No. 715,317. Patented Dec. 9, 1902.

L. P. TAEGE.

RIVETING MACHINE.

(Application filed Feb. 24, 1902.)

(No Model.)

Fig. 1.

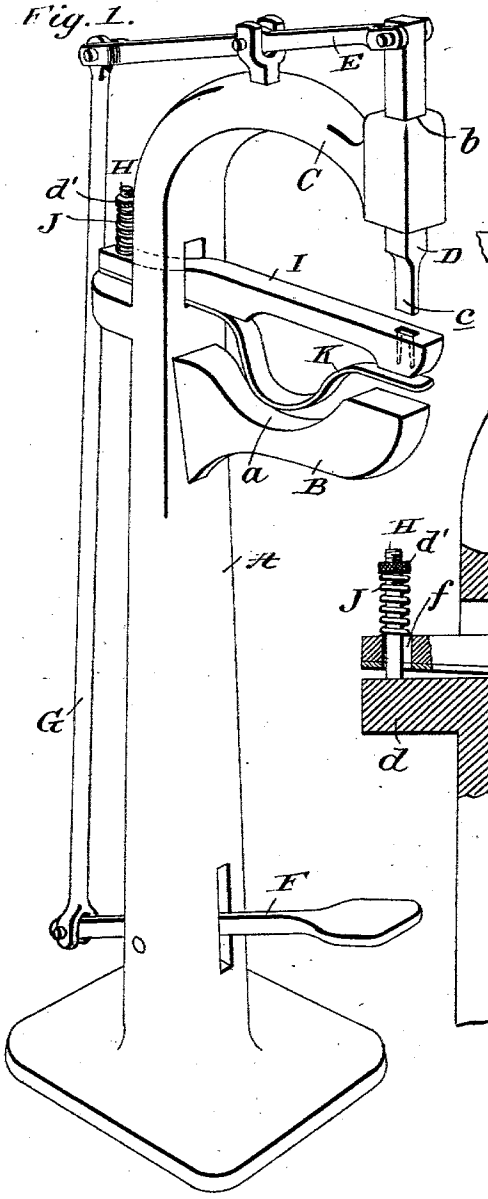
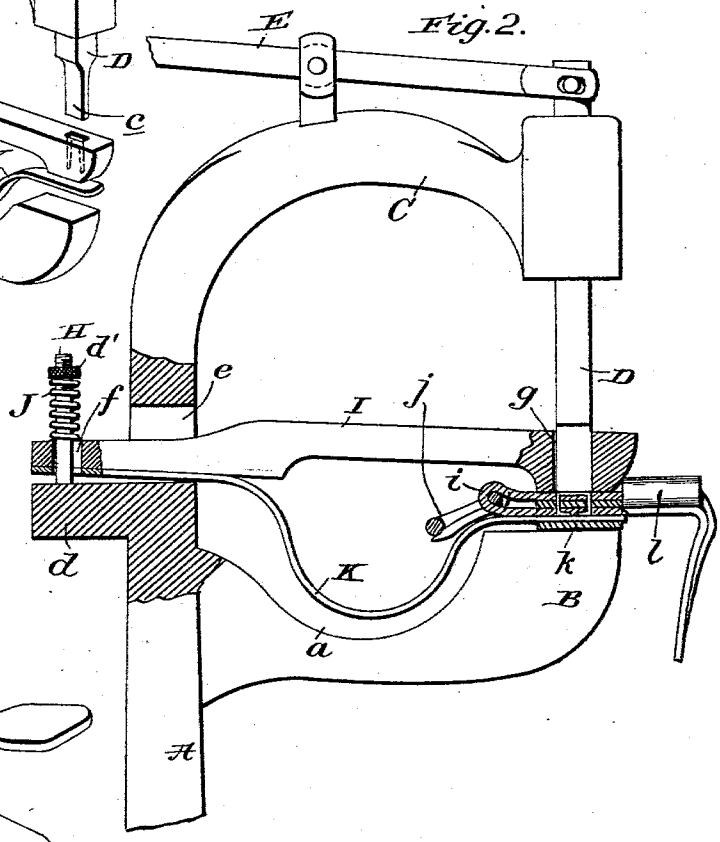


Fig. 2.



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LOUIS P. TAEGE, OF SEWARD, NEBRASKA.

RIVETING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 715,317, dated December 9, 1902.

Application filed February 24, 1902. Serial No. 95,394. (No model.)

To all whom it may concern:

Be it known that I, LOUIS P. TAEGE, a citizen of the United States, residing at Seward, in the county of Seward and State of Nebraska, have invented new and useful Improvements in Riveting-Machines, of which the following is a specification.

My invention relates to riveting-machines such as are designed more particularly for riveting harness-loops and the like; and it consists in a certain peculiar construction, the novelty, utility, and advantages of which will be fully understood from the following description and claims when taken in conjunction with the accompanying drawings, in which—

Figure 1 is a perspective view of my improved machine, and Fig. 2 an enlarged detail of the upper portion of the machine with a harness-loop in position to be riveted.

Similar letters of reference designate corresponding parts in both views of the drawings, referring to which—

A is the stand or pedestal of the machine, formed by preference of metal; B, a work-support preferably formed integral with and extending laterally from the stand at an intermediate point in the height thereof and having a concavity *a* in its upper side; C, an arm extending from the upper end of the stand and overhanging the work-support; D, a plunger movable vertically in a guide-aperture *b* in the overhanging arm and having by preference a reduced lower end *c* of the shape shown; E, a lever fulcrumed at an intermediate point of its length on the arm C and connected at one end to the plunger; F, a pedal-lever fulcrumed at an intermediate point of its length in the lower portion of the stand, and G a link connecting the levers E and F.

