

(No Model.)

J. L. McKEE.
SPRING HAMMER DEVICE.

No. 419,702.

Patented Jan. 21, 1890.

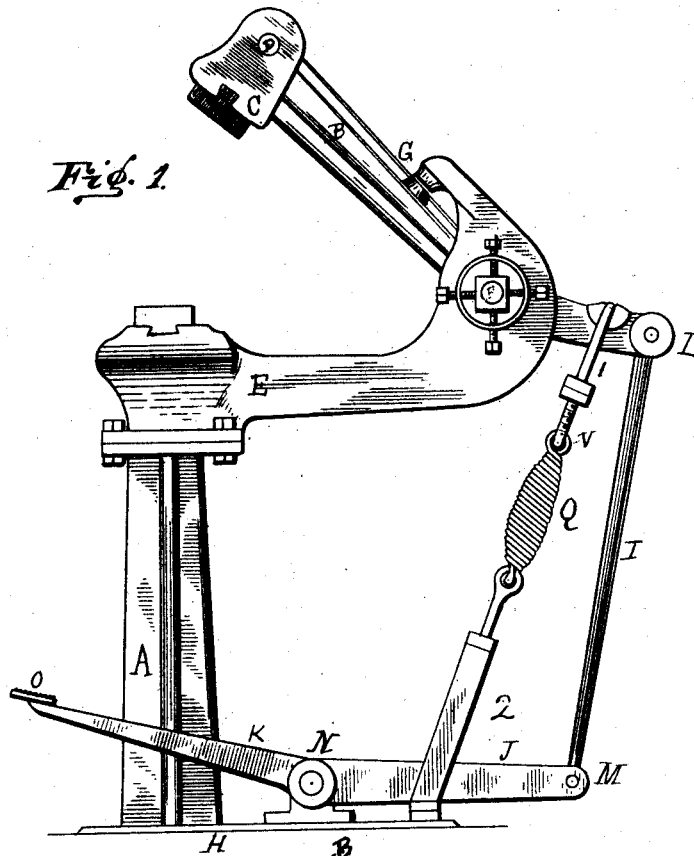
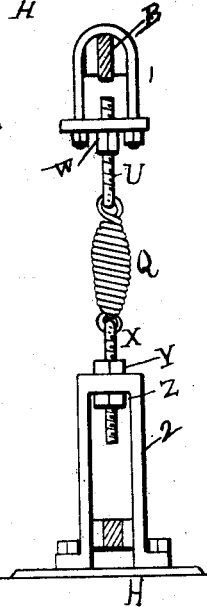


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN L. MCKEE, OF CORTLAND, NEW YORK, ASSIGNOR TO THE HITCHCOCK
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SPRING-HAMMER DEVICE.

SPECIFICATION forming part of Letters Patent No. 419,702, dated January 21, 1890.

Application filed January 21, 1888. Renewed December 13, 1889. Serial No. 333,589. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. MCKEE, a citizen of the United States, residing at Cortland, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Foot-Hammer Springs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to dispense with the elliptic spring used to draw back the handle in the ordinary foot-hammer, and, further, to use a coiled spring in the place of the ordinary elliptic spring heretofore used, thereby giving the parts a compact appearance, also obtaining the action of a coiled spring, which is preferable to an elliptic spring, and adjusting said coiled spring so as to give a stronger or weaker spring-power, as may be desired, to the hammer and its handle. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the foot-hammer, showing the coiled spring attached to a standard projecting up from the base and to a yoke or collar supported from the handle; and Fig. 2 is a view of the said standard, the coiled spring, and the said yoke or collar, showing the manner of the attachment of the same to said handle and base.

Similar letters refer to like parts throughout the different views.

In said drawings, A represents the standard of the foot-hammer.

B represents the handle.

C represents the hammer, which has a projecting handle, (shown at D,) by which it can be operated by hand.

E represents the beam, to which the handle B is pivoted at F. This pivotal mechanism I usually make with trunnions, (shown in Fig. 1,) adjustable by means of set-screws there shown, whereby hammer C can be slightly shifted forwardly and laterally, thus making dies when used match evenly and obviate the usual shim.

G represents a rubber buffet for the handle B to strike against.

H represents the base-plate of the machine.

I J K represent the connecting links or rods of the foot mechanism of the machine, whereby handle B is operated, said rods or links I J K being jointed or pivoted at the working-joints shown at L, M, and N.

O represents the foot plate or step of the machine, to which the power is applied by the foot of the operator. The coiled spring Q is attached to the handle B by means of the collar or yoke I, and is capable of adjustment by means of the nut W and screw U. The lower end of the spring is attached, by means of the screw X and nuts Y and Z, to a standard 2, which is secured to the base H.

All the parts of the machine I construct of suitable metal and other proper materials.

Having thus explained the construction of the different parts of my improvement, and the parts of a foot-hammer to which it is attached, so as to clearly represent the same, I now proceed to describe its operation.

The tendency of the coiled spring Q as used herein is to keep the hammer C raised and the handle B pressed against the buffet G. The coiled spring Q and its tension are so arranged as to do this when the foot-hammer is operated. When the pressure is brought to bear on the treadle, the hammer is forced down into operation, the spring being drawn out, and when the treadle is released the action of the spring will cause the hammer to fly upward against the buffet G, its normal position.

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

1. In a foot-power hammer, the combination, with the treadle and pivoted handle thereof, of the adjustable yoke attached to said handle, an adjustable standard connected to the base-plate, and a spring whose ends are so connected, respectively, to the yoke and standard that the tension of the spring may be adjusted as required, substantially as specified.

2. In a foot-power hammer, the combination

of the pivoted handle, the connecting-rod I, the
treadle J K O, the standard 2, connected to
the base, the yoke 1, attached to the handle,
the spring Q, one end of which is attached to
5 the yoke and the other end to the standard,
and means for adjusting the tension of the
spring, substantially as specified.

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

JOHN L. MCKEE.

Witnesses:

JOHN W. SUGGETT,
W. F. HITCHCOCK.