

(No Model.)

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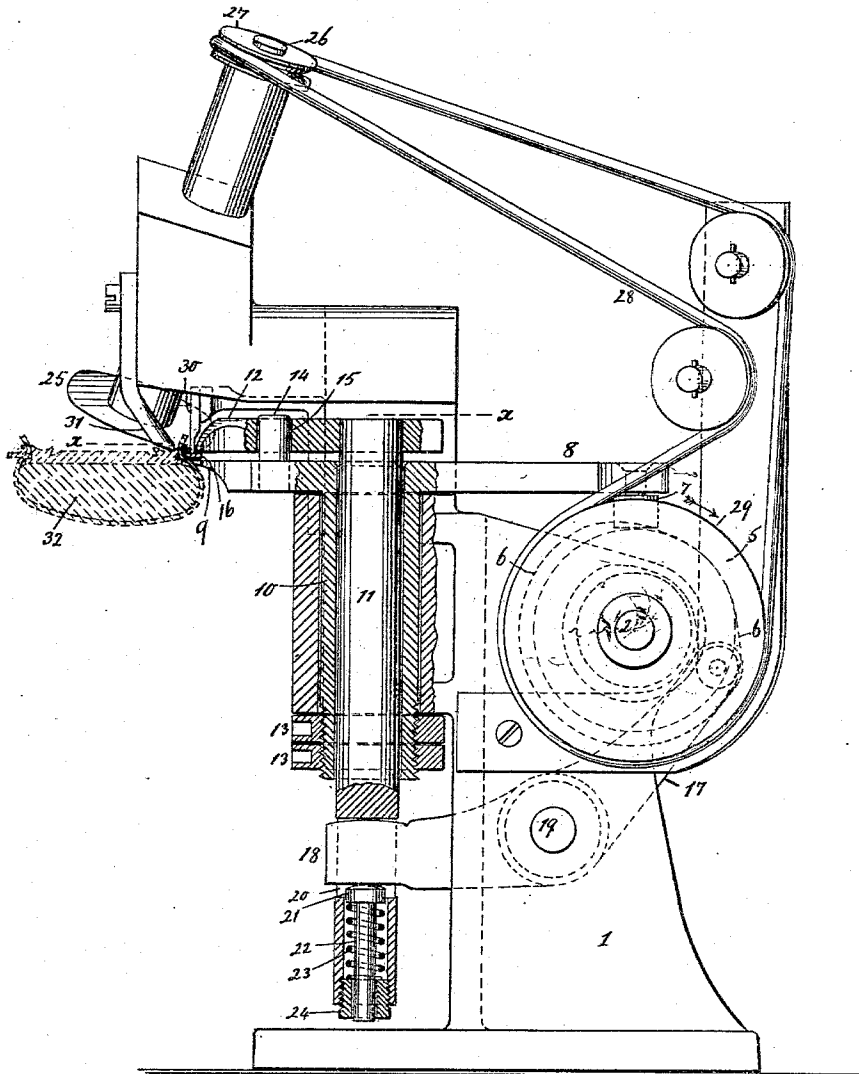
C. DANCEL.

MACHINE FOR BEATING WELTS AND TRIMMING SHOES.

No. 548,524.

Patented Oct. 22, 1895.

*Fig. 1.*



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(No Model.)

