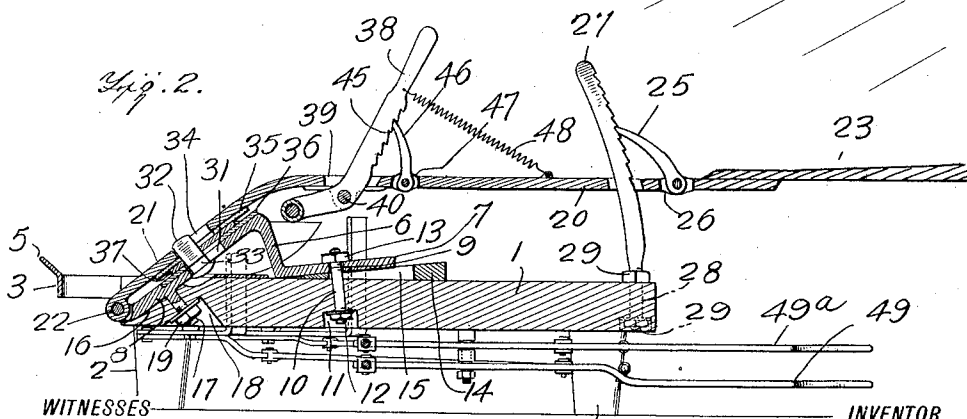
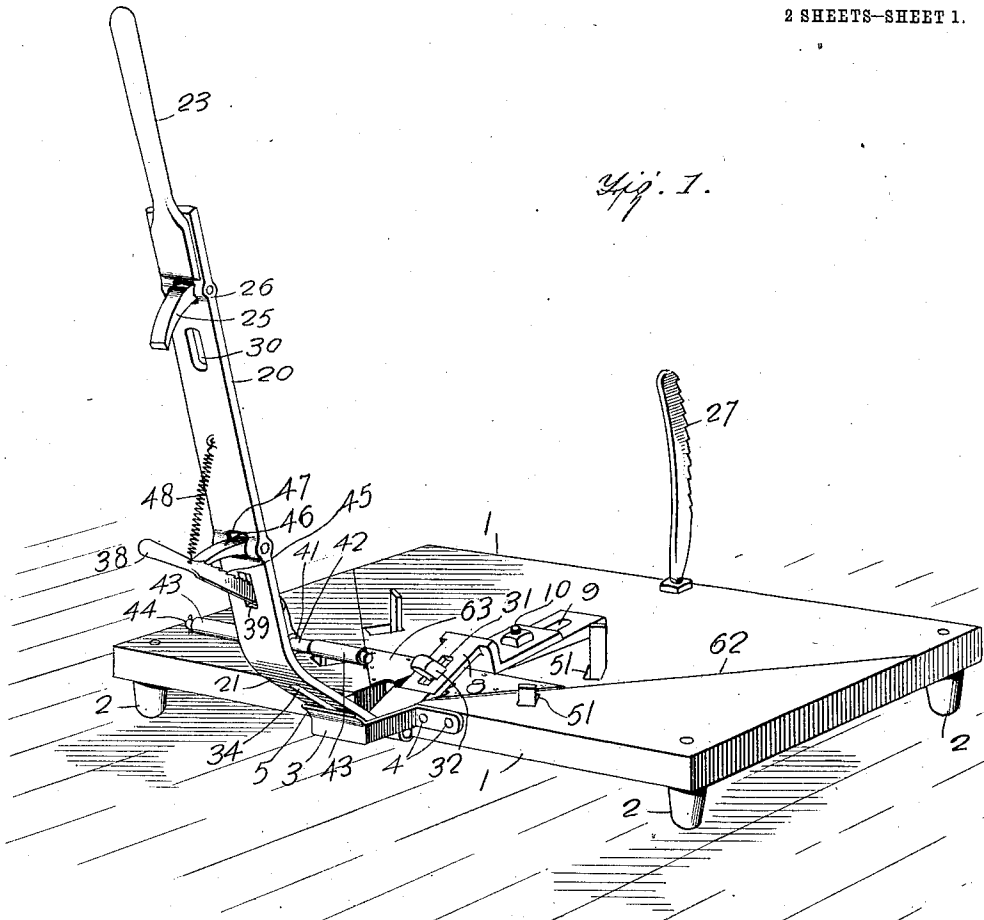


W. L. WILSON.
HEEL SWEEP SETTER.
APPLICATION FILED NOV. 19, 1912.

1,058,651.

