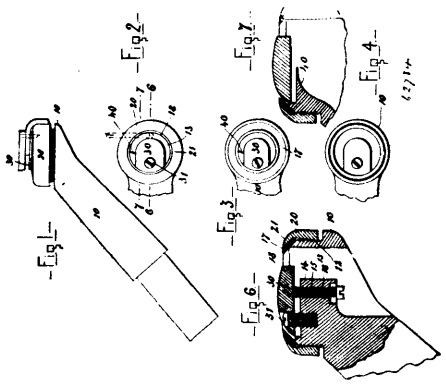
in which the chains or other flexible connections between the cylindrical or other vessels are spaced and maintained apart in two groups near to the ends of the said vessels and are (*a*) hauled in by the action of sets of movable pulleys 14 that are forced away from sets of fixed pulleys 17 by hydraulic rams 12, or cylinders 34, operated by motors 31 located within the vessels and controlled from the surface of water (*b*) and are simultaneously forced to move from the points at which they first enter the vessels through the longitudinal slots or openings 23, and to travel in an inward direction away from the ends of the veesels by means of wheels or pulleys 21 over and partly around which the chains first pass after entering the vessels and which are connected with the longitudinally movable parts of the hydraulic apparatus. 10th. In apparatus of the kind specified, hydraulic hauling-in mechanism, comprising hydraulic cylinders and rams and means for supplying them with liquid under pressure, fixed and movable sets of pulleys, the movable set being carried by the movable part of the hydraulic apparatus, chains wheels carried by said movable part of the hydraulic apparatus, chains extending over and partly round said sets of pulleys and over and partly around the chain wheels, and means for preventing backward rotation of said chain wheels, substantially as described and shown. 11th. In apparatus of the kind specified, hydraulic hauling-in mechanism, comprising hydraulic cylinders and rams, and means for supplying them with liquid under pressure, fixed and movable sets of pulleys, the movable set being carried by the movable part of the hydraulic apparatus, chain-wheels carried by sai l movable part of the hydraulic apparatus and adapted to permit of the free passage over them of chains of smaller size and to gear with chains of larger size, chains extending over and partly round said sets of pulleys and over and partly around the chain-wheels, and having their central portions of greater size and strength than their remaining portions, and ratchet mechanism adapted to prevent backward rotation of said chain-wheels, substantially as described and shown. 12th. In apparatus of the kind described, hydraulic hauling-in mechanism, comprising hydraulic cylinders and rams, and means for supplying them with liquid under pressure, fixed and movable sets of pulleys, the movable set being carried by the movable part of the hydraulic apparatus, chain-wheels carried by said movable part of the hydraulic apparatus, chains extending over and partly round said sets of pulleys and over and partly round the chain-wheels, means for preventing backward rotation of said chain-wheels, and means, substantially as described and shown, for supporting the hydraulic rams as they leave their cylinders, as set forth. 13th. In apparatus of the kind herein referred to, means, substantially as hereinbefore described with reference to and shown in the drawings annexed, for admitting water to the interior of the cylindrical or other vessels for the purpose of causing them to sink, and whereby water can be afterwards withdrawn from and air admitted to the interiors of the said vessels in order to cause them to rise. 14th. In apparatus of the kind hereinbefore referred to, the combination with the chains or other flexible connections between the cylindrical or other vessels of readily detachable buoys that are spaced apart and connected together by rigid connections, substantially as hereinbefore described, for the purpose specified.

No. 62,784. Pegging Machine. (*Machine à cheviller.*)

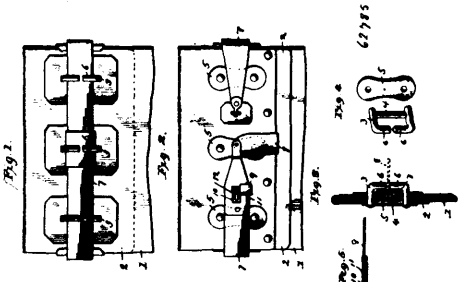


Elouild Duplessis, St. Hyacinthe, Quebec, Canada, 27th February, 1899; 6 years. (Filed 14th February, 1899.)

