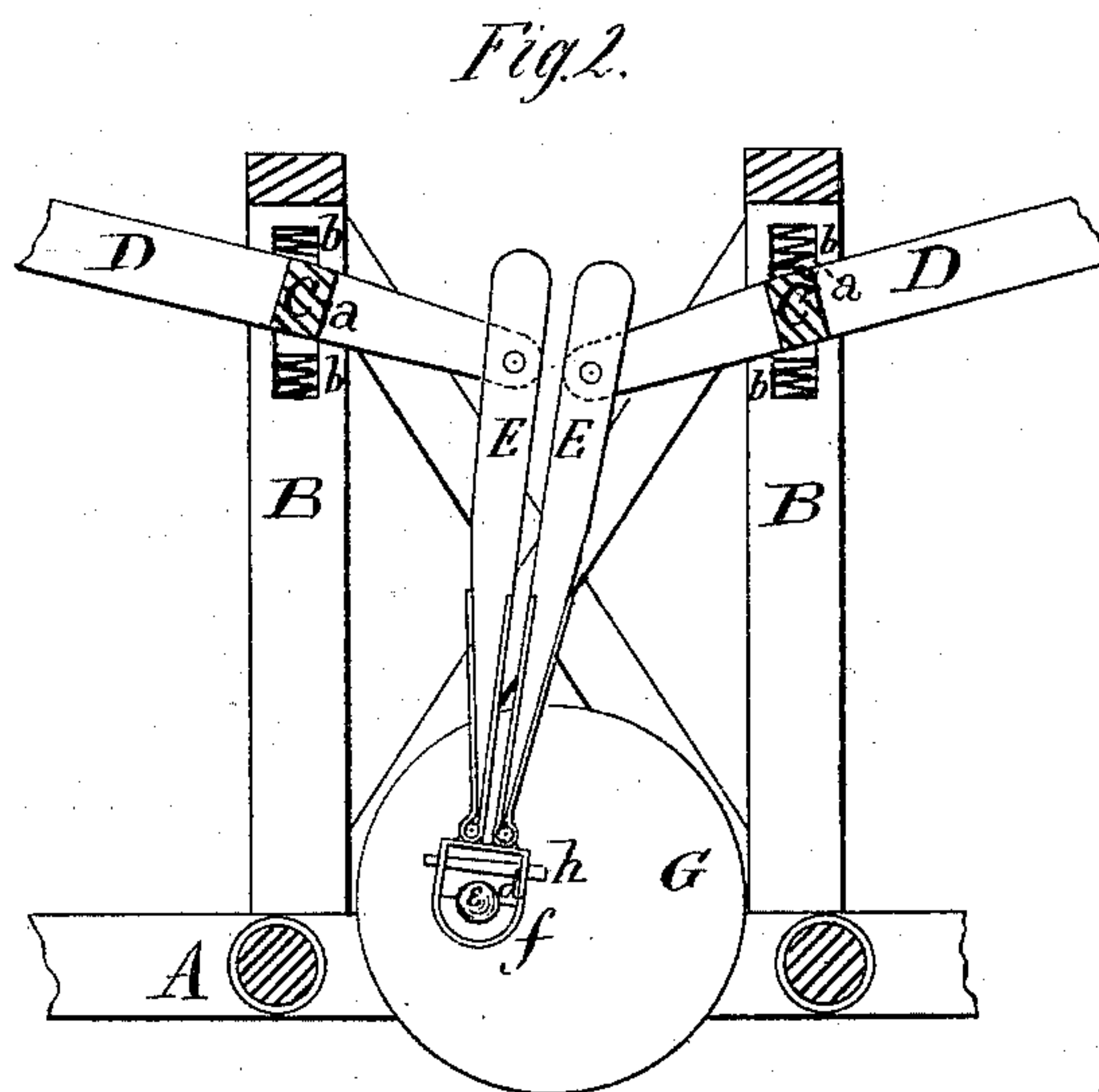
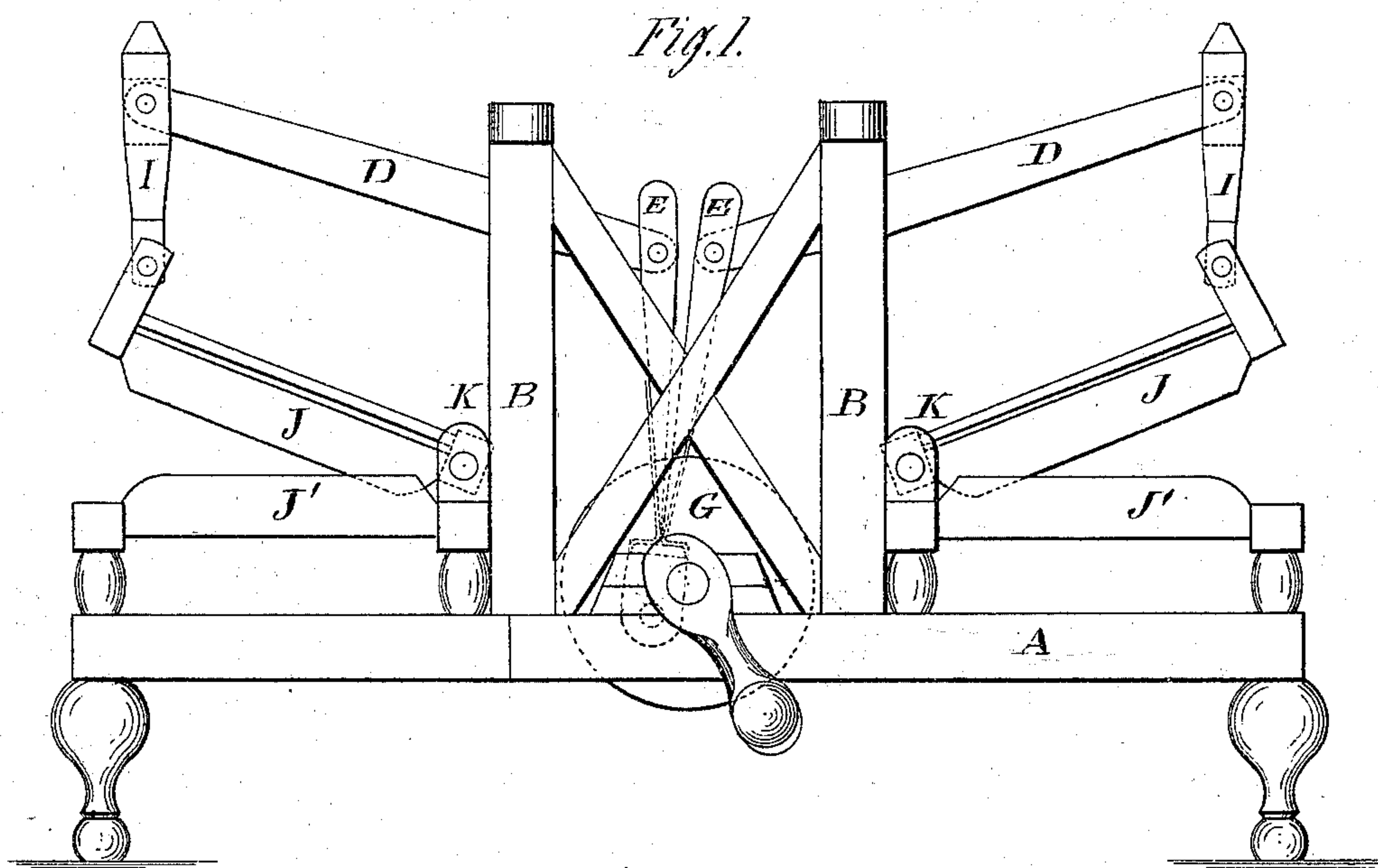


