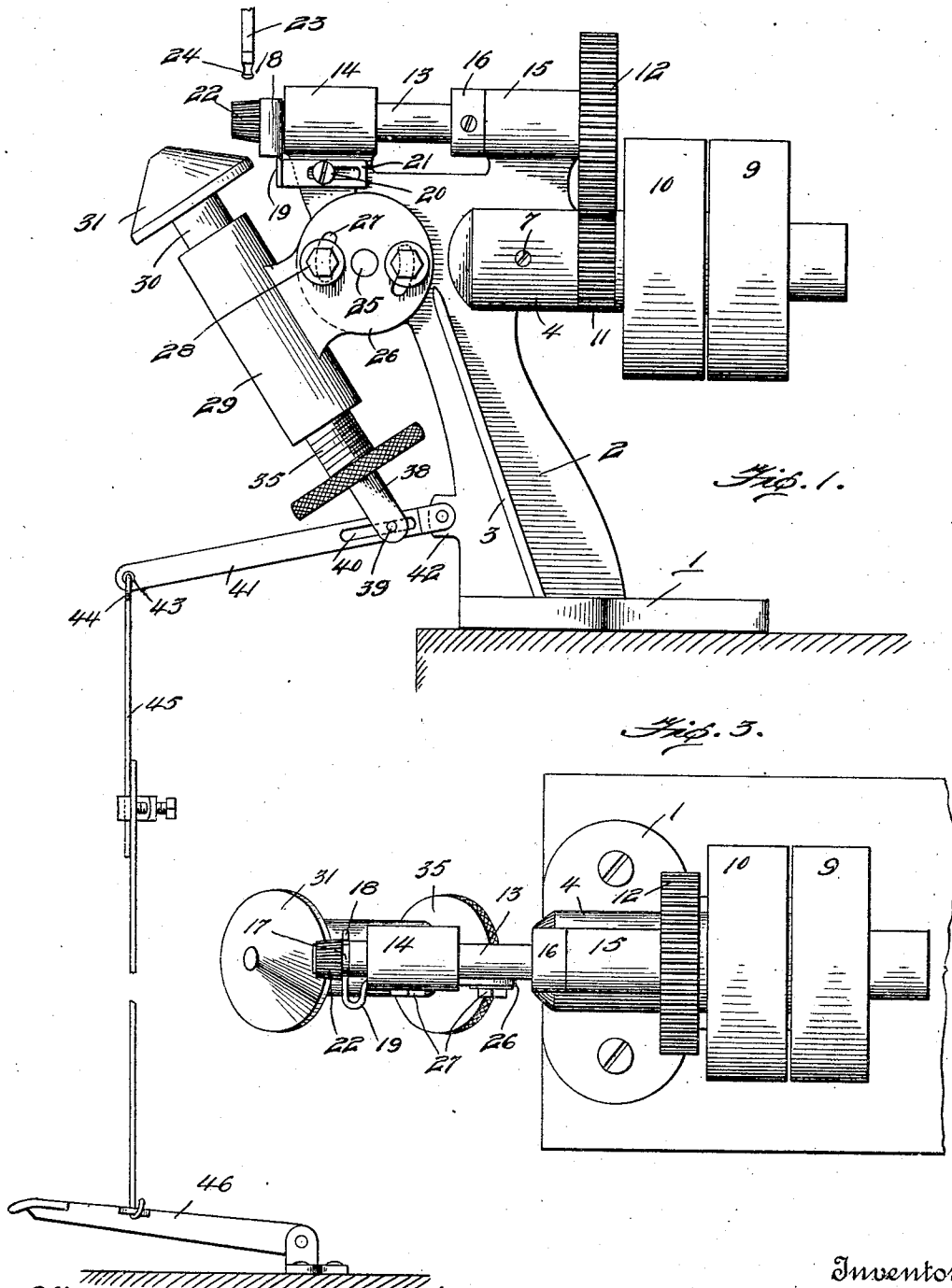


F. P. TAYLOR.
 STITCH SEPARATING MACHINE.
 APPLICATION FILED FEB. 13, 1908.

938,400.

Patented Oct. 26, 1909.