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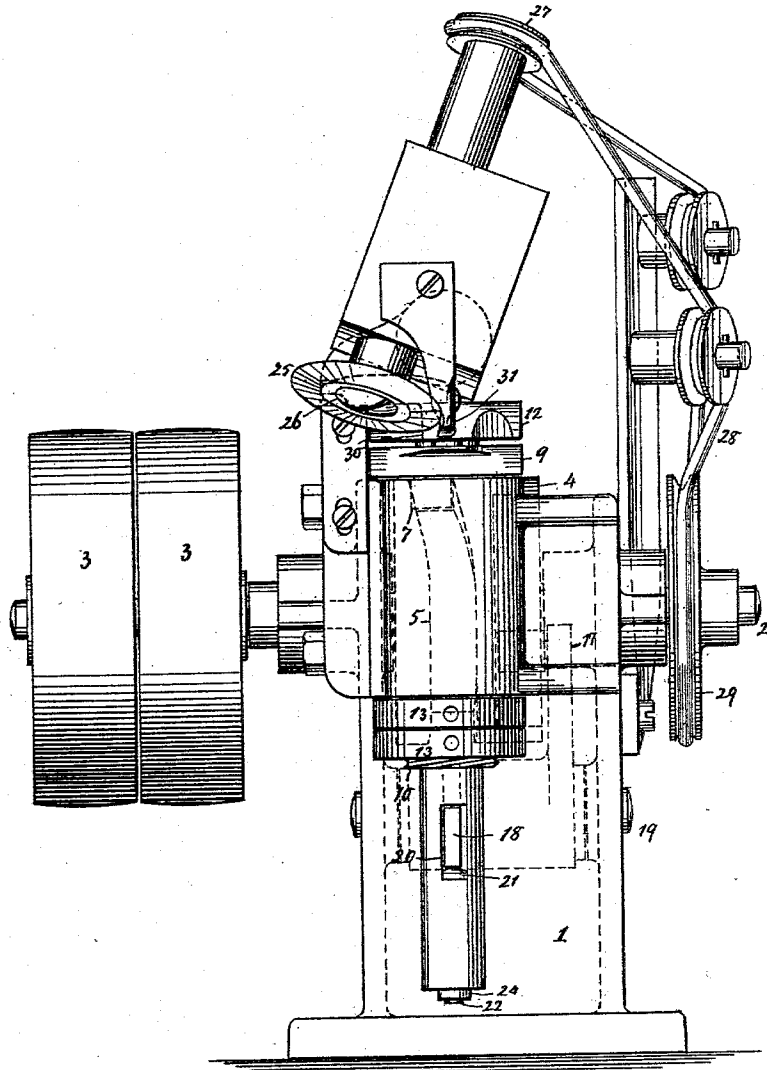
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*Fig. 2.*



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3 Sheets—Sheet 3.

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Fig. 3.

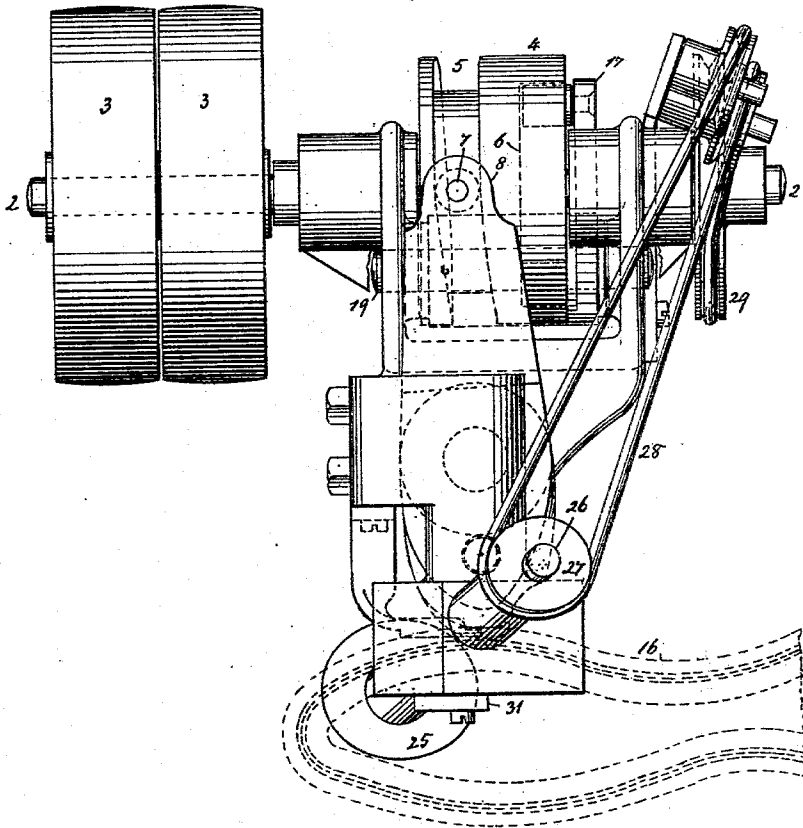
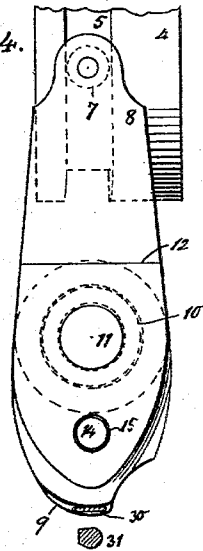


Fig. 4.



