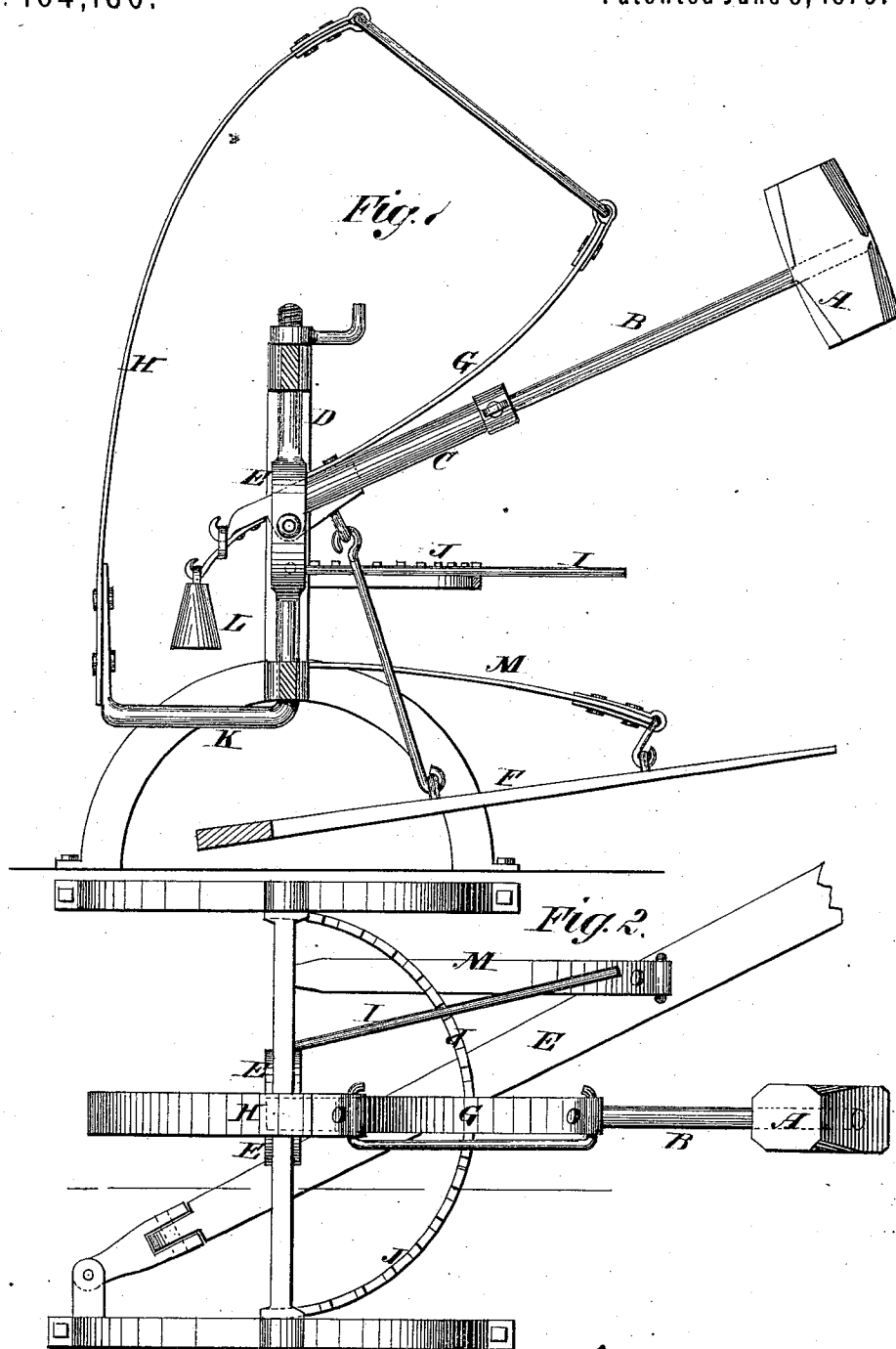


A. J. JUDSON.
 Blacksmiths' Forging-Hammer.

No. 164,180.

Patented June 8, 1875.



WITNESSES:

Francis McQuillan
 A. J. Terry

INVENTOR:

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 BY Minut Co
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UNITED STATES PATENT OFFICE.

ANDREW J. JUDSON, OF HILLVILLE, ASSIGNOR OF THREE-FOURTHS HIS RIGHT TO JACOB TRULY, OF CATFISH, PENNSYLVANIA.

IMPROVEMENT IN BLACKSMITHS' FORGING-HAMMERS.

Specification forming part of Letters Patent No. **164,180**, dated June 8, 1875; application filed April 3, 1875.

To all whom it may concern:

Be it known that I, ANDREW J. JUDSON, of Hillville, Armstrong county, Pennsylvania, have invented a new and Improved Foot-Power Sledge-Hammer, of which the following is a specification:

My invention consists of a sledge-hammer for blacksmith's use, contrived with a foot-treadle for forcing it down and a spring for raising it, contrived to strike quick light blows, or slower heavy ones, at the will of the operator, the helve of the hammer being pivoted in a yoke of a vertical standard, which is free to turn, and has a lever for the purpose of swinging the hammer laterally along the anvil, whereby the blacksmith may cause the hammer to strike on any part of the anvil at will, and as the work requires. The springs for raising the hammer are also contrived to turn with the helve, so as not to interfere with its turning, and the helve is extensible to lengthen and shorten its range.

Figure 1 is a sectional elevation of my improved foot-power hammer, and Fig. 2 is a top view.

Similar letters of reference indicate corresponding parts.

A is the sledge; B and C, the extensible helve; D, the vertical support of the yoke E, in which the helve is pivoted. F is the foot-treadle for forcing the hammer down to strike the blow; G and H, the springs for raising it;

I, the lever for swinging the hammer laterally along the anvil, and J a notched bar for lever I to drop into to hold the hammer above any part of the anvil. Spring G is attached to the helve, and spring H to an arm, K, of the oscillating support D, so that they turn freely with the hammer and work alike in any position. L is a counterpoise, attached to the short arm of the hammer-helve to lessen the power of the hammer when its full weight is not required.

Different weights may be employed to regulate the hammer to different work.

A spring, M, is employed to lift the foot-treadle; but it may be lifted by the same springs that lift the hammer, if preferred.

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

1. The hammer-helve and its lifting-springs, arranged to swing laterally in the pivoted support D, in combination with the lever I and holding-bar J, substantially as specified.

2. The foot-power hammer A, having an extensible helve, in combination with a laterally-swinging support, D, for the helve, substantially as specified.

ANDREW J. JUDSON.

Witnesses:

T. C. MCGREGOR,
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