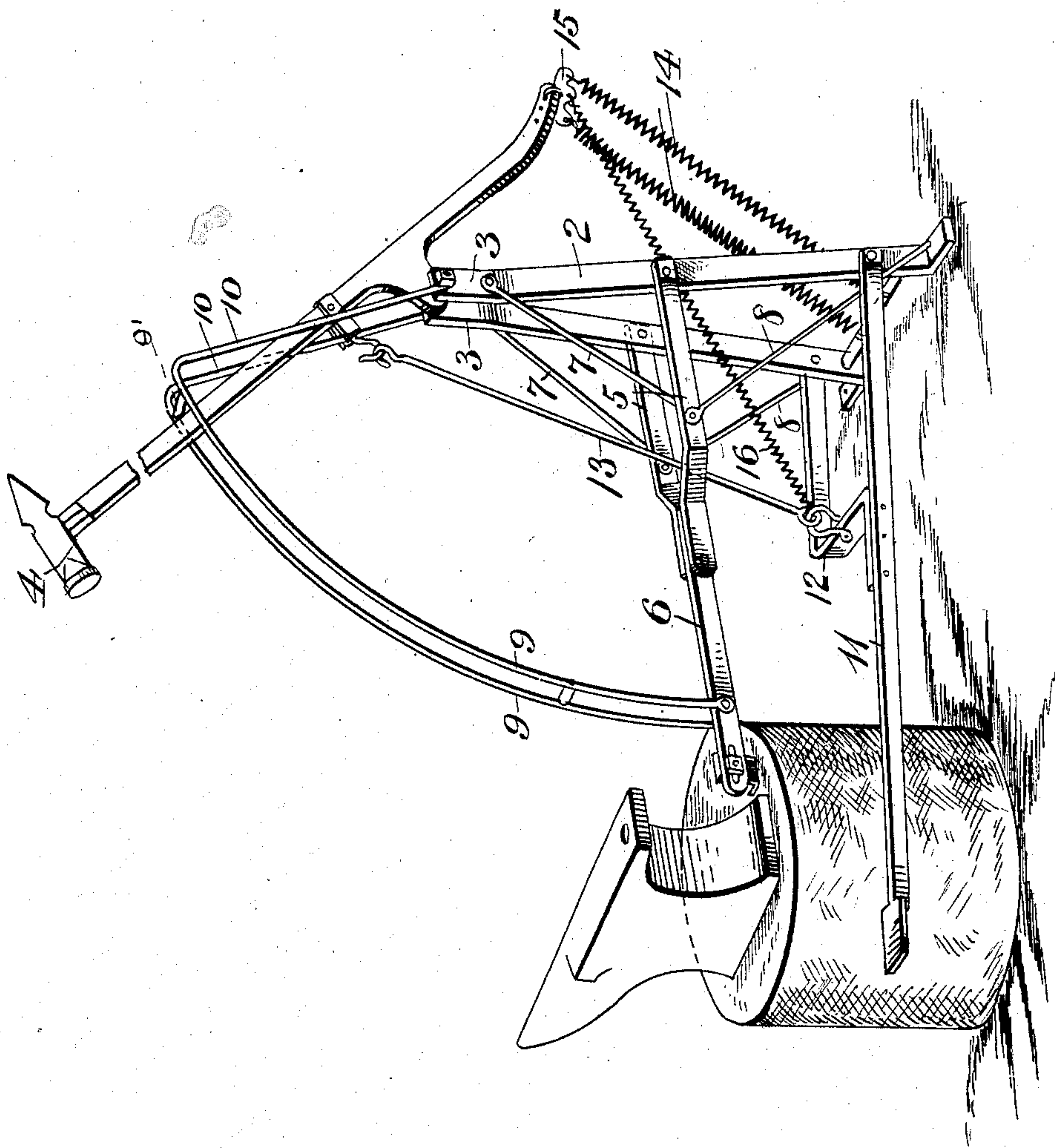


No. 864,970.