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# UNITED STATES PATENT OFFICE.

CHRISTIAN DANCEL, OF BROOKLYN, NEW YORK.

## MACHINE FOR BEATING WELTS AND TRIMMING SHOES.

SPECIFICATION forming part of Letters Patent No. 548,524, dated October 22, 1895.

Application filed May 3, 1895. Serial No. 548,039. (No model.)

*To all whom it may concern:*

Be it known that I, CHRISTIAN DANCEL, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Machines for Beating Welts and Trimming Shoes, of which the following is a specification.

The object of this invention is to provide a machine which will beat the welts of boots and shoes, and which at the same time feeds the boot or shoe so that the latter can have its entire welt beaten, and also can be trimmed by a knife or cutter suitably applied; and the invention resides in the novel features of construction set forth in the following specification and claims and illustrated in the annexed drawings, in which—

Figure 1 is a side elevation of the machine, partly in section. Fig. 2 is a front elevation of the machine. Fig. 3 is a plan view of the machine. Fig. 4 is a section along *xx*, Fig. 1.

The base or support 1 is provided with a driving-shaft 2, having the usual fast and loose pulleys 3, and provided with a cam 4, having the circumferential cam-groove 5 and the lateral cam-groove 6. The groove 5 is engaged by a roller-stud 7 on an arm 8, extending from a welt-gripping jaw 9, so that the groove 5 imparts to the welt-gripping jaw 9 a reciprocating or oscillating, or what may be called a "feeding," movement. The jaw 9 is provided with a sleeve 10, surrounding the shaft 11 of welt-gripping jaw 12, the lower part of sleeve 10 being threaded for the reception of jam-nuts 13 for holding the sleeve in place.

The jaw 12 is connected to jaw 9 by a pin-and-slot connection 14 and 15, so that said jaw 12 will partake of the oscillations or reciprocations of jaw 9, while at the same time said jaw 12 is free to move toward and from jaw 9.

When the jaws 9 and 12 are apart, a welt 16 can be inserted therebetween, and as the jaws come together, at the same time swinging forward or in the direction of feed, the welt is not only beaten or properly flattened, but is at the same time fed along by the swing of the jaws. After the completion of the feeding-stroke the jaw 12, separating or moving away from jaw 9, will leave the welt free

during the back or return swing of the jaws, and on the completion of the return swing, the jaws again coming together and seizing a succeeding part of the welt, will beat said succeeding welt part and also cause a further feed of the welt by the forward swing of the jaws.

The alternate movement of jaw 12 toward and from jaw 9 is caused by the lateral cam-groove 6 engaging levers 17 and 18, fulcrumed at 19, the lever-arm 18 engaging the shaft 11 of jaw 12. Said shaft 11 is longitudinally movable as well as capable of rocking or oscillating.

The slot or eye 20 in shaft 11, into which lever-arm 18 engages, is large enough to allow shaft 11 to rock to the required degree. In raising said shaft 11 to move jaw 12 away from jaw 9 the lever-arm 18 acts directly on shaft 11; but the motion of jaw 12 toward jaw 9 is effected by lever-arm 18 pressing on the head 21 of the stem 22, about which is coiled spring 23, seated in a suitable chamber or recess in shaft 11, closed by the screw-plug or closure 24. The spring 23 at the proper periods thus holds jaw 12 with yielding pressure toward jaw 9, so that as varying thicknesses of welt come between the jaws such welt will be properly beaten. The knife or cutting-disk 25 has its shaft 26 inclined sidewise and backward relatively to the jaws, and said driving-shaft 26 is driven or rotated by pulley 27 and belt 28 connecting with pulley 29 on the cam-driving shaft 2. As the welt is thus beaten and fed by the jaws 9 and 12, the knife or trimmer 25 will suitably trim the shoe.

