

G. C. HAUSER & J. H. DOLAN.
METHOD OF ATTACHING WOODEN OR LOUIS HEELS.
APPLICATION FILED MAR. 10, 1916.

1,213,191.

Patented Jan. 23, 1917.
2 SHEETS—SHEET 1.

Fig. 4.

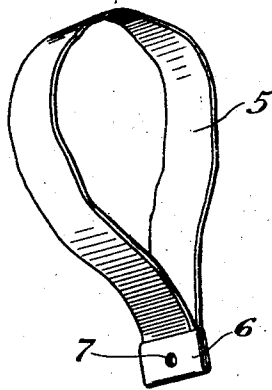


Fig. 2.

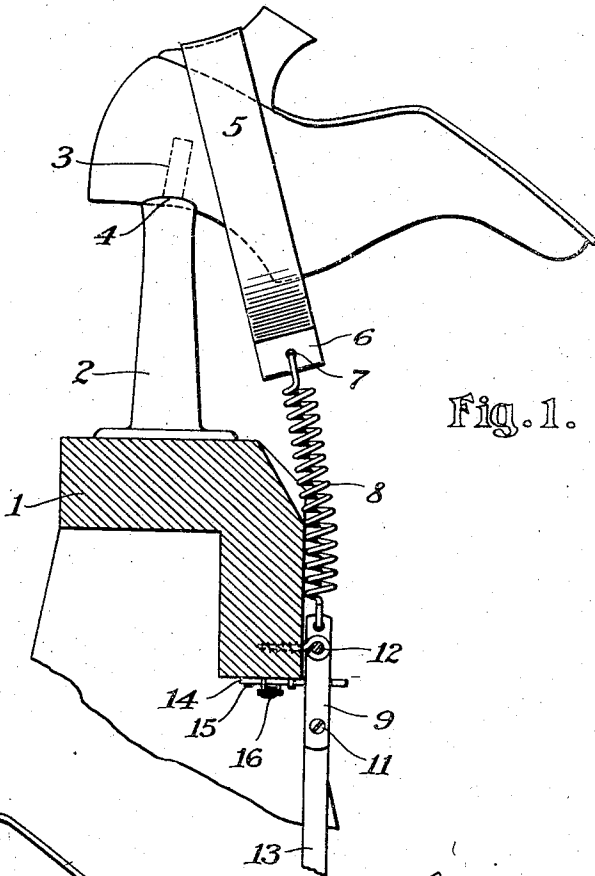
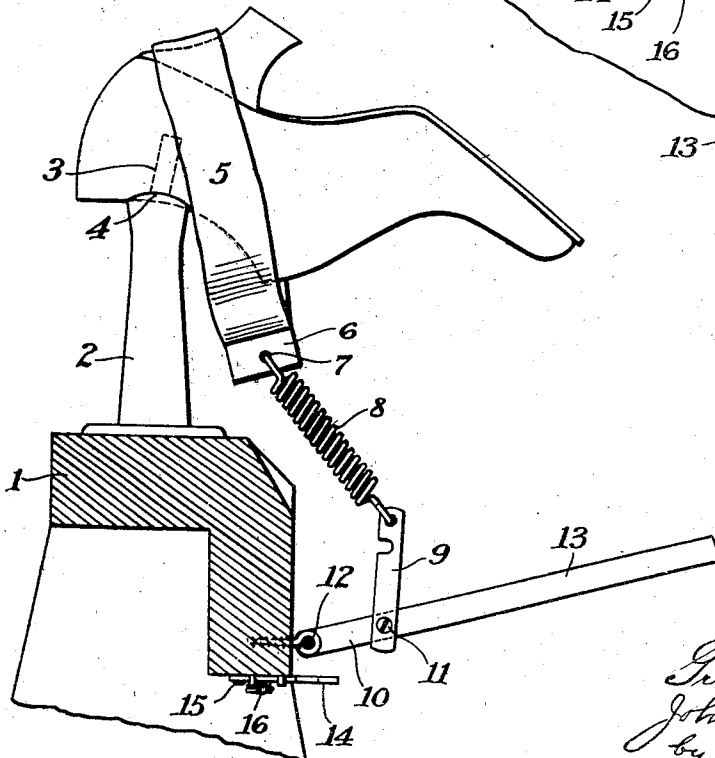
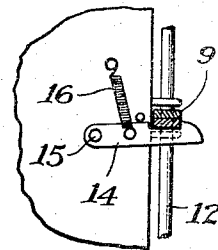


Fig. 1.

Fig. 5.



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2 SHEETS—SHEET 2.

Fig. 3.