Patented Apr. 8, 1913.

2 SHEETS-SHEET 1.



WITNESSES
L. H. Schmidt
Geo. T. Shinnick

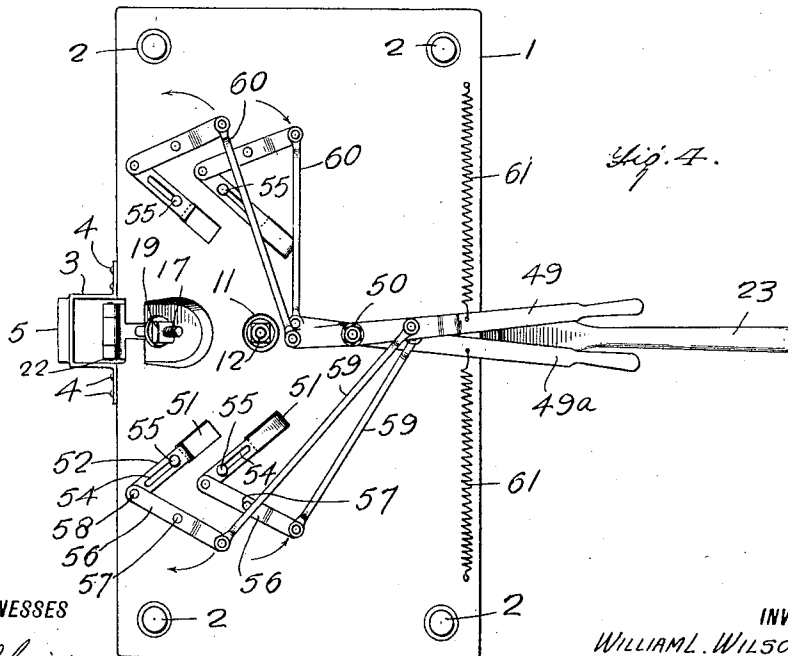
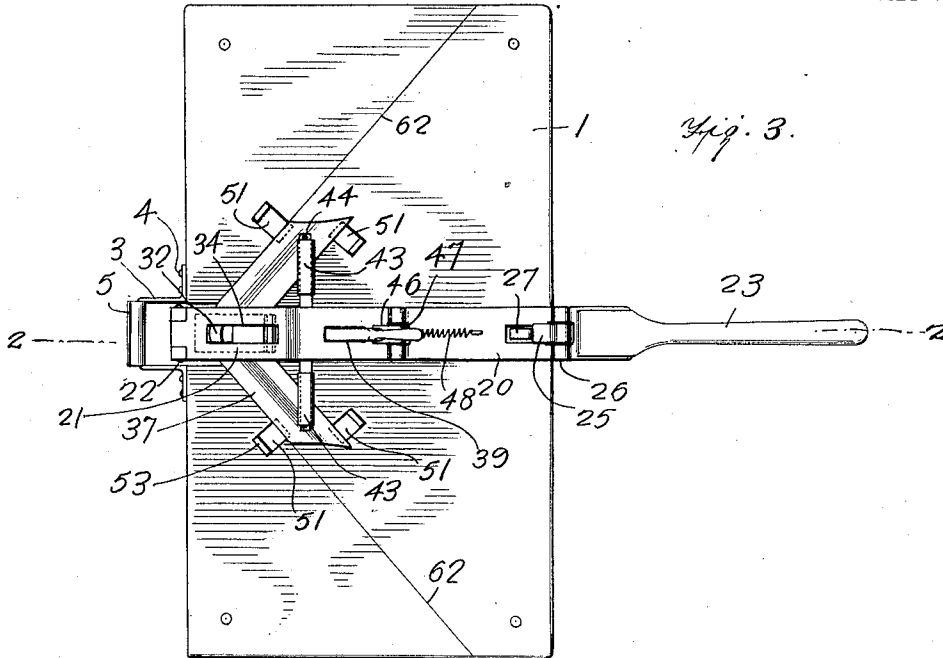
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UNITED STATES PATENT OFFICE.

WILLIAM L. WILSON, OF STEPHENS, ARKANSAS.

HEEL-SWEEP SETTER.

1,058,651.

Specification of Letters Patent.

Patented Apr. 8, 1913.

Application filed November 19, 1912. Serial No. 732,248.

To all whom it may concern:

Be it known that I, WILLIAM L. WILSON, a citizen of the United States, and a resident of Stephens, in the county of Ouachita and State of Arkansas, have invented a new and useful Improvement in Heel-Sweep Setters, of which the following is a specification.

