

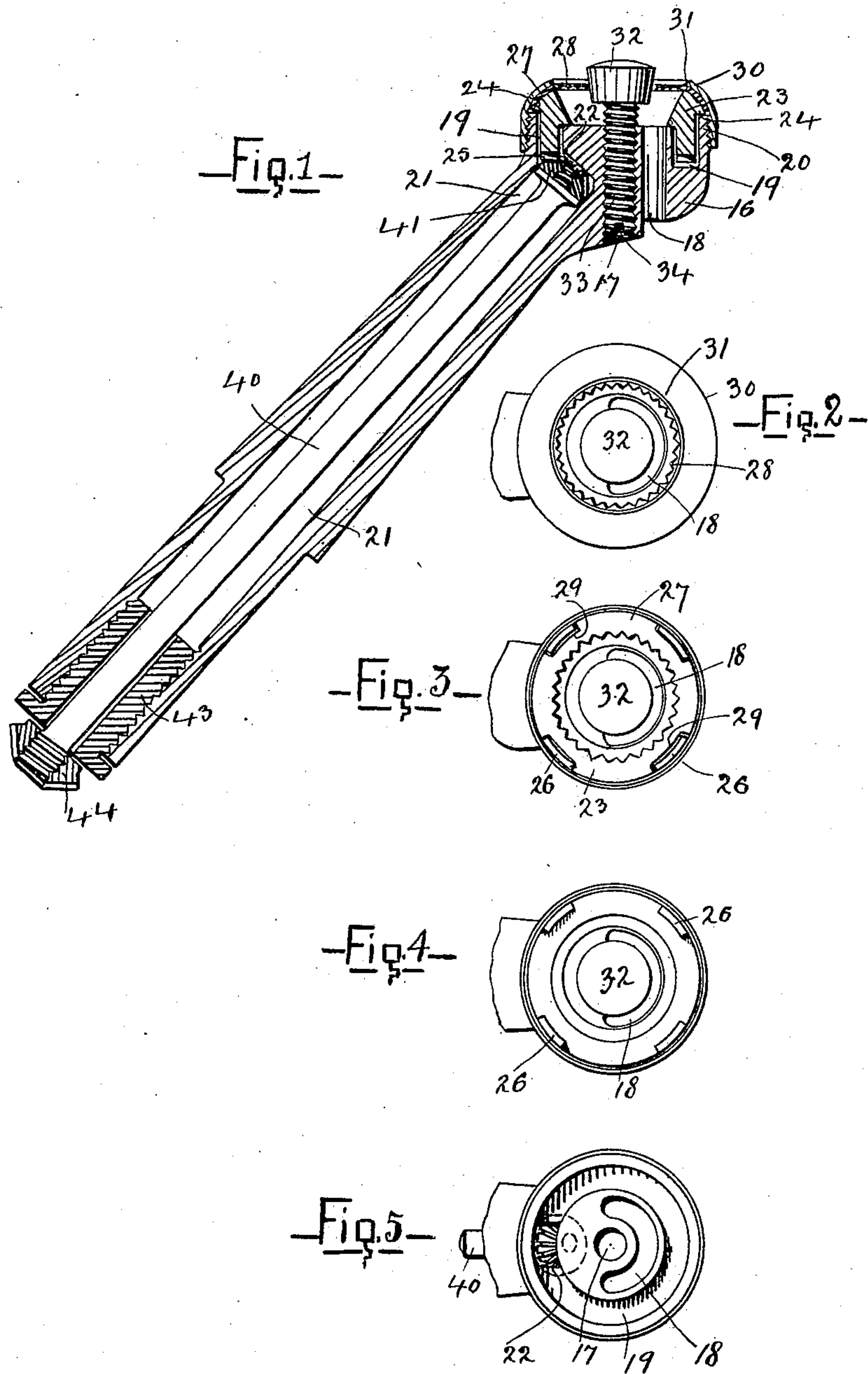
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Patented Dec. 27, 1898.

E. DUPLESSIS.
PEGGING MACHINE.

(Application filed Jan. 7, 1898.)

(No Model.)



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UNITED STATES PATENT OFFICE.

ELOUILD DUPLESSIS, OF ST. HYACINTHE, CANADA.

PEGGING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 616,699, dated December 27, 1898.

Application filed January 7, 1898. Serial No. 665,975. (No model.)

To all whom it may concern:

Be it known that I, ELOUILD DUPLESSIS, of St. Hyacinthe, in the county of St. Hyacinthe and Province of Quebec, Canada, have invented certain new and useful Improvements in Pegging-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has for its object to so improve pegging-machines that they will do a better class of work and be more easily operated than has been possible heretofore.

