H. R. NYE.

RIVET SETTER.

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1,289,526.

Patented Dec. 31, 1918

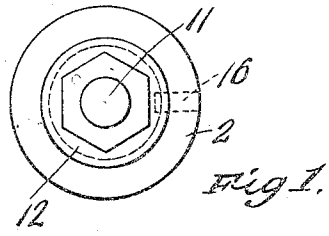


Fig 1.

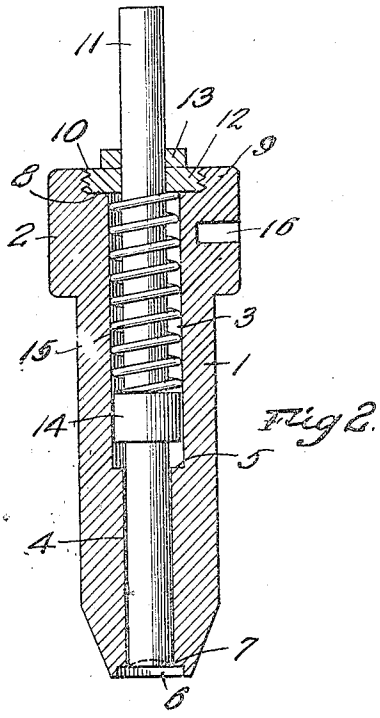


Fig 2.

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WITNESSES

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HARRY R. NYE, OF TWIN BRIDGES, MONTANA.

RIVET-SETTER.

1,289,526. Specification of Letters Patent. Patented Dec. 31, 1918.

Application filed February 14, 1918. Serial No. 217,159.

To all whom it may concern:

Be it known that I, HARRY R. NYE, a citizen of the United States, residing at Twin Bridges, in the county of Madison and State of Montana, have invented certain new and useful Improvements in Rivet-Setters, of which the following is a specification.

This invention relates to riveting tools in general, and aims to provide a riveting tool peculiarly fitted for upsetting the ends of the iron or copper rivets which are usually employed for securing two pieces of leather or similar material together and which as a general rule, have a washer associated with the end to be upset.

Up to the present time, considerable difficulty has been experienced in properly upsetting rivets of the type above mentioned owing to the fact that the washer associated with the end to be upset has a tendency to spring away from the material through which the rivet passes, during the riveting operation of the tool and thus frequently causes an improper set. So far as I know none of the riveting tools now in use are equipped in any way to prevent this objectional movement on the part of the washer during the riveting operation and it is for this reason that I have devised the present invention which has as its primary object the provision of a riveting tool having means for firmly holding a washer around the end of the rivet to be upset.

Another object is to provide a riveting tool constructed in such a manner that the striking pin will be held against rebounding during the riveting operation.

A further object of the invention is to provide a riveting tool having means for properly positioning a washer around the end of the rivet to be upset, and further with means for holding the washer against movement during the riveting operation, said holding means being engaged with the washer in such a manner as to prevent lateral movement of the tool with respect to the rivet, thus preventing possibility of the tool slipping during the riveting operation.

Other objects and advantages of the invention will be more readily understood from the following description and drawings wherein I have illustrated the invention in its preferred embodiment and in which drawings:—

Figure 1 is a top plan view of my improved riveting tool, and

Fig. 2 is a vertical sectional view partly in elevation.

Referring more particularly to the drawings, 1 designates a cylindrical barrel enlarged at its upper end as indicated at 2, and provided with a central longitudinally extending bore 3. This bore is made relatively wide for a portion of its length and is then restricted at 4 to provide a shoulder 5 adapted to serve as a stop as hereinafter pointed out. At its lower end, the restricted portion 4 of the bore is circumferentially widened to form a recess 6 and a shoulder 7. The upper wider portion of the bore is also enlarged in a similar manner at its upper end to provide a shoulder 8 and an annular wall 9 surrounding said shoulder and screw threaded on its inner face as indicated at 10.

11 designates a striking pin mounted for longitudinal movement in the bore 3 and having its lower end making a close sliding fit with the restricted portion 4 of said bore. Surrounding this pin and resting upon the shoulder 8 is a circular nut 12, provided with a central opening through which the pin passes and having its periphery threaded for engagement with the threaded inner face of the wall 9. Upon its open face this nut is provided with an integral hexagon shaped head 13 which enables the same to be readily applied or removed by means of a wrench.

Formed integral with the striking pin remote from the upper end thereof is an annular collar 14. This collar is movable in the wider portion of the bore 3 and is engageable at times with the shoulder 5 to limit the downward movement of the pin. Surrounding the pin between this collar and the lower face of the nut 12 is a coiled spring 15 which is adapted to exert sufficient downward pressure upon the collar to resist the rebounding tendency of the striking pin during the riveting operation.

Formed in the enlarged portion 2 of the barrel as a short transverse socket 16 which opens into the outer face of said enlarged portion. Prior to the riveting operation this socket is adapted to be inserted over the

end of the rivet and engaged with the washer surrounding the same. A few light taps of a hammer upon the enlarged portion 2 will be sufficient to force the washer firmly against the material through which the rivet passes.

After the washer has been forced to its initial position by the socket 16 the tool is then held in the vertical position above the rivet, with the striking pin engaging the projecting end of the rivet and the washer surrounding said projecting end received in the recess 6 and held against the material through which the rivet passes by means of the shoulder 7. This recess and shoulder hold the washer against any movement during the riveting operation and furthermore will prevent lateral movement of the barrel, thus holding the striking pin directly above the projecting end of the rivet and preventing the same from slipping during the riveting operation.

It is to be also understood that I have shown my invention merely in its preferred embodiment and I therefor reserve the right to change the construction and arrangement of the parts as I see fit providing that any such changes contemplated come within the scope of the appended claims and do not depart from the spirit of the invention.

I claim:—

1. A riveting tool comprising a hollow barrel provided with annular recesses at its opposite ends, a striking pin slidably mounted in said barrel, a nut surrounding said barrel and threadedly engaged in the upper of said recesses, a collar formed on said pin, and a spring encircling said pin between said collar and the under face of said nut.

2. A riveting tool including a barrel provided with a longitudinal bore restricted for a portion of its length, said restricted portion having its lower end enlarged to provide an annular recess, the outer wall of which provides a shoulder surrounding said bore, a plunger slidably mounted in said bore and resilient means engaged with said plunger to resist the rebounding tendency of the same during the riveting operation.

3. A riveting tool which comprises a hollow barrel having a shoulder formed therein, a plunger slidably mounted in said barrel, a collar formed on said plunger and engageable with said shoulder, a spring encircling said plunger above the collar, and having one end engaging said collar and abutting means for the other end of said spring.

4. A riveting tool which comprises a hollow barrel provided with a longitudinal bore, said bore being restricted adjacent its lower end to provide a shoulder, a plunger mounted for sliding movement in said barrel, and provided with a stop collar engageable with said shoulder to limit movement of the plunger in one direction, and resilient means engageable with said collar to prevent rebounding movement of said plunger.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY R. NYE.

Witnesses:
C. A. NYHART,
GEORGE R. ALLEN.