My invention is an improvement in heel sweep setters, and has for its object the provision of a simple, easily operated device of the character specified, wherein mechanism is provided for receiving and holding a heated heel sweep and for shaping the sweep while held by the support.

In the drawings: Figure 1 is a perspective view of the improved machine, Fig. 2 is a section on the line 2—2 of Fig. 3, Fig. 3 is a top plan view, and Fig. 4 is a bottom plan view.

In the present embodiment of the invention, a base 1 is provided, having supports or legs 2, and a stirrup 3 is secured at 4 to the rear edge of the base, the said stirrup having an angular lip 5 at its upper rear edge for a purpose to be described.

An angle plate comprising a body 6 and oppositely extending arms 7 and 8 is arranged adjacent to the stirrup, the arm 7 having a longitudinal opening 9, through which is passed one end of a double ended bolt 10. The lower end of the bolt 10 is received in a countersunk opening 11 in the under face of the base, and a nut 12 is engaged with the said end of the bolt. The other end of the bolt passes through the opening 9 of the arm 7 and is engaged by a nut 13.

A wedge 14 having a longitudinal slot 15 is arranged beneath the arm 7, the slot receiving the bolt 10. The arm 7 is thus arranged at an angle with respect to the face of the base, and the arm 8 is arranged at a greater angle to the said base, the said arm being received in a beveled recess 16 in the rear edge of the base at the stirrup 3. The said arm is provided with an integral threaded stem 17, engaging a recess 18 in the bottom of the base, and a nut 19 is threaded on to the stem, the said stem passing through an opening in the base.

A lever 20 is arranged transversely of the base, and the inner end of the lever is bent angularly as shown at 21, and is pivoted to the rear end of the arm 8, as shown at 22, the pivot being below the stirrup 3. The arrangement is such that when the lever 20

is in the position of Fig. 1, that is, in inoperative position, it will be supported by the lip 5 of the stirrup 3. A handle or grip 23 is secured to the free end of the lever and a pawl 25 is pivoted at the inner end of the said handle as shown at 26. The pawl is adapted to engage the teeth of a bar 27, having a threaded stem 28, which is passed through an opening at the center of the front edge of the base and the said stem is engaged by nuts 29 above and below the base, to hold the bar in the position shown. A slot 30 is provided in the lever for the passage of the bar 27, and the pawl normally lies against the teeth, so that the said pawl will engage the teeth automatically, when the lever is pressed downwardly by means of the grip 23.

When the lever 20 is in the position of Fig. 2, the angular portion 21 thereof will lie approximately parallel with the arm 8 of the double angle plate, and the said arm is provided with a longitudinal slot 31, in which is movable the reduced portion 32 of a bar 32, the said bar having a head below the arm 8 to prevent disengagement of the bar. The upper end of the bar 32 engages a slot 34 in the angular portion of the lever 20 when the lever is in the position of Fig. 2, and a plurality of pressing plates 35 and 36 are arranged between the arm 8 and the angular portion of the lever 20, each of the said plates having an opening for receiving the bar 32.

The sweep plates 37 are of different sizes, and are interchangeable, and as shown in Fig. 3, each of the said plates is provided adjacent to the apex thereof with an opening for receiving the bar 32. The said plates 37 are arranged between the plates 35 and 36, after being heated, and when so arranged the lever 20 is swung over into the position of Fig. 2 and is pressed downwardly, the pawl 25 holding the lever in its position. A second lever 38 is arranged in a slot 39 in the body of the lever 20, and the said lever is pivoted in bearings 40 below the lever. The lower end of the lever has secured transversely thereof a rod 42, and sleeves 43 are arranged on the ends of the rod on opposite sides of the lever, each sleeve being held in place by a cotter pin 44 or the like. The front edge of the lever 38 is toothed as shown at 45, and a pawl 46 is pivoted in a slot 47 in the lever 20, the said pawl engaging the teeth 45 of the lever 38. A coil

spring 48 is arranged between the upper end of the lever 38 and the lever 20, and normally pulls the upper end of the lever 38 toward the lever 20, to cause the sleeves or
5 rollers 43 to press against the inner edges and upper faces of the wings of the sweep 37.

