

gang, of a series of disks, cylindrical hollow spools, a clamp-rod, and supporting collars arranged to hold the parts concentric with each other. 10th. In a disk-harrow, having one gang placed rearwardly of the other, the rearward having more disks than the forward gang to counteract side draft. 11th. In a disk-harrow, a tongue composed of two pieces extending directly to the gangs and joined at their forward ends, as and for the purpose set forth. 12th. A harrow-disk of spheroidal or equivalent shape, as set forth. 13th. A harrow-disk having a diametral section a , b , c , Fig. 11, or its equivalent, as set forth.

No. 32,666. Machinery for Manufacturing Peat Fuel. (*Machinerie pour la fabrication de la tourbe combustible.*)

David Aikman, Montreal, Que., 2nd November, 1889; 5 years.

Claim.—1st. In an apparatus for manufacturing peat fuel, the combination, with a floating scow provided with excavating, elevating and stick removing mechanism, of troughs or receptacles for the semi-liquid peat pipes, for admitting live steam through heated rollers or their equivalents for reducing the pulp to thin films or flakes and drying same, a press having a series of moulds and plungers for forming the blocks, and means for maintaining such moulding devices at a high temperature, all substantially in the manner and for the purpose described. 2nd. The combination of a receiving hopper for the semi-liquid pulp-steam jets, for heating same therein, a screw or its equivalent for conveying such heated pulp, heated rollers or surfaces for working same into dried sheets, films or flakes, scrapers for removing and discharging the dried peat, and a heated press for condensing same into wholly or partially carbonized blocks, substantially as specified. 3rd. The combination, with a trough or receptacle, and a conveyor for the semi-liquid pulp, of a pair or series of hollow rollers having steam inlet and outlet pipes, means for revolving same, and a scraping device for clearing the rollers, substantially as specified. 4th. A press for moulding peat into blocks for fuel, consisting essentially of a revolving table or cylinder adapted to receive and retain a high degree of heat, and having a series of pockets or openings to receive the dried peat, and upper and lower plungers for compressing the blocks therein, and mechanism for maintaining the moulds until the blocks are completely condensed and carbonized, substantially as described. 5th. The combination, with the revolving table or cylinder q^2 having pockets or openings, and plungers for moulding the blocks, of the heated receiver r^1 , and mechanism for feeding the peat therefrom into the moulds, substantially as described. 6th. The combination, with the press and receiver r^1 adapted to be heated, and in which the air is prevented from circulating, as described, of the central shaft m^1 having arms n^1 , substantially as described. 7th. In a peat press, the combination, with the revolving table or cylinder q^2 having recess s^1 , and openings a^1 , of the operating plungers K^1 and r^1 , and means for operating same, substantially as and for the purpose specified. 8th. The combination, with the table having openings a^1 , of the plungers having grooves a^2 for allowing air to escape, substantially as described.

No. 32,667. Stapling Implement. (*Outil pour river les crampons.*)

Benjamin W. Buxton (assignee of Osro P. Johnson and Henry F. White), Detroit, Mich., U.S., 2nd November, 1889; 5 years.

Claim.—1st. A stapling implement, consisting of a clinching jaw and a driving jaw jointly connected, said driving jaw provided with a driving arm, a sliding head engaged upon said arm and forming a seat for a staple, substantially as set forth. 2nd. A stapling implement, consisting of a clinching jaw and a driving jaw jointly connected, said driving jaw provided with a driving arm, and a sliding head engaged upon said arm, and a spring bearing upon said head, substantially as set forth. 3rd. A stapling implement, consisting of jaws A , A^1 jointly connected, one of said jaws provided with a driving arm, and the other jaw with a clinching die, a sliding head supported upon said driving arm, a spring bearing on said head, the movement of said head toward said die limited at a point above the said arm, substantially as set forth. 4th. A stapling implement, consisting of jaws A , A^1 jointly connected, one of said jaws provided with a driving arm, and a sliding head supported upon said arm, said head provided with a flange at its upper end, and the other jaw provided with a clinching die, substantially as set forth. 5th. A stapling implement, consisting of jaws A , A^1 jointly connected, one of said jaws provided with a driving arm, said head flanged at its sides to embrace the lateral edges of said arm, and flanged at its upper end to limit the movement of the head in one direction, and a spring bearing on said head, substantially as set forth. 6th. A stapling implement, consisting of jaws A , A^1 jointly connected, one of said jaws provided with a clinching die and the other jaw with a driving arm, having side flanges, a sliding head supported upon said arm, said head flanged at the sides to embrace the side flanges of said arm, and also flanged at its upper end to limit the movement of the head in one direction, a spring connected to one of the jaws and bearing on said head, substantially as set forth. 7th. A stapling implement, consisting of jaws A , A^1 having a jointed connection, one of said jaws provided with a clinching die, and the other jaw with a driving arm, a sliding head engaged upon said arm a spring bearing on the end of said head, a part of said head bent over to form a flange to limit the movement of said head in one direction, and a guide notch for the end of the spring, substantially as set forth.

No. 32,668. Implement for Fluting Boot or Shoe Uppers. (*Outil pour tuyauter les empeignes des chaussures.*)

Ambrose Eastman, in trust (assignee of Charles T. Wood), Boston, Mass., U.S., 2nd November, 1889; 5 years.

