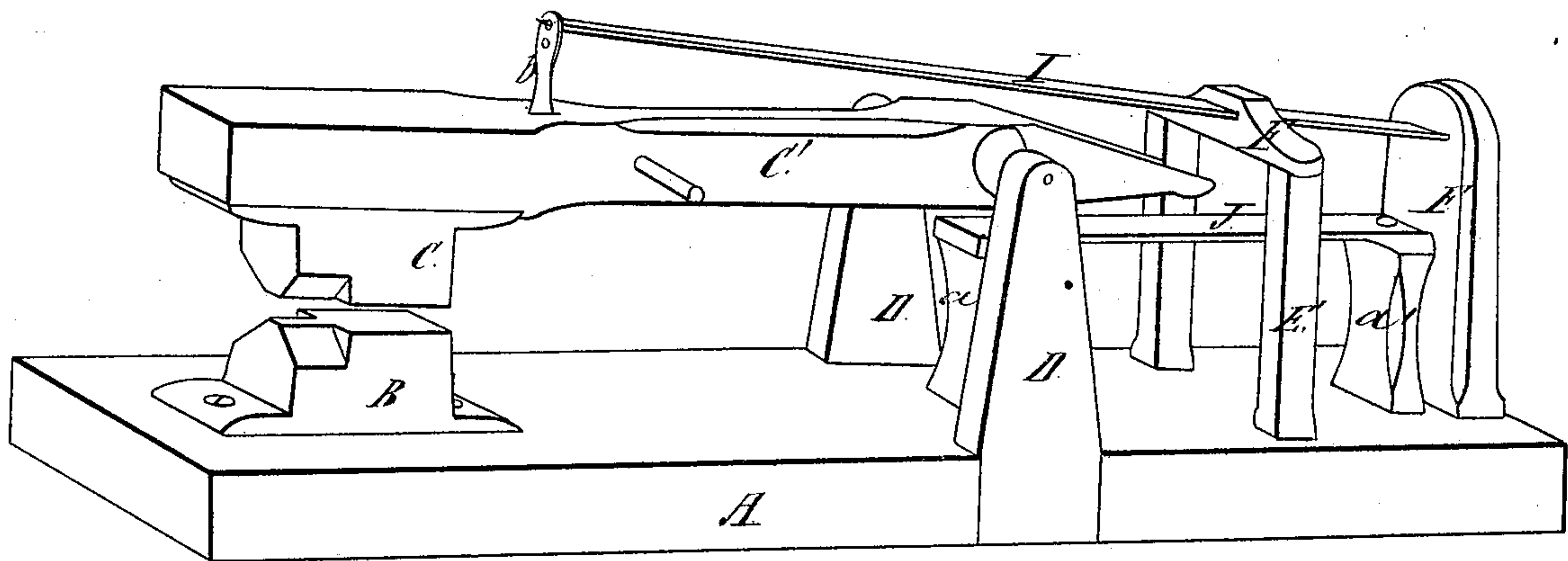


*J. Collins.*

*Spring Balance Hammer.*

*N<sup>o</sup> 89,292.*

*Patented Apr. 27, 1869.*



*Witnesses.*

*Geo. W. Tibbitts*  
*J. Colmes.*

*Inventor.*

*John Collins*

# United States Patent Office.

JOHN COLLINS, OF PARMA, OHIO.

Letters Patent No. 89,292, dated April 27, 1869.

## IMPROVED SPRING-BALANCE HAMMER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN COLLINS, of Parma, in the county of Cuyahoga, and State of Ohio, have invented a certain new and improved Spring-Balance Hammer; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

The drawing is a perspective view of the hammer.

The nature of this invention consists in the construction and arrangement of a spring-balance hammer for blacksmiths' use, and is designed to supply the place of an assistant, or striker.

It is portable, making it convenient for removal from one fire, or part of a shop, to another, as may be desired.

In the drawing—

A represents the base, or platform, on which are arranged the hammer, and means by which it is supported.

B represents the anvil, above which is the hammer C, the said hammer being firmly secured to the lever, or beam C', which gives the motion to the hammer, as hereafter described.

D D are uprights, or standards, secured, one at each side of the base A. Through the top of these standards passes a pin, or shaft, which extends through the lever, or beam of the hammer, thus forming the fulcrum, or pivot of said lever.

At one end of the base, opposite the anvil, is the upright E, in the upper end of which is secured one end of the spring I, the said spring passing through a slot in the cross-bar F, which is supported by the two standards E'.

Underneath the cross-bar F, and extending from the block *a* to *a'*, on which it rests, is the spring J, the purpose of which is to receive the force of the concus-

sion of the short arm of the lever C', and give, by its elasticity, extra force to the hammer.

The spring I, one end of which is secured in the standard E, extends forward to near the hammer, the end being attached to the rod, or bar *b*, which may be provided with a right and left-hand screw, so as to adjust the hammer according to the blow required; the spring balancing and supporting said hammer, as shown.

This spring I may be constructed, as shown, or any other suitable form may be employed, to produce the desired result, my object being to produce a suspending and balancing-power for supporting the hammer, by, and through which it may be operated, as herein described.

In constructing this hammer it may be made of any desired size, and the play of the hammer adjusted according to the work required to be done.

By the use of this improvement the smith is enabled to perform much of his work without employing an assistant, as with it he can strike very rapid and hard blows with one hand while holding his tongs with the other, without much exertion; or if he should desire many and repeated heavy blows, a boy, or apprentice, may be employed.

Thus it will be seen that the expense and hard labor of a striker, with a sledge-hammer, are entirely overcome, the work being very much more easily and perfectly performed.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The arrangement of devices above described, to form a spring-balanced hammer, consisting of the spring I, hammer-helve C', spring J, hammer C, anvil B, and standards D and E, substantially as specified.

JOHN COLLINS.

Witnesses:

GEO. W. TIBBITTS,  
GEO. HESTER.