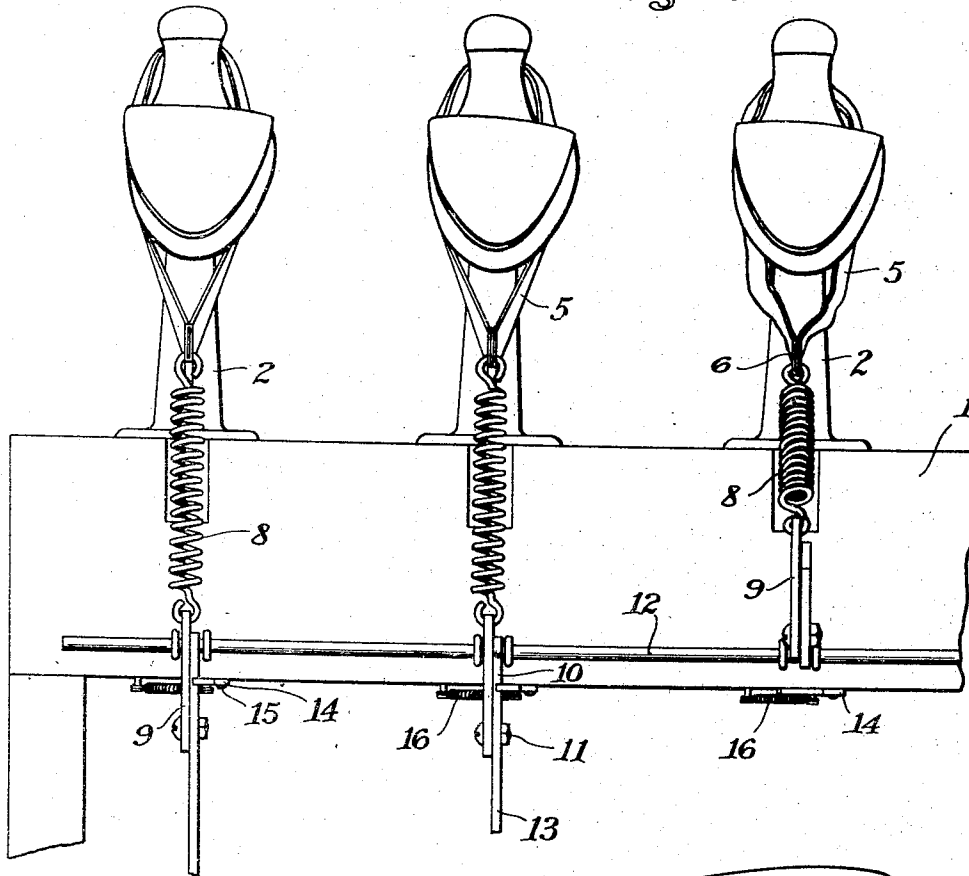
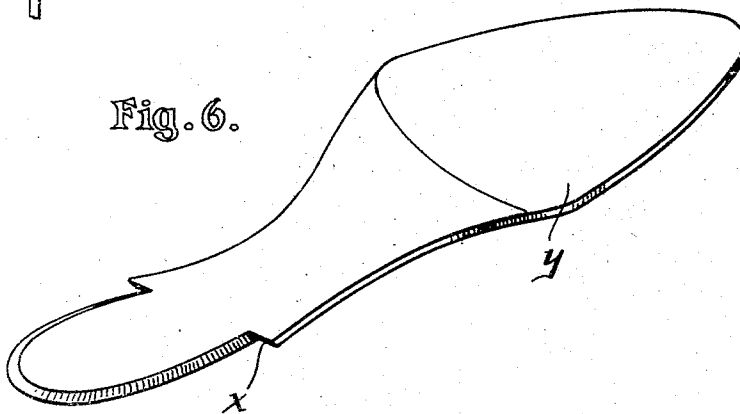


Fig. 6.



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UNITED STATES PATENT OFFICE.

GROVER C. HAUSER AND JOHN H. DOLAN, OF ROCHESTER, NEW YORK.

METHOD OF ATTACHING WOODEN OR LOUIS HEELS.

1,213,191.

Specification of Letters Patent.

Patented Jan. 23, 1917.

Application filed March 10, 1916. Serial No. 83,417.

To all whom it may concern:

Be it known that we, GROVER C. HAUSER and JOHN H. DOLAN, citizens of the United States, and residents of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Methods of Attaching Wooden or Louis Heels, of which the following is a specification.

The present invention relates to the art of shoe making and more particularly to the attaching of wooden heels, such as the French or Louis heels, to shoes, an object of this invention being to provide a new method of attachment by which the cost of manufacture of such shoes may be materially reduced.

In the drawings:—Figure 1 is a sectional view of a portion of a machine, showing the manner in which the heel is applied and held to the shoe; Fig. 2 is a view similar to Fig. 1 showing the position of the parts before the pressure has been applied to the heel; Fig. 3 is a view on front elevation of the machine showing how a number of shoes are operated upon at one time; Fig. 4 is a perspective view of the pressure applying device; Fig. 5 is a detail view of the detent which holds the pressure applying device in pressure applying position; and Fig. 6 is a perspective view of the sole of an ordinary French or Louis heel shoe.