2 SHEETS—SHEET 1.



Witnesses
E. M. Offutt
C. H. Griesbauer

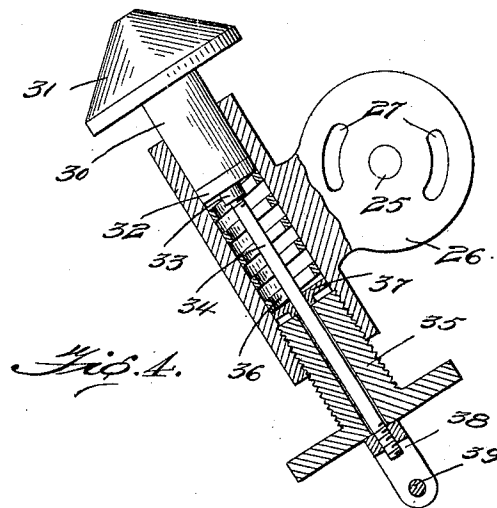
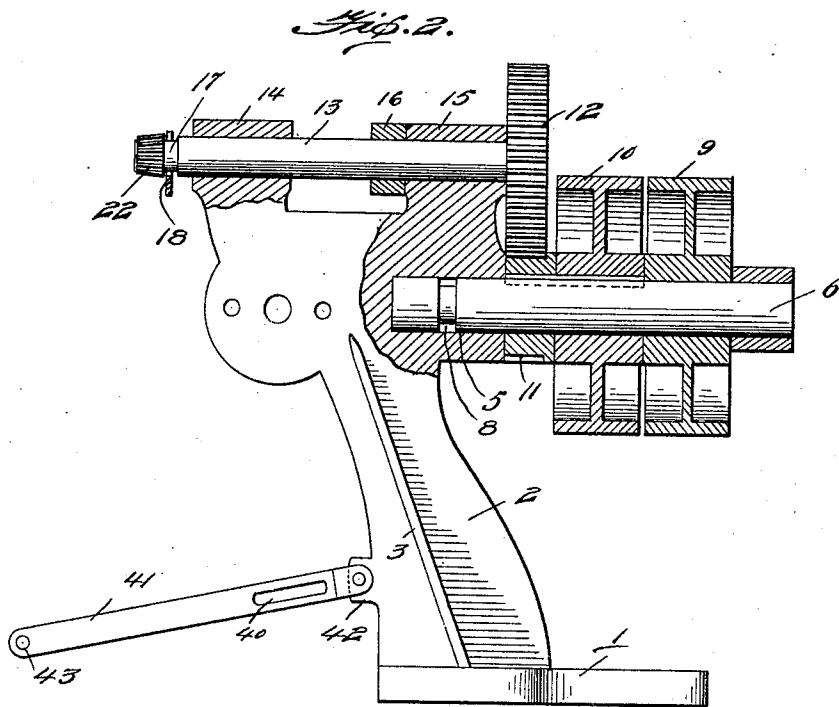
Inventor
F. P. Taylor
 By *A. B. Wilson & Co*
 Attorneys

F. P. TAYLOR.
 STITCH SEPARATING MACHINE.
 APPLICATION FILED FEB. 13, 1908.

938,400.

Patented Oct. 26, 1909.

2 SHEETS—SHEET 2.



Witnesses
B. M. Offord,
C. H. Giesbauer.

Inventor
F. P. Taylor,
 By *A. B. Wilson & Co.*
 Attorneys

UNITED STATES PATENT OFFICE.

FRED P. TAYLOR, OF AUBURN, MAINE, ASSIGNOR OF ONE-HALF TO THE NATIONAL SHOEMAKERS, OF LEWISTON, MAINE, A CORPORATION.

STITCH-SEPARATING MACHINE.

938,400.

Specification of Letters Patent.

Patented Oct. 26, 1909.

Application filed February 13, 1908. Serial No. 415,743.

To all whom it may concern:

Be it known that I, FRED P. TAYLOR, a citizen of the United States, residing at Auburn, in the county of Androscoggin and State of Maine, have invented certain new and useful Improvements in Stitch-Separating Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to stitch separating machines for shoe welts, and especially to that type of machine which is adapted for Goodyear welts.

The object of this invention is to provide a simple, cheap and easily operated stitch separating machine. In order to accomplish this result, I press instead of indent the welt, as is usual. This gives several advantages. First, it does not pull down or bend the sole so as to necessitate re-molding. Second, it keeps the welt of the sole uniform. Third, it is much more simple, and, therefore, much cheaper than other machines of a similar character.

