

upwardly and rearwardly curved branches provided in the inside of their horizontal portions, with aligned vertical recesses of the thill section having a T-branch adapted to be seated in the curved branches of the main plate, the locking plate adapted to be connected to the main plate, and having the reduced forward portion and the angular branch adapted to be seated in the recesses of the curved branches of the main plate, and the interposed rubber block between the locking plate and the T-branch of the thill section, substantially as specified. 2nd. In a thill coupling, the combination, with a main plate longitudinally slotted in its forward portion, and having the upwardly and rearwardly curved branches provided in the inside of their horizontal portions with aligned vertical recesses of the thill section having a T-branch adapted to be seated in the curved branches of the main plate, and the locking plate having the forward reduced portion, and the angular branch adapted to be seated in the recesses of the curved branches of the main plate, substantially as and for the purpose described.

No. 37,142. Machine for Cutting or Trimming Miter. (*Machine pour couper et dresser à onglet.*)

Willis J. Perkins, Grand Rapids, Michigan, U.S.A., 12th August, 1891; 5 years.

Claim.—1st. In combination, with the floor or table, of a slicing machine, an arched knife guiding way above and below the knife and in proximity to the straight edge of the table, and a knife travelling in said way with its edges moving in a plane parallel with the straight edge of the table, substantially as described. 2nd. The miter machine table having an arched track adjacent to its rear edge and integral with the table, a second arched track concentric with the first and connected to the table by standards, and a knife carrier arranged between the tracks to run on the arched way, in combination, substantially as described. 3rd. The miter table having guide ways adjacent to its rear edge and above and below the knife, the knife carrier moving in said guide ways, and a knife on said carrier having its edge inclined with reference to the table, so as to move past the same with a shear cut, in combination, substantially as described. 4th. The miter machine having concentric curved tracks, the double inclined knife carrier moving in the way formed by said tracks, the knives, one at each side of said carrier, and the block interposed between said knives, whereby the knives brace each other, all in combination, substantially as described. 5th. In a mitering machine, the combination of a table, a knife moving in a curved way so as to shear against a straight side of the table, a fence pivoted to swing on the face of the table and retain its corner in line with the edge of the knife, and a clamp for holding the free end of the fence. 6th. The combination of the table, the fence pivoted thereto, the clamp for holding the swinging end of the fence to the table, and a separately movable gage held by said clamp and serving as an auxiliary to the fence. 7th. The combination, with the table having a fulcrum below the knife carrier, and a knife carrier moving adjacent to said table, of a lever engaging said fulcrum and carrier, said lever provided with teeth or projections, and a detachable handle engaging said teeth and also engaging the body of the lever, substantially as described. 8th. The combination, with the table, knife way, and knife carrier therein, of a fulcrum below said knife carrier, a lever engaging said fulcrum and the knife carrier and having a variable leverage and lost motion between the two, and a handle for operating said lever, as set forth. 9th. In a mitering machine, the table having a knife way, the knife carrier moving in said way, the lever engaging said knife carrier and a fulcrum so as to permit a lost motion as described, and an operating handle adjustably secured to said lever, the specified elements being combined, substantially as described. 10th. The combination of the table having a curved track adjacent to its rear edge and a fulcrum below said track, a second curved track concentric with the first above the table, the knife carrier moving between said tracks, a slotted lever provided with segmental teeth having its slot around said fulcrum and engaging projection from said carrier, and a detachable handle engaging the teeth of said segment and having likewise an end connecting to the lever, all substantially as described. 11th. In combination, with the table and knife carrier moving in ways adjacent thereto, an operating lever extending alongside the knife carrier and having a projection engaging the same, a fulcrum below the engaging surfaces of the lever and knife carrier, and an adjustable handle connected to said lever, substantially as described.

No. 37,143. Corset Fastening. (*Agrafe de corset*)

Cassious May Thomas, Camden, Ohio, U.S.A., 12th August, 1891; 5 years.

Claim.—A corset fastening, consisting of a busk provided with a series of studs having eccentric heads, and a companion busk having a series of sockets members each comprising a shank, and a dome shaped hollow head projecting from said shank and having a V-shaped opening in its under side leading to the interior of the dome, substantially as described.

No. 37,144. Water Meter. (*Compteur à eau.*)

Rogers Liquid Meter Company, Boston, (assignees of Richard Jackson Rogers, Chelsea), both in Massachusetts, U.S.A., 12th August, 1891; 5 years.

