

E. B. LOWE.

Improvement in Flour-Bolt Knockers.

No. 126,312.

Patented April 30, 1872.

FIG. 1.

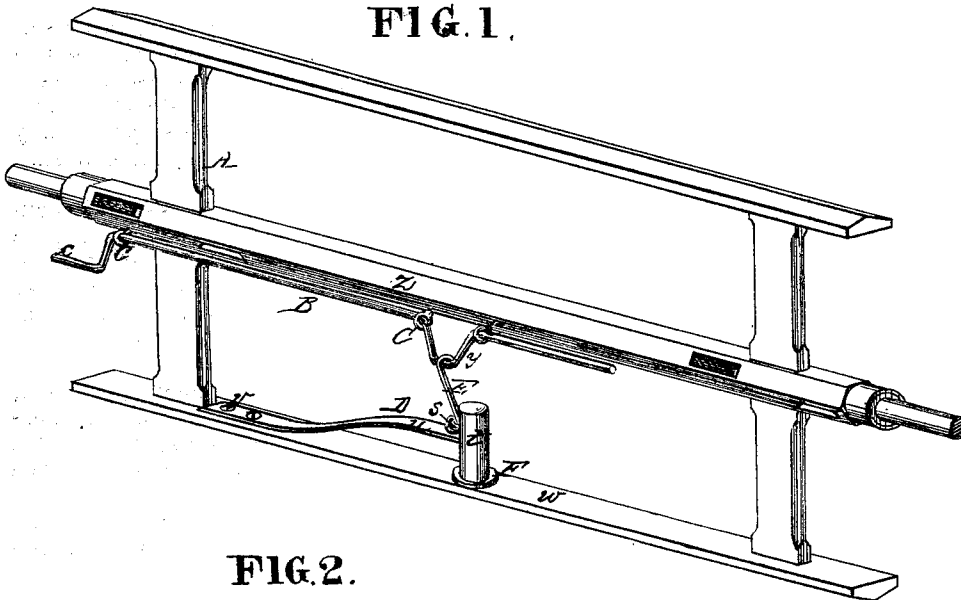
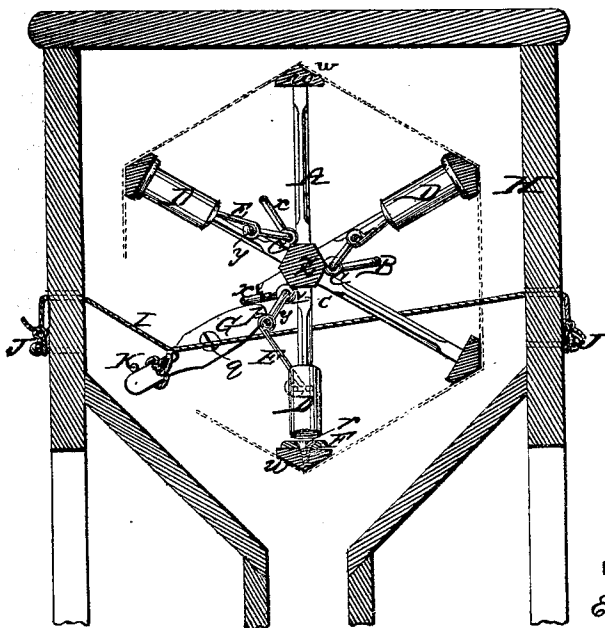


FIG. 2.



ATTEST.

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UNITED STATES PATENT OFFICE.

EDMOND B. LOWE, OF BELLEFONTAINE, OHIO, ASSIGNOR OF ONE-HALF HIS
RIGHT TO ABNER M. GREGG, OF SAME PLACE.

IMPROVEMENT IN FLOUR-BOLT KNOCKERS.

Specification forming part of Letters Patent No. 126,312, dated April 30, 1872.

Specification describing an Improved Flour-Bolt Knecker, invented by EDMOND B. LOWE, of Bellefontaine, in the county of Logan, Ohio.

The first part of my invention consists in a peculiar form of tripper; the second part, in the combination of an oscillating rod or rock-shaft formed with crank within the reel, and a crank-arm on its outer end, eye-bolts for attaching the same, a connecting-link, spring-hammer, and striking-plate, to constitute the knocking device.

The advantages of the device are superior simplicity, cheapness, and ease of attachment, with adaptation for reversing and adjustability as to force of blow.

Figure 1 is a perspective of a reel, with my knocking device applied. Fig. 2 is a transverse section thereof, and of a bolt-chest inclosing the same, showing the tripper in working position.

Taking any reel, A, I apply to its shaft, Z, a rock-shaft, B, of, say, five-eighths inch bar-iron, the same being formed with a central crank, *y*, and an end crank-arm, *x*, and attached by eye-bolts, C. Opposite this, on a rib, *w*, I attach a hammer, D, by screws, *v*. This is composed of a spring-arm, *u*, and a head, *t*, which may be cast thereon, being provided with a staple, *s*, for the attachment of a link, E, connecting the same to the central crank *y* of the rock-shaft. Under the hammer a striking-plate, F, which may be a circular disk, is attached by a screw, *r*. The tripper proper G, is attached to the inside of the end or cross-tree of the bolt-chest H by a pivotal screw, *q*. Its engaging end *p* is so formed as to present two cam-faces to the crank-arm *x* of the rock-shaft B. Its other end is adapted for the attachment of a cord, I, one or both

ends of which project through perforations in the chest to belaying-pins, J, and are used to adjust the tripper so as to increase or lessen the force of stroke. To facilitate the operation of the tripper, one or more stops, K, may be employed, and the cord I be made of elastic material.

It is obvious that two or more sets of knocking devices may be applied to the reel, or more hammers to a rib by mere duplication of parts.

In operation, as the reel revolves in either direction, the crank-arm *x* is brought in contact with the tripper and deflected and released thereby, thus rocking the shaft B, and through the crank *y* and connecting-links E, lifting and tripping the hammer or hammers D, which, in turn, through their striking-plates F, jar the bolt and open the meshes of the cloth.

The apparatus may be applied by any one, and all the metal-work may be made by a common blacksmith.

I claim as new and of my invention—

1. The pivoted reversible tripper G, constructed and arranged as herein shown and described, in combination with the cord I and belaying-pins J for adjusting the same, for the purpose specified.

2. The knocking device, composed of the rock-shaft B with crank *y* and crank-arm *x*, the eye-bolt C, spring-hammer D, connecting-link E, and striking-plate F, constructed and arranged substantially as and for the purposes shown and described.

EDMOND B. LOWE.

Witnesses:

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