In the drawings, Figure 1 is a side elevation of the device; Fig. 2 is a vertical sectional view thereof; Fig. 3 is a top plan view; and Fig. 4 is an enlarged detail sectional view of the presser head and its associated mechanism.

Referring more especially to the drawings, 1 represents a suitable base upon which is mounted the standard, 2, projecting diagonally therefrom and provided at its sides with strengthening webs, 3. The upper part of the frame, 3, is provided with an enlarged boss, 4, having a shaft-receiving socket, 5, into which the pulley shaft, 6, is keyed by means of a set screw, 7, seated in a groove, 8, therein. This pulley shaft is provided with a loose pulley, 9, and an operating pulley, 10, which is keyed to the shaft in the usual manner and to a pinion, 11, mounted between the pulley, 10, and the boss, 4. This pinion meshes with a larger gear, 12, carried upon a horizontal shaft, 13, mounted in separate bearings, 14 and 15, and held from longitudinal movement by a suitable collar, 16, which is keyed to the shaft and abuts the bearing, 15, upon the opposite side from the wheel, 12. The shaft, 13, after passing through the bearing, 14, is provided with an annular recess, 17, which is adapted to re-

ceive the forked end, 18, of a guide, 19, adjustably secured upon the standard, 2, by the engagement of a locking screw, 20, with a slotted extension, 21. The end of the shaft is provided with a milled head, 22, which is kept in a heated condition by a jet of gas fed from the pipe, 23, whose nozzle, 24, is arranged immediately above the head, 22.

Pivoted to the standard 1, by a center pin, 25, is an ear, 26, having a plurality of arcuate slots, 27, on the opposite sides of the pivot adapted to be engaged by the locking bolts, 28. This ear projects at substantially right-angles and forms an integral part of a tubular guide member, 29, in which is rotatably mounted the stub shaft, 30, of the pressure head, 31. The stub shaft, 30, of the head, 31, is seated upon a hardened disk or collar, 32, having a threaded projection, 33, to receive the pressure controlling shaft, 34. This shaft passes through an adjusting nut, 35, which is threaded into the lower end of the tubular guide, 29, and a spiral pressure spring, 36, is arranged between the collar, 32 and a similar collar, 37, and normally holds the head in proper position.

In order to place the shoe between the heads 31 and 22, I adjustably attach to the lower end of the pressure controlling shaft 34, a bifurcated head piece 38, which has a pintle 39 passing through the lower end to engage a longitudinal slot 40 formed in a lever 41 pivoted upon a lug 42, extending outwardly from the standard 2. The outer end of the lever 41 is apertured at 43 to receive the hooked end 44 of an operating rod 45, which is connected to a foot lever 46, pivoted in any suitable manner to the floor. By operating the pressure nut or adjusting screw 35, the distance between the conical pressure head or table 31 and the milled stitch separating head 22 may be regulated. The tension of the spring 36 may be regulated by screwing up on the head 38. This may be accomplished by first removing the pintle 39 from its connection with the lever 41. When this adjustment is made, the table will be slightly lowered and in order to compensate for this change of the relative arrangement between the table and the milled stitch separating head, the nut 35 can be adjusted to bring the parts back to normal position.

In operation the foot lever, 46, is operated to retract the pressure head, 31, so that the

sole may be placed in between this head and the milled head, 22. The belt which has been running on the loose pulley, 29, is then shifted to the driving pulley, 10, and the shoe moved around by the action of the milled head, 22, having its edge held in engagement with the guide, 11, by the operator.

While I have described a foot-operating lever, 46, for the pressure head, a good operator will dispense with its use and insert the sole without moving the pressure head.

Having thus described my invention, what I claim as new and desire to secure by Letters-Patent, is:

In a shoe machine, a standard, a tubular work support adjustably secured thereto, an adjusting screw mounted in one end of said tubular support, a spiral spring arranged

above said adjusting screw, a disk above said spiral spring, a rod connected to said disk and passing through the adjusting screw, an operating head threaded on the rod to adjust the tension of the spring between the adjusting screw and the disk, and a work table revolubly mounted in said tubular work support and resting upon said disk, said adjusting screw adapted to bodily raise and lower the work table together with the spring and disk.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRED P. TAYLOR.

Witnesses:

RALPH W. CROCKETT,
JOHN H. LITCHFIELD.