PATENTED SEPT. 3, 1907.

J. D. KINSON.  
POWER HAMMER.

APPLICATION FILED SEPT. 24, 1906.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JAMES D. KINSON, OF TOLAR, TEXAS, ASSIGNOR OF ONE-HALF TO JAMES M. WRIGHT, OF WEATHERFORD, TEXAS.

## POWER-HAMMER.

No. 864,970.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed September 24, 1906. Serial No. 336,017.

*To all whom it may concern:*

Be it known that I, JAMES D. KINSON, a citizen of the United States of America, residing at Tolar, in the county of Hood and State of Texas, have invented certain new and useful Improvements in Power-Hammers, of which the following is a specification.

The invention relates to new and useful improvements in power hammers and relates more particularly to that class operated by a treadle.

It is an object of the invention to provide a device of this kind with a novel arrangement of springs whereby the operation of the same is greatly enhanced.

A further object of the invention is to provide a novelty device of this character that will be a simple construction, comparatively inexpensive to manufacture.

With the above and other objects in view, the invention consists in the details of construction and the novel arrangement and combination of parts as will be hereafter more fully described.

In describing the invention in details, references will be had to the accompanying drawing, wherein is shown a view in perspective of the invention.

In the drawings 2, indicates a frame approximately the shape of inverted V, having at the top the parallel ears 3, between which is pivoted, intermediate its length, the hammer arm 4, said pivot being nearer the outer end of the arm.

Approximately midway the frame is pivoted the yoke 5, which is attached to an arm 6. This arm 6, is intended to be secured to any suitable place to hold the frame in position as will, it is thought, be readily understood. Brace rods 7, are secured to the upper portion of the frame and to the yoke and additional brace rods 8, are attached to the base of the frame and to the yoke.

Secured to both sides of the arm 6, are the parallel rods 9 which extend on the segment of a circle. The upper ends of the arms are secured to the depending arms 10, which are secured to the ears 3, of the frame. The hammer arm 4, moves between the rods 9, and is thereby held against undue lateral movement or "wobbling" and the cross arm 9', acts as a stop for the upward movement of the hammer arm 4 and thus prevents it from swinging back sufficient distance to get out of operative position.

Pivoted to one side of the frame near its bottom is a treadle arm 11, having rigidly secured thereto the angular arm 12, the free end of which being pivoted to the opposite side of the frame. Secured to the angular arm 12 and the hammer arm 4, in advance of its pivot is a rigid connection 13, which, when the treadle is depressed, will cause the descent of the hammer arm and it may be well to state that the pressure on the treadle arm will determine the stroke of the hammer arm.

The hammer arm 4, is held in its normal or elevated position by the heavy coil springs 14, which are secured at their lower ends to the base of the frame and at their upper ends to a clevis 15, held by the outer end of the hammer arm. To further assist in the elevation of the hammer arm a smaller coil spring 16, is secured at one end of the clevis 15, at its opposite end to the union of the connection 13, with the angular arm 12. This spring 16, while assisting the larger springs in the elevation of the hammer arm also elevate the treadle arm and it has been found in practice that this small spring entirely removes from the heavy springs the necessity of raising the treadle, a feature which has been found most advantageous in the operation of the device. It is well to mention that this small spring 16, is an essential feature of the invention.

On the hammer arm 4, is any ordinary or preferred hammer head 17 and it is the intention of the invention to so mount the head on the hammer that the same can be readily adjusted to vary the angle of the stroke.

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

In combination, a frame, a rocking arm carried by the frame, a treadle pivoted to the frame, a rigid connection pivotally secured to the treadle and the rocking arm, spring connections between the rocking arm and the frame and a spring connected to the treadle at a point in advance of the frame and to the rocking arm at a point on the opposite side of the frame.

In testimony whereof I affix my signature in the presence of two witnesses this 24 day of August, 1906.

JAMES D. KINSON.

Witnesses:

W. W. McILROY,

E. K. HUFSLDEN.