The guides 30 and 31 for the seam and for the between substance or bottom of the sole will keep the shoe in proper position relatively to the beating-jaws and to the trimmer, so that the shoe shown on last 32 can be rapidly treated by the machine. The seam-guide 30 guards against the knife or cutter cutting into or injuring the thread or seam.

What I claim as new, and desire to secure by Letters Patent, is—

1. A welt beater comprising two oscillating or reciprocating jaws, one of said jaws being made movable toward and from the other, in combination with a cam having a

circumferential and a lateral cam groove, and levers engaging said grooves and connected respectively with the said jaws, one lever operating to oscillate the jaws horizontally, and the other lever operating to move one jaw vertically with relation to the other jaw, substantially as described.

2. A welt beater comprising two oscillating or reciprocating welt-gripping jaws, one of said welt-gripping jaws being made movable toward and from the other, in combination with a cutter shaft inclined laterally and toward the rear of said jaws, and a welt-trimming disk-cutter mounted on said laterally inclined shaft and rotating in juxtaposition to the gripping ends of the jaws, substantially as described.

3. A welt-beater for boots and shoes having two oscillating or reciprocating welt-gripping jaws, one of which is movable toward and from the other, a seam gage, a sole gage, and a welt-trimming cutter arranged in juxtaposition to the acting ends of the welt-gripping jaws, substantially as described.

4. The combination with a pair of welt-gripping jaws adapted to oscillate, and one of which is movable vertically to and from the other, of a cam, devices actuated by the cam for oscillating the two jaws and moving one to and from the other, a welt-trimming cutter, a driving-shaft for the cam, a driving-shaft for the welt-trimming cutter, and connections between said shafts, substantially as described.

5. A welt-beater, consisting of two welt-gripping jaws adapted to oscillate and move one toward and from the other, a vertically movable and axially rotatable shaft connected with one of the jaws, means for raising and lowering the said shaft at recurring intervals, and means for oscillating the two jaws, substantially as described.

6. A welt-beater, consisting of two welt-gripping jaws adapted to oscillate and move one toward and from the other, one jaw having a slot and the other a pin extending into the slot, a vertically movable and axially rotatable shaft connected to one of the jaws, a vibratory lever engaged at one end with the vertically movable shaft, a cam for vibrating the lever to raise and lower the shaft, and cam mechanism for oscillating one of the jaws, substantially as described.

7. A welt-beater, consisting of two welt-gripping jaws adapted to oscillate and move one toward and from the other, a vertically

movable and axially rotatable shaft connected to one of the jaws, a vibratory lever loosely engaged at one end with the said shaft, a cam acting on the other end of said lever for raising and lowering the shaft, an arm connected with one of the jaws, and a cam acting on said arm to oscillate the jaw connected therewith, substantially as described.

8. A welt-beater, consisting of two welt-gripping jaws adapted to oscillate and move one toward and from the other, one jaw having a slot and the other a pin extending into the slot, a vertically movable and axially rotatable shaft connected to one of the jaws, a vibratory lever engaged at one end with the shaft for raising and lowering the latter, a cam acting on the other end of the lever to vibrate the latter, an arm connected with one of the jaws, and a cam acting on the arm to oscillate the jaw connected therewith, substantially as described.

9. A welt-beater, consisting of two welt-gripping jaws adapted to oscillate and move one toward and from the other, a vertically movable and axially rotatable shaft connected to one of the jaws and provided with a yielding device at the lower end portion thereof, a vibratory lever engaging said shaft and bearing against said yielding device, a cam for vibrating the lever to raise and lower the shaft, an arm connected with one of the jaws, a cam acting on said arm to oscillate the jaw connected therewith, and means whereby the two jaws are made to oscillate in unison, substantially as described.

10. The combination in a welt-beater, of two welt-gripping jaws adapted to oscillate and move one toward and from the other, one jaw having a slot and the other a pin entering the slot, a vertically movable and axially rotatable shaft connected with one of the jaws and provided at its lower end portion with a yielding device, a vibratory lever engaging said shaft and bearing against said yielding device, a cam for vibrating said lever, an arm connected with one of the jaws, and a cam acting on the arm to vibrate the jaw connected therewith, substantially as described.

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

CHRISTIAN DANCEL.

Witnesses:

WM. C. HAUFF,  
E. F. KASTENHUBER.