A pair of levers 49 and 49^a are pivoted intermediate their ends to a bolt 50 on the under face of the base 1, the outer ends of
10 the levers extending below the grip 23 of the lever 20. The base is provided on each side of its transverse center with a plurality of approximately parallel slots 51, and a slide 52 is arranged adjacent to each of the said
15 slots, each slide having an angular lug 53 extending upwardly through the slot. The slots 51 are so arranged that the lugs 53 are adjacent to each wing of the sweep when in place, the said lugs 53 being on opposite
20 sides of the sweep and near the ends of the wings. Each slide is provided with a longitudinal slot 54 engaged by a pin 55 on the under face of the base, the head of the pin preventing disengagement of the slide. A
25 lever 56 is pivoted intermediate its ends as indicated at 57 adjacent to each slide and one end of each lever is pivoted to the outer end of the slide as shown at 58. A link 59 or 60 connects the opposite end of each lever
30 56 to a lever 49 or 49^a. The slides of one wing of the sweep are connected to the inner ends of the levers 49—49^a by links 60, while the slides at the opposite wing of the sweep are connected to the levers 49—49^a on the
35 outer side of the pivot 50 by the links 59. The arrangement is such that when the outer ends of the levers 49—49^a are pressed toward each other, all the lugs 52 will be moved toward the sweep to properly shape the same.
40 Coil springs 61 are arranged between the levers and the base for returning the levers to normal position.

In operation, with the parts in the position of Fig. 1, the pressing plate 36 is placed
45 in position on the arm 8, and the sweep is placed on the plate with the upper end of the bar 32 passing through the central opening thereof, the central portion of the sweep being heated before it is placed in position.
50 The pressing plate 35 is then placed above the sweep and the lever 20 is then brought into the position of Fig. 2, and pressed downward as far as possible. The pawl 25 by its engagement with the teeth of the bar
55 27 holds the lever in this position. The lever 38 is now pressed forward as far as may be necessary, and the rollers 43 press down the levers of the sweep and the pawl 46 holds the lever in the position into which
60 it is adjusted. The levers 49—49^a are now pressed toward each other as shown in Fig. 4, and the lugs 53 engage opposite sides of the wings of the sweep, completing the operation of shaping the sweep. An indicating
65 line 62 is provided on the upper face of the

base at each side thereof, the said lines extending diagonally and indicating the position to which the outer edges of the wings of the sweep must be brought. The lugs 53
70 at the outer side edges of the sweep are so arranged that when the levers 49—49^a are pressed together, the said side edges are brought into coincidence with the indicating line 62. By means of the wedge 14, the
75 sweep may be set to any angle. The wedge is adjustable toward and from the stirrup 3 and it will be evident that by moving the wedge in this manner, the angle of the arm 8 may be changed. The base, if not of metal, is preferably provided with metal
80 plates 63, secured to the upper face thereof beneath the position occupied by the heated portion of the sweep when in place.

I claim:—

1. A device of the character specified, 85 comprising a base having supporting feet, a shaping bar comprising a body and oppositely extending arms at the ends of the body, said arms being inclined with respect to each other and with respect to the body,
90 one of the arms having an opening and the base having an opening in register therewith, a wedge having a longitudinal slot arranged beneath the said arm, a bolt passing through the registering openings and the slot, the other arm extending toward the
95 rear edge of the base at approximately the center thereof, a lever having an angular portion hinged to the end of the last-named arm, said arm and the angular portion of the lever having registering longitudinal
100 slots, a bar having a sliding engagement with the slot of the arm and extending through the slot of the lever, pressing plates having openings for receiving the bar and arranged between the arm and the lever,
105 means for holding the lever in adjusted position, said lever having a slot adjacent to its junction with the angular portion, a second lever in the slot and pivoted to the first-named lever, a rod extending transversely
110 of the lower end of the said second-named lever, a roller on each end of the rod for engaging the upper edges of the wings of the sweep, means for holding said second-named
115 lever in adjusted position, said base having indicating lines and having means for engaging the wings of the sweep to bring an edge of each wing into coincidence with the adjacent indicating line, said means comprising slides on the under face of the base,
120 the base having an opening at each slide and each slide having a lug extending through the opening, means for simultaneously moving all of the slides toward the indicating
125 lines, said means comprising levers pivoted to the base on the under face thereof, links connecting the levers with the slides and springs for returning the levers to their
130 original position, and a stirrup on the base

for engagement by the first-named lever to hold the said lever in approximately upright position when not in use.

