

E. M. PATTEN.
TRIP HAMMER.
APPLICATION FILED SEPT. 16, 1911.

1,042,961.

Patented Oct. 29, 1912.

Fig 1

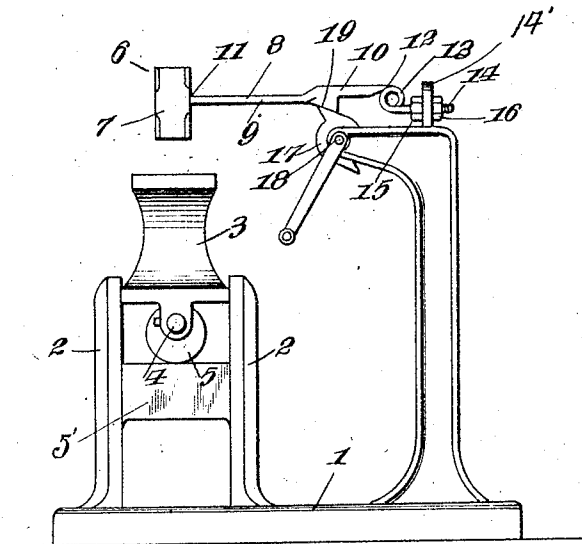


Fig 2

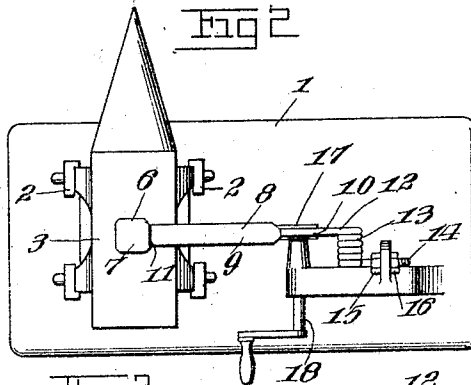
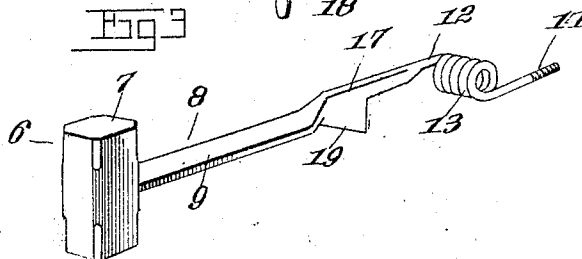


Fig 3



Inventor

Edward M. Patten

Witnesses

M. H. S. L. L.

James D. L. L.

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

EDWARD M. PATTEN, OF YUMA, COLORADO.

TRIP-HAMMER.

1,042,961.

Specification of Letters Patent.

Patented Oct. 29, 1912.

Application filed September 16, 1911. Serial No. 649,676.

To all whom it may concern:

Be it known that I, EDWARD M. PATTEN, a citizen of the United States, residing at Yuma, in the county of Yuma and State of Colorado, have invented new and useful Improvements in Trip-Hammers, of which the following is a specification.

This invention relates to trip hammers and particularly to a hammer designed especially for use by blacksmiths or the like, and has for an object to provide a hammer which will include means for effectively operating the same and means such as an anvil adjustable beneath the hammer and adapted to support the work at any required distance with respect to the hammer as the occasion may require.

Another object of the invention is to provide a hammer which will include a springy or elastic portion which will operate to increase the force of the hammer against the work.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views: Figure 1 is a front view of the apparatus. Fig. 2 is a plan view of the apparatus. Fig. 3 is a perspective view of the hammer.

My improved trip hammer comprises a suitable supporting frame 1 which includes the vertical guides 2 in which the vertically sliding anvil 3 is mounted. An anvil controlling shaft 4 is journaled in the anvil and disposed therebeneath, being provided with an eccentric 5 which is arranged in peripheral contact with the bar 5' of the frame so that when the shaft 4 is revolved the anvil may be raised or lowered as the occasion may require. The hammer 6 which is disposed above the anvil comprises a head 7 and a rocking support 8.

The support 8 is constructed preferably

from a single piece of flat springy steel and is provided with the horizontal flat portion 9 and a similar vertically disposed flat portion 10, the former being attached, at 11, in any suitable well known manner to the head 7. The portion 10 is rolled so as to provide the cross sectionally wound portion 12 which is coiled, at 13, to form a horizontally disposed spring. One of the wound portions of the coil is threaded, at 14, and extended through the lug 14' of the frame 1 and secured thereto by the clamping nuts 15 and 16, which are arranged at the opposite sides of the frame bar, as shown. A tappet wheel or cam 17 is mounted on the hammer driving shaft 18 and is disposed beneath the actuating surface 19 on the portion 10 of the hammer supporting member, being adapted to engage said surface so that the support will be rocked vertically toward and away from the anvil 3.

In the construction of the apparatus described it will be seen that the power of the hammer can be regulated as the occasion may require by readily adjusting the hammer and the anvil relatively.

I claim:

In apparatus of the character described, a frame, an anvil, a lug rising from the frame and disposed above the plane of the anvil, a hammer disposed above the anvil, a helve for the hammer provided at one end with a coiled portion for rendering the hammer yieldable, the said coiled portion having one of its convolutions extended through the lug and detachably secured thereto, and means on the frame for moving the hammer.

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

EDWARD M. PATTEN.

Witnesses:

WILLIAM B. HOUSTON,
CHARLES E. HULBURD.