It will be readily seen that when the free end of the lever F is depressed the plunger D will be moved downwardly in the guide-aperture of the overhanging arm C. When pressure is removed from the lever F, a spring contained in the stand A, and hence not shown, operates to return the levers and the plunger to the positions shown in Fig. 1.

I prefer to employ the means just described for operating the plunger D, but do not desire to be understood as confining myself to the same, as any other means suitable to the purpose may be employed without departing from the scope of my invention.

H is a threaded bolt which rises from a lug *d* on the back of the stand A; I, a bar loosely arranged in an aperture *e* in the stand and having an aperture *f* adjacent to its rear end loosely receiving the bolt H and an aperture *g* coincident with the plunger D for receiving a rivet; J, a spring interposed between the bar I and a nut *d'* on the bolt and having for its purpose to yieldingly hold the bar in and return it to the position shown in Fig. 1, and K a spring-tongue disposed below the bar I and having a rear straight portion loosely receiving the post H, a forward straight portion arranged below the aperture *g* in the bar I, and an intermediate dished portion extending down into the concavity of the support B. The forward or free end portion of the spring-tongue K normally rests in and after an operation of the machine returns to a position between the support B and the bar I, this to permit of the ready insertion of said forward or free end portion between two layers of stock, as will be presently pointed out.

My improved machine is designed more particularly for riveting the last end of a harness-loop—that is to say, securing one end of a harness-loop between two layers of leather after the other end of said loop is secured between the layers by through-and-through stitches. The piece of harness shown in Fig. 2 comprises a strap *i*, bent upon itself to receive a buckle *j*, and loops *k l*, disposed at opposite sides of the strap. A line of through-and-through stitches arranged adjacent to one edge of the strap connects the layers of the strap together and secures one end of each loop between said layers. In the preferred practice of my invention the connection of one end of each loop to the strap by stitches is effected, and then the strap is placed on the machine with the free end of the spring-tongue K inserted between the loop *k* and the lower layer of the strap and within the loop. With this done a rivet, preferably in the form of a staple, is placed in the aperture *g* of the rivet holder or bar I, and the plunger D is forcibly moved downwardly, when the rivet will be forced through the upper layer of the strap, the end of the loop *k*, and the lower

layer of the strap and, through the medium of the tongue K, clenched or upset against the under side of the said lower layer within the loop, after the manner shown. Any number of rvets may be employed to secure the loose end of the loop *k*, and after the same is accomplished the strap is removed from the machine and turned to make the loop *l* the lowermost one, after which the strap is replaced on the machine and the tongue K is inserted between the lower layer of the strap and the said loop *l* and within the loop. The operation before described is then repeated, when the tongue K will clench the rivet or rivets against the under side of the lower layer of the strap. It will be observed that the clenched or upset ends of the rivets are disposed within the loops *k l*, and consequently hidden from view, which is highly desirable.

The concavity in the support B and the dished portion of the spring-tongue K are advantageous, because they do not interfere with the buckle *j* and the loops resting in the position shown in Fig. 2 during the riveting of the loops.

By adjusting the nut *d'* the pressure which the spring J exerts on the bar I may be readily increased or diminished at pleasure.

I have entered into a detailed description of the construction and relative arrangement of parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear, and exact understanding of the same. I do not desire, however, to be understood as confining myself to such specific construction and arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of my claims.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination in a riveting-machine, of a stand, a work-support, a rivet-holder disposed above the support, a plunger disposed above the rivet-holder, and a resilient, rivet-clenching tongue connected with and extending forwardly from the stand, below the rivet-holder and having its forward free end normally disposed in a plane between the work-support and the rivet-holder.

2. The combination in a riveting-machine, of a stand, a work-support, a bar loosely connected with and extending forwardly from the stand and having a vertically-disposed rivet-receiving aperture adjacent to its free end, means for yieldingly holding said bar in a plane above the work-support, a plunger disposed above the forward portion of the rivet-holder, and a resilient, rivet-clenching tongue connected at its rear end to the frame below the rivet-holding bar, and having its forward portion disposed below the aperture of the rivet-holding bar.

3. The combination in a riveting-machine, of a stand, a work-support having a concave upper side, a rivet-holding bar loosely connected with and extending forwardly from the stand, and having an aperture adjacent to its forward end, means for yieldingly holding said bar in a plane above the work-support, a plunger arranged above the forward portion of the rivet-holding bar, and a spring rivet-clenching tongue connected at its rear end with the frame below the bar, and having the intermediate dished portion, and also having the forward end portion normally resting in a plane between the work-support and the bar.

4. The combination in a riveting-machine, of a stand having a lug at its back, and a nut-bearing bolt on said lug, and also having the aperture *e* disposed in a plane above the lug, a work-support extending laterally from the stand, an arm extending from the stand and overhanging the work-support, a plunger guided in said arm, means for operating the plunger, a rivet-holding bar resting above the work-support and in the aperture of the stand, and having an aperture loosely receiving the post, a spring interposed between the said bar and the nut on the post, and a resilient, rivet-clenching tongue connected to the post below the bar and extending through the aperture *e* of the stand, and having its forward free end disposed between the work-support and the bar.

5. The combination in a riveting-machine, of a work-support having a concave upper side, a rivet-holder disposed above the forward portion of the support, a plunger disposed above the rivet-holder, and a rivet-clenching tongue disposed above the work-support and concaved in conformity therewith, and having the forward free end.

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

LOUIS P. TAEGE.

Witnesses:
GRAY NORVAL,
ROBT. E. CAMPBELL.