2. A device of the character specified, comprising a base having supporting feet, a shaping bar comprising a body and oppositely extending arms at the ends of the body, said arms being inclined with respect to each other and with respect to the body, one of the arms having an opening and the base having an opening in register therewith, a wedge having a longitudinal slot arranged beneath the said arm, a bolt passing through the registering openings and the slot, the other arm extending toward the rear edge of the base at approximately the center thereof, a lever having an angular portion hinged to the end of the last-named arm, said arm and the angular portion of the lever having registering longitudinal slots, a bar having a sliding engagement with the slot of the arm and extending through the slot of the lever, pressing plates having openings for receiving the bar and arranged between the arm and the lever, means for holding the lever in adjusted position, said lever having a slot adjacent to its junction with the angular portion, a second lever in the slot and pivoted to the first-named lever, a rod extending transversely of the lower end of the said second-named lever, a roller on each end of the rod for engaging the upper edges of the wings of the sweep, means for holding said second-named lever in adjusted position, said base having indicating lines and having means for engaging the wings of the sweep to bring an edge of each wing into coincidence with the adjacent indicating line, said means comprising slides on the under face of the base, the base having an opening at each slide and each slide having a lug extending through the opening, means for simultaneously moving all the slides toward the indicating lines, said means comprising levers pivoted to the base on the under face thereof, and links connecting the levers with the slides and springs for returning the levers to their original position.

3. A device of the character specified, comprising a base having supporting feet, a shaping bar comprising a body and oppositely extending arms at the ends of the body, said arms being inclined with respect to each other and with respect to the body, one of the arms having an opening and the base having an opening in register therewith, a wedge having a longitudinal slot arranged beneath the said arm, a bolt passing through the registering openings and the slot, the other arm extending toward the rear edge of the base at approximately the center thereof, a lever having an angular portion hinged to the end of the last-named arm, said arm and the angular portion of the

lever having registering longitudinal slots, a bar having a sliding engagement with the slot of the arm and extending through the slot of the lever, pressing plates having openings for receiving the bar and arranged between the arm and the lever, means for holding the lever in adjusted position, said lever having a slot adjacent to its junction with the angular portion, a second lever in the slot and pivoted to the first-named lever, a rod extending transversely of the lower end of the said second-named lever, a roller on each end of the rod for engaging the upper edges of the wings of the sweep, means for holding said second-named lever in adjusted position, said base having indicating lines and having means for engaging the wings of the sweep to bring an edge of each wing into coincidence with the adjacent indicating line, said means comprising slides on the under face of the base, the base having an opening at each slide and each slide having a lug extending through the opening, and means for simultaneously moving all of the slides toward the indicating lines.

4. A device of the character specified, comprising a base having supporting feet, a shaping bar comprising a body and oppositely extending arms at the ends of the body, said arms being inclined with respect to each other and with respect to the body, one of the arms having an opening and the base having an opening in register therewith, a wedge having a longitudinal slot arranged beneath the said arm, a bolt passing through the registering openings and the slot, the other arm extending toward the rear edge of the base at approximately the center thereof, a lever having an angular portion hinged to the end of the last-named arm, said arm and the angular portion of the lever having registering longitudinal slots, a bar having a sliding engagement with the slot of the arm and extending through the slot of the lever, pressing plates having openings for receiving the bar and arranged between the arm and the lever, means for holding the lever in adjusted position, said lever having a slot adjacent to its junction with the angular portion, a second lever in the slot and pivoted to the first-named lever, a rod extending transversely of the lower end of the said second-named lever, a roller on each end of the rod for engaging the upper edges of the wings of the sweep, means for holding said second-named lever in adjusted position, said base having indicating lines, and means for engaging the wings of the sweep to bring an edge of each wing into coincidence with the adjacent indicating line.

5. A device of the character specified, comprising a base, a shaping bar composed of a body and oppositely extending arms at the ends of the body, said arms being in-

clined with respect to each other and with respect to the body, one of the arms being adapted to rest upon the base at approximately the center thereof, a wedge mounted for longitudinal movement between the base and the arm to vary the angle of the other arm with respect to the base, means for securing the last said arm to the base, a lever having an angular portion hinged to the end of the other arm, means for holding the lever with the angular portion in engagement with the said arm, shaping plates between the arm and the angular portion of the lever for holding the sweep, means for engaging the upper edges of the wings of the sweep to press the said wings downwardly, said means comprising a second lever pivoted to the first lever, said first lever having a slot through which the second lever extends, a rod arranged transversely of the lower end of the said second lever, means for holding the said second lever in adjusted position, said base having indicating lines on the upper face thereof, and means for engaging the wings of the sweep to bring an edge of each wing into coincidence with the adjacent indicating line.