The invention may be said, briefly, to consist in improving the means for cutting off the ends of the driven pegs and providing means whereby said ends may be caused to be either cut off flush with the surface of the work or below said surface for a variable distance. To these ends I mount in the nose of the horn of the machine a rotatable carrying part for the cutter adapted to removably carry said cutter and provide means for retaining said cutter against displacement relatively to its carrying part. Adjacent to this cutter I provide a vertically-adjustable work-supporting section adapted to determine the position of the surface of the work through which the pegs project relatively to the cutter in order to enable the pegs to be cut off flush with said surface or projecting through said surface to a variable extent.

For full comprehension, however, of my invention reference must be had to the accompanying drawings, forming a part of this specification, in which like symbols indicate the same parts, and wherein—

Figure 1 is an enlarged detail longitudinal vertical sectional view of the nose of the horn constructed according to my invention; Fig. 2, a detail plan view thereof; Fig. 3, a similar view, but with the annulus for retaining the parts against displacement removed; Fig. 4, a similar view to Fig. 3, but with the cutter removed; Fig. 5, a similar view to Fig. 4, but with the carrier for the cutter and the central adjustable work-supporting portion removed.

The perforating and peg-driving mechanism—such as the awl 10, driver 11, and cam-disk 12, shaft 13, and their carrying and operating parts, together with the frame 14 of the head—are and may be of any approved con-

struction, and therefore will not be herein-after further described in detail.

The nose of the horn is preferably circular in form and horizontally offset, as at 16, and provided concentrically thereof with a screw-threaded perforation 17. A semicircular slot 18 is cut vertically through this offset portion concentrically of said perforation 17 and in front thereof, and a circular recess 19 is cut concentrically of this slot, while the outer edge of the nose is upwardly offset to provide a flange 20, which is screw-threaded on its outer side, and the body of the horn is formed with a chamber 21, extending far enough into the nose of the horn to intersect, as at 22, the adjacent portion of the recess 19.

The cutter proper is mounted upon a carrying part consisting, preferably, of an annulus 23, having its upper edge angular in cross-section and its lower portion diminished in thickness to form a shoulder 24, while its lower edge is formed with beveled gear-teeth 25. This carrier is set with its lower toothed edge located within the recess 19 and with its shoulder 24 resting upon the upper end of the flange 20, while the outer beveled side thereof is formed with a series of projections 26.

The cutter proper is in the form of a beveled ring 27, having its upper edge saw-toothed, as at 28, and its lower edge notched, as at 29, and this cutter is adapted to be placed loosely upon its carrier 23, with its notches 29 receiving the projections 26, and is retained against displacement by means of a ring 30, having its upper edge inwardly offset, as at 31, and the inside of its body portion screw-threaded to take over the screw-threaded periphery of the nose of the horn. This ring serves the double purpose of retaining the parts against displacement and guarding the cutter against damage, and under certain circumstances may serve as an auxiliary adjustable work-support, as will be hereinafter set forth.

The means for regulating the length the ends of the driven pegs are to project through the surface of the work after having been trimmed consists, preferably, of a vertically-adjustable work-supporting section 32, located within and concentrically of the cutter, and is adjusted by means of a screw-threaded shank 33, formed integrally therewith and

adapted to take into the screw-threaded perforation 17 in the nose of the horn, the lower end of this shank being slotted, as at 34, to receive the end of a screw-driver or the like, through which the vertical adjustment of this work-supporting section is secured. If desired, this regulation of the length of the protruding ends of the driven pegs can be made more uniform and more effective by utilizing the ring 30 for that purpose by adjusting same through its screw-threads to the same level as the surface of the work-supporting section 32.

The cutter-carrier 23 is driven by means of a spindle 40, extending longitudinally through the chamber 21 in the horn and having a beveled gear 41, mounted rigidly upon the upper end thereof and adapted to intermesh with the beveled teeth 25 of said carrier, while the lower end of this spindle is screw-threaded and projects through a bushing 43 and has a pinion 44 screwed thereon, to which a rotary movement may be imparted from any desired initial power. (Not shown.)

In some classes of work—as, for instance, when the insole used is thin or frail—it is desirable when trimming the pegs to leave a small portion projecting beyond the surface to be spread and enable the parts to be better held together thereby. This is accomplished by adjusting the work-supporting section 32 a distance above the teeth of the saw equal to the length it is required that the peg project.