Claim.—1st. In an oscillating water meter, the combination of the measuring cylinder A, provided with the trunnions A¹ and A², an enclosing casing composed of the central ring or band B, provided with the inlet pipe B², and the two cylinders B, screwed into said ring, and having their outer ends closed by heads formed in one piece therewith, and the cylinder supporting discharge pipe C, screwed into said ring and forming a bearing for the hollow trunnion A². 2nd. The combination of the outer casing B, B¹, provided with

the inlet pipe B², the branch pipes c², and c³, having orifices e¹, and e², respectively, the valve seat d, provided with the two ports e, and e¹, the measuring cylinder A, mounted in trunnion bearings at the centre of its length the valve rod b¹, extending the whole length of said cylinder and mounted in bearings so as to be movable endwise therein, the valve b, attached to the middle of said rod, and constructed and arranged to operate in conjunction with the seat d, and ports e, and e¹, to determine the flow of the inlet water through the pipes c², and c³, and a pad g¹, mounted upon each end of the rod b¹, constructed and arranged to be alternately acted upon by the jet of water escaping from the orifice e¹, or e². 3rd. The combination of an oscillating measuring cylinder provided on the exterior of each head, with a projecting lug or shoulder, two latch levers constructed and arranged to engage with said lugs or shoulders alternately at the end of the cylinder that is the most elevated to lock said cylinder, a reciprocating piston within said cylinder, a pendent vibratory lever mounted in the inner face of each cylinder head on a rocker shaft, another pendent lever mounted on each of said rocker shafts and arranged to act upon the latch levers to disengage them from the lugs on said heads, when the piston comes in contact with and vibrates the levers within the cylinder, substantially as described. 4th. The combination of the cylinder A, the piston D, the lugs or shoulders a², a³, the levers f, provided with shoulders f¹, and the pins or lugs f², the valve rod b¹, mounted in bearings on said cylinder and carrying the valve b, the arms g, and pads g¹, mounted on each end of the valve rod b¹, the pendent levers a², and a³, and the rocker shaft a¹, all constructed, arranged and operating, substantially as described. 5th. The combination, in a water meter, of an oscillating measuring cylinder mounted on trunnions in an outer enclosing, and water containing casing an inlet pipe opening into said outer casing, a discharge pipe opening from one of said trunnions an inlet valve and casing, and an exhaust valve and casing on each side of said trunnion and between it and the end of said cylinder, pipes connecting said discharge trunnion with each exhaust casing, each of said exhaust casings with an inlet casing, and each inlet valve casing with the interior of the cylinder, and two valve operating levers supported in fixed bearings at their outer ends, and each extending inwards beneath an inlet, and an exhaust valve in positions to act upon the lower ends of the stems of said valves projecting through their casings, and pivoted at points central between said outlet and exhaust casings to bars connecting said casings, substantially as described.

No. 37,145. Holder for Cuffs.

(*Bouton de manchette.*)

Harvey Dwight Blakeslee, (assignee of Henry H. Baker), both of Buffalo, New York, U.S.A., 12th August, 1891; 5 years.

Claim.—1st. In a cuff holder, the combination, with a bar or shank provided near one of its ends with a stud or button adapted to engage with the button-hole of a cuff, and with a series of indentations or openings arranged lengthwise on the face of said shank, of a loop in which the shank is adjustably and removably secured, a spring catch arranged on said loop and engaging with the indentations of the shank, and a stud or button formed on the rear side of said loop and forming a sleeve button for connecting the ends of the wrist band, substantially as set forth. 2nd. In a cuff holder, the combination, with a loop having a button, and a spring-tongue formed integral therewith and provided with a projection, of an adjustable bar or shank arranged in said loop and provided with a button, and with a series of indentations or openings in which the projection of the spring tongue engages, substantially as set forth. 3rd. In a cuff holder, the combination, with the loop having a button and a spring catch, of a bar or shank adjustably arranged in said loop and having a series of indentations, and a button formed integral therewith and composed of two reverse tongues cut out of the bar and bent upwardly to form the shank of the button, and thence outwardly in opposite directions to form the head thereof, substantially as set forth.

No. 37,146. Gear for Disengaging the Boats of Ships. (*Palan à l'usage des embarcations sur les navires.*)

Henry John Simpson and Harold Herom Hosack, both of Liverpool, England, 12th August, 1891; 5 years.

Claim.—1st. The combination, with a ship's boat, of a hook b, at each end pivotedly mounted in bearings c, and having their axes disposed fore and aft in the horizontal plane: a projecting provision f, disposed below the said hooks b, with its point or free end lying in close proximity with the point of the hooks b, when turned down and in their engaged position, the ring or hook m, of the raising and lowering tackle of the boat being adapted to pass into said hooks b, over their ends, and means such as a bar or bars, ropes or cords, or levers by which said hooks are connected together and adapted to operate in unison. 2nd. The combination, with a ship's boat of a hook b, at each end pivotedly mounted in bearings c, and having its axis disposed fore and aft in the horizontal plane: a connecting bar a, the axis of which lies coincidently with those of the hooks b: a lever h, by which said bar a, and hooks b, are moved about their axes: a projecting provision f, disposed below the said hooks b, with its point or free end lying in close proximity with the point of the hooks b, when turned down and in their engaged position, substantially as set forth. 3rd. The combination, with a ship's boat, of a hook b, at each end, pivotedly mounted in bearings c, and having its axis disposed fore and aft in the horizontal plane, a bar d, vertically disposed in the boat and secured at its lower end to the keel of the boat, a connecting bar a, the axis of which lies coincidently with those of the hooks b, a lever h, by which said bar a, and hooks b, are moved about their axes, a projecting provision f, disposed below the said hooks b, with its point or free end lying in close proximity with the points of the hooks b, when turned down and in their engaged position, substantially as set forth. 4th. The combination, with a ship's boat, of a hook b, at each end pivotedly mounted in bearings c, and having their axis disposed fore and aft in the horizontal plane,