse type 22, and paste feeder roll arranged to make contact with said type, substantially as set forth. 6th. The combination with the bottoming rolls, their creasing blade and gripper jaws, of a paste type 22, arranged adjacent to the creasing blade, substantially as set forth. 7th. The combination with the devices for forming a paper tube, of bottoming rolls, one provided with a punch and the other with a die, substantially as described. 8th. The combination of the devices for forming and feeding a paper tube, of rolls 4, 5, one having a projection pin and the other a die, with a recess to receive said pin, and a chamber below said recess, substantially as set forth. 9th. The combination with the bottoming rolls 4, 5, of a type carried by the said rollers, substantially as set forth. 10th. The combination with the bottoming rolls, of a type carried by one of the rolls, the other provided with a socket, with a yielding block therein, for the purpose described. 11th. The bottoming rolls provided with peripheral annular recesses or grooves, each having a block adjustably secured therein, and supporting part of the operating devices carried by said roll, substantially as set forth. 12th. The combination with the roll 5, having a peripheral recess, of a block fitting said recess and supporting the die, substantially as described. 13th. The combination with the roll 5, its peripheral recess and block, of a type supported by said block, substantially as set forth. 14th. The combination with the rolls 4, 5, having peripheral recesses, of the blocks C, C', one supporting a die and the other a punch, substantially as described. 15th. The combination with the roll 4, having a transverse socket, of a detachable block C', supporting a part of the bottom forming devices, substantially as described.

No. 40,196. Refrigerator. (Glacière.)

Everard Hesketh and Alexander Marcet, of 23 St. Swithin's Lane, London, England, 13th December, 1892; 6 years.

Claim.—1st. In, or for, freezing or chilling meat, or other articles a freezing or chilling room through which travel carriers so that the carcasses, or articles, are introduced into, and carried through the said room and delivered therefrom, substantially as hereinbefore described. 2nd. In, or for, freezing or chilling meat, or other articles, a freezing or chilling room through which travel carriers, so that the carcasses or articles are introduced into, and carried through the said room and delivered therefrom at the end of the room at which cold air or cooling medium is introduced, substantially as hereinbefore described. 3rd. In, or for, freezing or chilling meat, or other articles, a hanging room and a freezing or chilling room, and a bagging or discharging room arranged in line, or series, with each other with a carrier, or carriers, arranged to carry the meat, or articles, progressively through the said rooms, substantially as hereinbefore described. 4th. The combination with the freezing or chilling room of endless series of carriers passing therethrough so as to carry the carcasses or articles, through the said chamber, substantially as hereinbefore described. 5th. The arrangement and combination of parts constituting the means for use in freezing or chilling meat, or other articles, substantially as hereinbefore described and illustrated in the accompanying drawings.

No. 41,197. Vest Shield. (Renfort de veste.)

John Francis Bullock, Saint John, New Brunswick, Canada, 13th December, 1892; 6 years.

Claim.—1st. The clasps B and C in combination with the frame work A having curves F and G, and the shield L, having lining M, provided with openings, substantially as and for the purposes