Louis or French heels and also other wooden heels are generally secured to a shoe against sole shoulders α formed by cutting the sole γ at one end, as shown in Fig. 6. Other ways of forming this shoulder are known, but this is the one most generally in use. The heels are attached by inserting each shoe individually in a clamp which engages the last and also the heel top at the rear of the latter to exert a pressure thereon in a direction intersecting the heel portion of the sole substantially at right angles to the latter. This pressure tends to and does break down the rear edge of the heel top and requires that the shoes be refinished or furnished with a new top.

By the present invention, the breaking down of the heel top is eliminated and, in addition, the pressure is exerted in such a manner that the heel is pressed firmly against the heel seat with substantially equal pressure throughout the entire area of the seat, and at the same time has its forward edge pressed forwardly into firm abutment

with the shoulder on the sole at the front of the heel.

The method may be carried out by the machine herein shown. In this machine, a base frame 1, or other suitable support, may be provided with a plurality of standards 2 from each of which a last pin 3 extends, the last pin preferably being inclined to the vertical so that the last with the shoe 4 thereon will lie with the forward part of the sole at an angle to the horizontal, as shown in Fig. 1. The top of each standard may be provided with lateral projections or flanges 4 on opposite sides of the pin 3 to prevent the turning of the last on the pin.

The heel clamping and holding means embodies a clamping element adapted to engage the rear of the heel between the top and the point of connection with the sole, and is movable in a direction to apply pressure to the heel in a line which intersects the portion of the shoe engaged by the heel, but at an acute angle to the plane of said shoe portion. In this way the heel is moved forwardly so that its forward edge is brought into firm abutment with the shoulder α , while at the same time the heel is moved toward the shoe and is thereby brought into firm engagement with the latter, thus effectively securing the heel in place, it being understood that an adhesive has been applied between the heel and the shoe, as usual, before the heel is pressed in place.

The clamping element is preferably in the form of a floating band 5 formed of strip material and having the meeting ends turned in one and the same direction and secured together by a metal clasp 6 which is perforated at 7 for the passage of a hook at one end of a coil spring 8. The other end of the coil spring may be secured to a toggle formed by two links 9 and 10 pivoted together at 11, one arm 10 being also pivoted at 12 to the base frame 1, and being also extended beyond the pivot 11 to form an operating lever 13.

For cooperation with the operating link 10, there may be provided a detent 14 pivoted at 15 to the under side of the frame 1 and moved to detaining position by a spring 16.

In operation, a shoe is fitted on a last which is inverted and has the pin 3 inserted in the opening thereof, as shown in Fig. 2. The heel is then, or a short time previously,

fitted to the shoe, and, while the glue is moist, the clamping means is brought into operation. The band 5 is made to engage the heel in the manner shown in Fig. 2, after which the toggle device is operated to apply pressure to the heel, through the elastic connection 8. This pressure is exerted in a direction at an acute angle to the plane of that portion of the shoe so that the heel tends to move toward the shoe, and also in the direction of the toe of the shoe, thus bringing the forward edge of the heel into firm abutment with the sole shoulders *x* at the same time that the heel is pressed to the shoe.

The clamping element, being in the form of a strap, snugly conforms to the heel and the sides of the shoe without injury to either of said parts. The clamping element engages the shoe and heel with a resilient or yielding pressure and this tends to make up for any inequalities in the different shoes and at the same time assists in preventing any injury to the shoes. During the clamping on, the rear face of the heel is engaged, the top being free to permit the heel to move to adapt itself to the heel seat. The pressure applying devices are in the form of a pulling mechanism instead of a pushing mechanism, and, in this way, the mechanism can be located in such a position as not to

interfere with the removal or attachment of the shoes to the supports.

What we claim as our invention, and desire to secure by Letters Patent is:

1. A method of attaching wooden or Louis heels to shoes comprising applying to the rear face of the heel a pressure which acts in a direction to force the heel simultaneously toward the toe and also toward the heel seat to produce substantially equal pressure of the heel on the heel seat throughout the entire area of the seat.

2. A method of attaching wooden or Louis heels to shoes comprising applying to the rear face of the heel a resilient pressure which acts in a direction to force the heel simultaneously toward the toe of the shoe and also toward the heel seat to produce substantially equal pressure on the heel seat throughout the entire area of the seat.

3. A method of attaching wooden or Louis heels to shoes comprising applying a resilient pressure to the rear face of the heel to force the heel simultaneously toward the toe of the shoe and with equal pressure against the heel seat throughout the entire area of the seat, while the heel is otherwise free to partake of movement under such pressure.

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