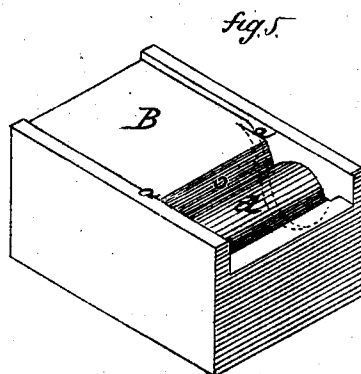
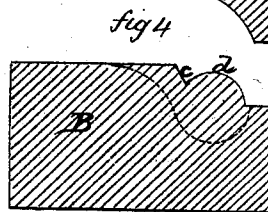
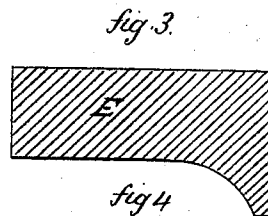
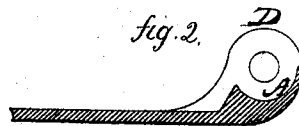
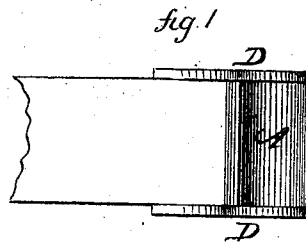


J. H. MASON.

Improvement in Dies for Forging Carriage-Spring Heads.

No. 116,206.

Patented June 20, 1871.



Witnesses.
John T. Shumway
a. j. Tibbitts

Joseph H. Mason
Inventor
By his Attorney,
John E. Earle

UNITED STATES PATENT OFFICE.

JOSEPH H. MASON, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN DIES FOR FORGING CARRIAGE-SPRING HEADS.

Specification forming part of Letters Patent No. 116,206, dated June 20, 1871.

To all whom it may concern:

Be it known that I, JOSEPH H. MASON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Dies for Forging Carriage-Spring Heads; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification and represents in—

Figure 1, a top view of the spring-head; Fig. 2, a longitudinal central section of the same; Figs. 3 and 4, sectional views of the upper and lower parts of the dies; and in Fig. 5, a perspective view of the lower part of the die.

This invention relates to the construction of dies forming carriage-spring heads of common construction—that is to say, such as are seen in Figs. 1 and 2, in which a seat, A, is formed on the spring, between the ears, into which the head of the other part of the spring rests or takes its bearing. The shape of the seat A retains the head in position, thereby relieving the strain, which, in the common construction, would come directly upon the bolt. My invention consists in the construction of a die for

striking up or forming the seat A, as more fully hereafter described. The lower die B is formed with a recess, *a*, at each side, of the form and shape of the ears D of the spring-head, as seen in Fig. 5 and denoted in broken lines, Fig. 4. The space between these recesses *a* is wrought into shape the reverse of the seat, as denoted at *c d*, Figs. 4 and 5. The upper die E is formed, as seen in Fig. 3, corresponding to the outer surface of the spring-head. The blank for the spring is provided with ears in the usual manner, previous to heating, there being sufficient metal at the end of the spring to form the seat, either by upsetting or by supplying an additional piece; then heated, the blank is placed in the lower die, the ears passing into their respective recesses; then the upper die, struck upon the upper surface of the spring, forces the metal of the head to conform to the shape of the lower die, and shapes the head complete, as in Figs. 1 and 2.

I claim as my invention—

The dies for forging carriage-spring heads, constructed as herein described.

JOSEPH H. MASON.

Witnesses:

JOHN H. SHUMWAY,
A. J. TIBBITS.