The slot 18 in the nose of the horn allows an exceedingly long awl to be used, thus enabling stock of different thickness to be operated upon, as in the case of a thin stock the awl will project therethrough and into said slot, while stock of a thickness equal to the length of the awl may be as readily used.

What I claim is as follows:

1. In a pegging-machine, the combination with a cutter, of vertically-adjustable work-supporting mechanism located with a part on each side of the said cutter and adapted to adjust the work to and from the cutter, for the purpose set forth.

2. In a pegging-machine, the combination with a rotary cutter consisting of a ring saw-toothed on its inner edge, a vertically-adjustable work-supporting section located within and concentrically of said cutter, and means for adjusting said work-supporting section, for the purpose set forth.

3. In a pegging-machine, the combination with a rotary cutter consisting of a ring saw-toothed on its inner edge, a vertically-adjustable work-supporting section located within and concentrically of said cutter, a vertically-adjustable work-supporting section located outside of said cutter, and means for adjusting said work-supporting sections, for the purpose set forth.

4. A pegging-machine having a horn or work-support, a rotary cutter mounted in the

nose of said horn or work-support, said cutter consisting of a ring saw-toothed on its inner edge, a work-supporting section located within said cutter and an opening extending completely through the nose of said horn and in a line intermediate of said cutter and work-support, for the purpose set forth.

5. In a pegging-machine, a rotary carrier consisting of a ring rotatably mounted in the nose of the horn and having its upper edge outwardly beveled, a rotary cutter consisting of a beveled ring saw-toothed on its inner edge and removably mounted upon the beveled surface of said carrier, means for retaining said cutter against displacement and means for rotating said carrier.

6. In a pegging-machine, a rotary carrier consisting of a ring rotatably mounted in the nose of the horn, a rotary cutter consisting of a ring saw-toothed on its inner edge and removably mounted upon said carrier; a ring adapted to retain said cutter against displacement and means for rotating said carrier.

7. In a pegging-machine, a rotary carrier consisting of a ring rotatably mounted in the nose of the horn, a rotary cutter consisting of a ring saw-toothed on its inner edge and removably mounted upon said carrier; a work-supporting ring adapted to retain said cutter against displacement, and means for rotating said carrier.

8. In a pegging-machine, a rotary carrier consisting of a ring rotatably mounted in the nose of the horn, a rotary cutter consisting of a ring saw-toothed on its inner edge and removably mounted upon said carrier; a vertically-adjustable work-supporting ring adapted to retain said cutter against displacement, and means for rotating said carrier.

9. In a pegging-machine, a rotary carrier consisting of a ring rotatably mounted in the nose of the horn and having its upper edge outwardly beveled, a rotary cutter consisting of a beveled ring saw-toothed on its inner edge and removably mounted upon the beveled surface of said carrier; a ring adapted to retain said cutter against displacement, and means for rotating said carrier.

10. In a pegging-machine, a rotary carrier consisting of a ring rotatably mounted in the nose of the horn and having its upper edge outwardly beveled, a rotary cutter consisting of a beveled ring saw-toothed on its inner edge and removably mounted upon the beveled surface of said carrier; a work-supporting ring adapted to retain said cutter against displacement, and means for rotating said carrier.

11. In a pegging-machine, a rotary carrier, consisting of a ring rotatably mounted in the nose of the horn and having its upper edge outwardly beveled, a rotary cutter consisting of a beveled ring saw-toothed on its inner edge and removably mounted upon the beveled surface of said carrier; a vertically-

adjustable work-supporting ring adapted to retain said cutter against displacement, and means for rotating said carrier.

12. In a pegging-machine, a horn or work-
5 support having the nose thereof provided with a screw-threaded perforation, a vertically-adjustable work-supporting section formed with a screw-threaded shank adapted to take into said perforation, said nose hav-
10 ing a semicircular opening therethrough concentric of said work-supporting section; an upwardly-projecting circular flange formed upon said nose concentrically of said work-supporting section and having its outside sur-
15 face screw-threaded; a ring having its upper edge angular in cross-section and provided with projections, and its lower portion gear-

toothed and provided on its outer periphery with a shoulder adapted to rest upon said flange; spindle and pinion mechanism for 20 rotating said ring; a beveled ring saw-toothed on its inner edge and notched on its outer edge; an outer ring screw-threaded on its inside face and having its upper edge inwardly offset, substantially as described and for the 25 purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ELOUILD DUPLESSIS.

Witnesses:

WILL P. McFEAT,
FRED. J. SEARS.