6. A device of the character specified, comprising a base, a shaping bar composed of a body and oppositely extending arms at the ends of the body, said arms being inclined with respect to each other and with respect to the body, one of the arms being adapted to rest upon the base at approximately the center thereof, a wedge mounted for longitudinal movement between the base and the arm to vary the angle of the other arm with respect to the base, means for securing the last said arm to the base, a lever having an angular portion hinged to the end of the other arm, means for holding the lever with the angular portion in engagement with the said arm, shaping plates between the arm and the angular portion of the lever for holding the sweep, means for engaging the upper edges of the wings of the sweep to press the said wings downwardly, said base having indicating lines, and means for engaging the wings of the sweep to bring the said wings into parallelism with the indicating lines.

7. A device of the character specified, comprising a base, a shaping bar composed of a body and oppositely extending arms at the ends of the body, said arms being inclined with respect to each other and with respect to the body, one of the arms being adapted to rest upon the base at approximately the center thereof, a wedge mounted for longitudinal movement between the base and the arm to vary the angle of the other arm with respect to the base, means for securing the last said arm to the base, a lever having an angular portion hinged to the

end of the other arm, means for holding the lever with the angular portion in engagement with the said arm, shaping plates between the arm and the angular portion of the lever for holding the sweep, and means in connection with the base for shaping the sweep while held by the shaping plates.

8. A device of the character specified, comprising a base, a shaping bar composed of a body and oppositely extending arms at the ends of the body, said arms being inclined with respect to each other and with respect to the body, one of the arms being adapted to rest upon the base at approximately the center thereof, means engaging the last said arm for varying the angle of the other arm with respect to the base, means for securing the said first-named arm to the base, a lever hinged to the end of the last-named arm, means for holding the lever in adjusted position, a guide for positioning the sweep, and means in connection with the base for shaping the sweep while held between the lever and the adjacent arm of the shaping bar.

9. A device of the character specified, comprising a base, a shaping bar arranged transversely of the base and inclined with respect thereto, means for varying the inclination of the said shaping bar with respect to the base, a lever hinged to the rear end of the bar and cooperating therewith to hold the sweep, means in connection with the bar and the lever for positioning the sweep, means in connection with the base for shaping the sweep while held between the lever and the bar, and means for holding the lever in adjusted position.

10. A device of the character specified, comprising a base, a shaping bar arranged transversely of the base and inclined with respect thereto, means for varying the inclination of the said shaping bar with respect to the base, a lever hinged to the rear end of the bar and cooperating therewith to hold the sweep, means in connection with the bar and the lever for positioning the sweep, and means in connection with the base for shaping the sweep while held between the lever and the bar.

11. A device of the character specified, comprising a base, a shaping bar supported transversely of the base at approximately the center thereof, said bar inclining upwardly toward the front of the base, a lever hinged to the rear end of the bar and cooperating therewith to hold a sweep, said bar having means for positioning the sweep, shaping plates between the bar and the lever, means in connection with the base for shaping the sweep while held by the shaping plates, means for holding the lever in adjusted position, and means for varying the angle of the shaping bar with respect to the base.

12. A device of the character specified, comprising a base, a shaping bar supported transversely of the base at approximately the center thereof, said bar inclining upwardly toward the front of the base, a lever 5 hinged to the rear end of the bar and cooperating therewith to hold a sweep, said bar having means for positioning the sweep, shaping plates between the bar and the lever, means in connection with the base for 10 shaping the sweep while held by the shaping plates, and means for holding the lever in adjusted position.

13. A device of the character specified, comprising a base, a shaping bar supported transversely of the base at approximately the center thereof, said bar inclining upwardly toward the front of the base, a lever 15 hinged to the rear end of the bar and cooperating therewith to hold a sweep in rigid

position, said bar having means for positioning the sweep, shaping plates between the bar and the lever, and means in connection with the base for shaping the sweep while held by the shaping plates. 25

14. A device of the character specified, comprising a supporting base, means on the base for clamping the body of a heated sweep, means for holding said clamping means in clamped position, means for shaping the sweep while so held, said clamping means inclining upwardly from the base toward the front thereof, and means for 30 varying the inclination of the said clamping means with respect to the base.

WILLIAM L. WILSON.

Witnesses:

G. M. SMITH,
R. B. ALLEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."