Claim.—1st. In a pegging-machine, a stationary cutter diagonally intersecting the path of the driven pegs in their travel with the work during the feeding thereof, and means for securing said cutter against displacement, for the purpose set forth. 2nd. In a pegging-machine, a stationary annular cutter consisting of a ring having its inner edge sharpened, said ring being rigidly mounted eccentrically of the point at which the pegs are driven, and means for securing said cutter against displacement. 3rd. In a pegging-machine, a horn or work support formed with an annular stationary part located eccentrically of the point at which the pegs are driven, a cutter consisting of a ring having its inner edge sharpened, and rigidly mounted upon said annular part concentrically thereof, and means for securing said cutter rigidly against displacement, substantially as described and for the purpose set forth. 4th. In a pegging-machine, a stationary cutter diagonally intersecting the path of the driven pegs in their travel with the work during their feeding thereof, means for securing said cutter against displacement, and a work supporting part free from said cutter and located adjacent to the cutting edge thereof, for the purpose set forth. 5th. In a pegging-machine, a stationary cutter diagonally intersecting the path of the driven pegs in their travel with the work during the feeding thereof, and means comprising a work supporting part for securing said cutter against displacement, for the purpose set forth. 6th. In a pegging-machine, a stationary cutter diagonally intersecting the path of the driven pegs in their travel with the work during the feeding thereof, means comprising a work supporting part for securing said cutter against displacement, and a work supporting part free from said cutter and located adjacent to the cutting edge thereof, for the purpose set forth. 7th. In a pegging-machine, a stationary cutter diagonally intersecting the path of the driven pegs in their travel with the work during the feeding thereof, means for securing said cutter against displacement, and a vertically adjustable work supporting part free from said cutter and located adjacent to the cutting edge thereof, for the purpose set forth. 8th. In a pegging-machine, a stationary cutter diagonally intersecting the path of the driven pegs in their travel with the work during the feeding thereof, means comprising a work supporting part for securing said cutter against displacement and a vertically adjustable work supporting part free from said cutter located adjacent to the cutting edge thereof, for the purpose set forth. 9th. In a pegging-machine, a horn or work support formed with an annular stationary part located eccentrically of the point at which the pegs are driven, a cutter, consisting of a ring having its inner edge sharpened, and rigidly mounted upon said annular part eccentrically thereof, means comprising a work supporting part for securing said cutter rigidly against displacement and a work supporting part located within and concentrically of said cutter, substantially as described and for the purpose set forth. 10th. In a pegging-machine, a horn or work support formed wlth an annular stationary part located eccentrically of the point at which the pegs are driven, a cutter consisting of a ring having its inner edge sharpened, and rigidly mounted upon said annular part concentrically thereof, means comprising a work supporting part for securing said cutter rigidly against displacement and a vertically adjustable work supporting part located within and concentrically of said cutter, substantially as described and for the purpose set forth. 11th. In a pegging-machine, a horn or work support formed with an annular stationary part, a cutter consisting of a ring having its inner edge sharpened, and rigidly mounted upon said annular part and concentrically thereof, and said annular part having its perimeter screw-threaded, a retaining sleeve having its upper edge diminished in interior diameter to bear upon said ring and having the interior of its lower portion screw-threaded to take in the screw-threads of said annular part, substantially as described and for the purpose set forth. 12th. In a pegging-machine, a horn or work support formed with an annular stationary part, a cutter consisting of a ring having its inner edge sharpened, and rigidly mounted upon said annular part and concentrically thereof and said annular part having its perimeter screw-threaded, a retaining sleeve having its upper edge diminished in interior diameter to bear upon said ring and having the interior of its lower portion screw-threaded to take into the screw threads of said annular part, a centre lineally extending arm formed on the interior of said annular part, a vertically adjustable screw carried by the inner end of said arm, an upwardly flared web connecting one side of said arm to the adjacent portion of said annular part, and a work supporting plate secured to said arm and resting upon said vertically adjustable screw, substantially as described and for the purpose set forth.

No. 62,785. Mail Sack Fastening.

(*Attache de sac de malles.*)



Alexander Braley, Langsville, Ohio, U. S. A., 27th February, 1899; 6 years. (Filed 16th February, 1899.)

Claim.—1st. The combination with a mail-sack, of strap loops or staples having their outer transverse bars divided centrally on their length, and a locking strap provided on its free end with a swiveling piece adapted to pass between the adjacent ends of the divided bars, substantially as described. 2nd. In a mail-sack, the combination with the folding flap thereof, of the locking-strap loops or staples