WILLIAM S. LAWRENCE.
Improvement in Hemp Brakes.

No. 125,466.

Patented April 9, 1872.



Witnesses.

M. Gardner.
A. S. Munk

Inventor,

William S. Lawrence
per Edw. W. Donn

UNITED STATES PATENT OFFICE.

WILLIAM S. LAWRENCE, OF WINCHESTER, KENTUCKY.

IMPROVEMENT IN HEMP-BRAKES.

Specification forming part of Letters Patent No. 125,466, dated April 9, 1872.

To all whom it may concern:

Be it known that I, WILLIAM S. LAWRENCE, of Winchester, in the State of Kentucky, have invented certain new and useful Improvements in Hemp-Brakes; and do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a hemp-brake, in which the movable beaters give a yielding blow, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a side view of my machine; and Fig. 2 is a longitudinal vertical section of the central part of my machine.

A represents the bed-frame of my machine, upon each side of which are two standards, B B, and a suitable distance from the center. The two standards on either side of the frame are braced by suitable cross-braces, while those on either side of the center are connected by a top cross-bar. On the inner side of each standard B is a recess, in which is placed a journal-box, *a*, with a spring, *b*, above and a similar spring below the box. In these boxes are placed the journals of two rocking bars, C C, running across the frame, and in the center of each rocking bar is attached a walking beam, D. To the inner end of each of the

walking beams D is attached a pitman, E, the lower end of which is attached to a wrist-pin, *e*, on a wheel, G. This wheel is placed in the center of the frame A, upon the inner end of a shaft, which is placed in suitable journal-boxes and revolved by crank or other suitable power. Around the wrist-pin *e* is placed a bisected box, *d*, and around the same is placed a metal strap or band, *f*, which is fastened by means of a wedge-key, *h*, and the two pitmen E E are hinged close together to this strap or band. The outer end of each walking beam D is connected by a pitman or connecting-bar, I, with the outer connected ends of beaters or knives J, the inner ends of which are attached to a rocking bar, K, mounted in short posts on the frame A. The beaters or knives J J work between similar but stationary knives, J', arranged a short distance above the bed-frame. The blow of the movable beaters J J is yielding on account of the springs *b b* placed above and below the boxes *a a*, in which the journals of the rocking bars C C have their bearings.

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

The walking beams D D attached to the rocking bars C C, having their bearings in the journal-boxes *a a*, and said boxes provided with a spring, *b*, both above and below, substantially as and for the purposes herein set forth.

WM. S. LAWRENCE.

Attest:

S. M. BOONE,
J. W. LAUGHLIN.