Claim.—1st. The combination, with a base piece, provided with a series of teeth, of the frame b^2 and the swinging arm a^2 secured to

said frame, and provided with a gear A^6 , adapted to mesh with the teeth of the base piece, substantially as shown and described. 2nd. The combination, with the base piece, having tapering teeth arranged in a curve thereon, of the frame b^2 , the arm a^2 pivoted at one end to a swivel in the frame, the toothed gear A^6 mounted on said arm, the arm j^6 and its stud having a rubber roll projecting under the front edge of the base piece, substantially as shown and described.

No. 32,669. Scallop Turner.

(*Découpoir d'oreille de chaussure.*)

John Foster & Co. (assignees of William D. Hall), Beloit, Wis., U.S., 2nd November, 1889; 5 years.

Claim.—1st. In a machine for turning and stretching out laterally the scallops or edges of boot flies, shoe uppers and other turned work or articles, the laterally expansible spreader, comprising a support, a relatively fixed member and a relatively movable member working transversely across the face of said fixed member, substantially as set forth. 2nd. In a machine for turning and stretching out laterally, scallops or for beading purposes, as described, the combination of the laterally expansible spreader, comprising a support, a fixed member, and a relatively movable member pivoted to the face of the fixed member, between the ends thereof, to vibrate transversely across the same, with an operating mechanism connected with said vibratory member, substantially as set forth. 3rd. The combination, with the frame and an expansible spreader mounted thereon, and consisting in a fixed member and a laterally-vibrating member pivoted to the face thereof, of an operating mechanism and stops in the path of the movable member to limit the length of its stroke in either direction, substantially as set forth. 4th. In a machine of the character described, a laterally-expansible spreader, comprising the stationary member and a laterally movable member pivoted together face to face, rounded at their upper ends and made of an increased thickness on the opposite or working edges k , k^1 , and of diminishing thickness in reverse directions relatively to each other, toward their opposite edges, substantially as set forth. 5th. The combination, with the table having a standard on its upper side, of a laterally-expansible spreader comprising a stationary member secured to said standard, a laterally-vibrating member pivoted between its ends to the stationary member, and extending at its lower end down and to the table, a spring for returning the said member to its normal position, stops in the path of the movable member for limiting its movement in either direction, a horizontally-swinging lever engaging with one end, the lower end of the movable member to impart a lateral movement thereto against the action of the spring, a vertical bell-crank lever engaging the other end of the horizontal lever, a treadle and a rod connecting the treadle and the bell-crank lever, substantially as set forth.

No. 32,670. Attachment for Double Line Sewing Machines for Piping or Cording or the like. (*Disposition aux machines à coudre à double couture, pour tuyauter ou cordonner ou autre chose.*)

Chappell, Allen & Co. (assignees of Thomas R. Rossiter), London and Bristol, Eng., 2nd November, 1889; 5 years.

Claim.—1st. An attachment for piping, cording or the like, in double line sewing machines, the said attachment being furnished with two guides, as described. 2nd. An attachment for piping, cording or the like, in double line sewing machines, the said attachment being furnished with two guides, one or both of which can be moved into and out of position, substantially as and for the purposes described. 3rd. An attachment for the purpose described, consisting of the main part B, having two guides b^1 , b^2 , slot b^3 and fixing screw d , substantially as hereinbefore described and illustrated in Figs. 1, 2 and 3 of the accompanying drawings. 4th. An attachment for the purpose described, consisting of the main part B, the bar guides b^1 , b^2 , and guide-carrying spring e , capable of being moved into and out of position, substantially as hereinbefore described and illustrated in Fig. 4 and 5 of the accompanying drawings.

No. 32,671. Carriage Top. (*Couverture de voiture.*)

Thomas & Merrell (assignees of Fredus R. Merrell), Versailles, Ohio, U.S., 2nd November, 1889; 5 years.

Claim.—1st. The combination, with a carriage top, of two curtains hung on rollers turning on bearings in the same horizontal plane and in line with each other, one of which curtains has a projecting edge adapted to lap on the other, substantially as described. 2nd. The combination, with a carriage top, of two curtains, one of which has a projecting edge adapted to lap on the other, and one of its upper corners cut away to clear the hanger on which it is suspended, substantially as described. 3rd. The combination, with a canopy top, and the curtain rollers therefor, of the irons D, E, F, each carrying a hanger for the rollers, and the rear iron D carrying two hangers, one of said hangers being attached outside of the centre of the hanger for the side curtain roller, substantially as described.

No. 32,672. Axle Cutter. (*Découpoir d'essieu.*)

Frank E. Beardsley and Warren R. Sullivan, Traverse, Mich., U.S., 2nd November, 1889; 5 years.

Claim.—1st. In an axle cutter, the combination, with a suitable frame work adapted to be fastened to the axle, of the tool head having the cutting knives located thereon, a shaft for revolving the same, and a movable sleeve embracing said shaft and adapted, when moved longitudinally, to carry the shaft with it, substantially as described. 2nd. In an axle cutter, the combination, with a suitable frame work adapted to be fastened to the axle, and the shaft E carrying the tool head E^1 , of the feeding mechanism, consisting of the sleeve G , screw-threaded on its interior to fit the threaded exterior of the shaft jour-