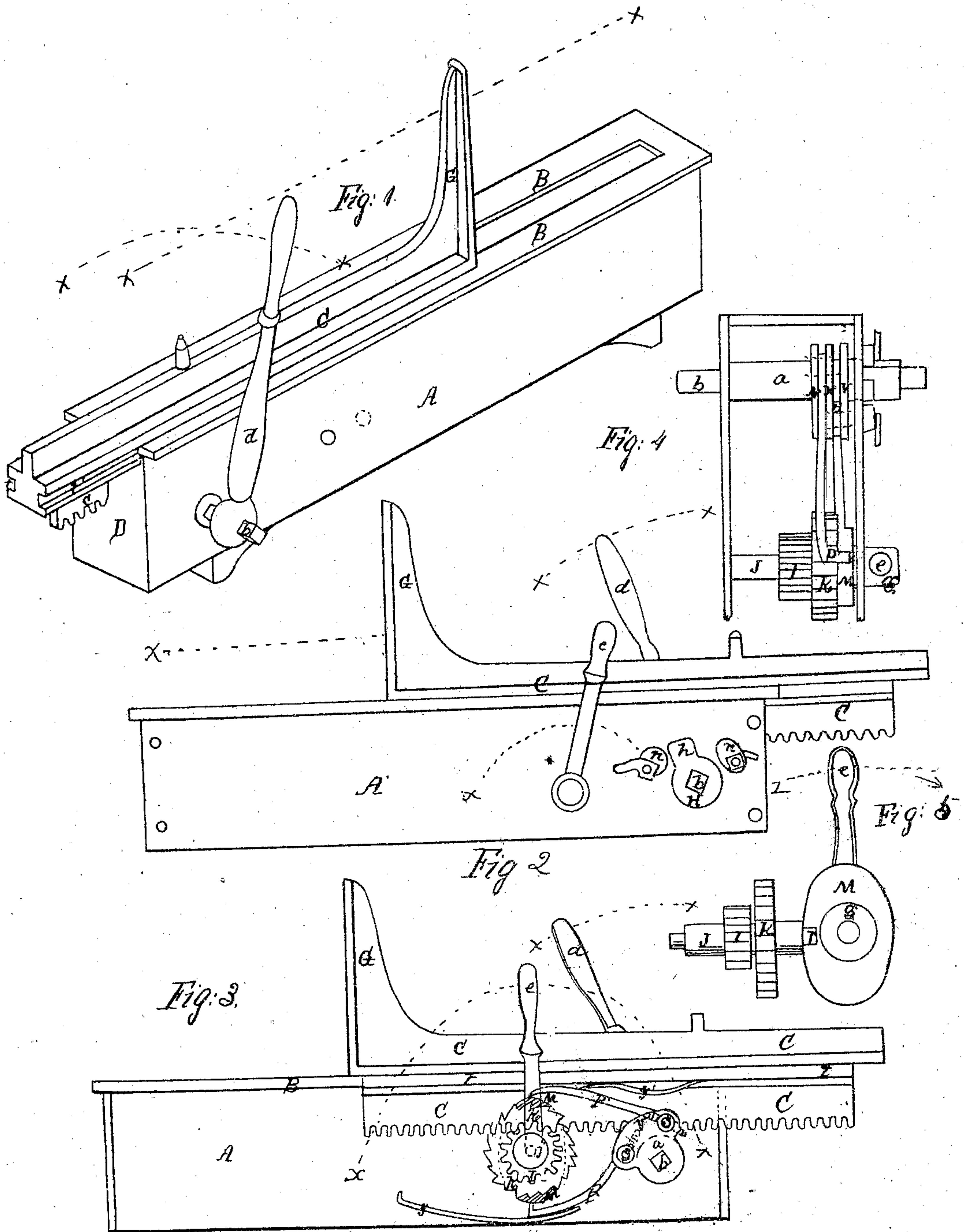


B. P. Perry.

Head-Block for Saw-Mills.

N^o 74588

Patented Feb. 18, 1868



Witnesses

Joseph Ruge
Richard Elliott

Inventor

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United States Patent Office.

BENJAMIN P. PERRY, OF RICHMOND, INDIANA.

Letters Patent No. 74,588, dated February 18, 1868.

IMPROVEMENT IN HEAD-BLOCKS FOR SAW-MILLS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, BENJAMIN P. PERRY, of the city of Richmond, county of Wayne, and State of Indiana, have invented a new and useful Improvement in Head-Blocks for Saw-Mills; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view.

Figure 2, a side elevation.

Figure 3, a longitudinal section.

Figure 4, a transverse section.

Figure 5, a view of a portion of the devices separate from the block.

The same letters in the different figures relate to corresponding parts of the invention.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The block or structure is composed of the sides A and A', and ends D and D', and cap B, secured together in a substantial manner, with screws or otherwise. C represents a rack, having channelled sides *t t'*, that slide on the inner edges of cap B. I represents a pinion, for operating the rack, and K represents a ratchet, on same shaft with pinion I. *a* represents a sleeve, with journal-bearings in the sides A and A', and is provided with an angular orifice, through which the square shaft *b* passes. N, X, and V are ears, attached to said sleeve, and on a corresponding surface of the latter, in the spaces thus formed by the ears, are secured the ends of the pawls P and P', in the following manner: S and S' are rungs, having journal-bearings respectively in ears N and X and X and V, and are screw-tapped transversely, into which are screwed the ends of the pawls, the latter being provided with suitable thread for that purpose. M represents an elliptical disk, attached to the thimble *g*, which latter is inserted through the side A' of the block, having attached to its outer end the lever *e*, by which said elliptic is operated. The shaft J, to which pinion I and ratchet K are connected, has a bearing of the end, *r*, in the cavity of thimble *g*, the other end of said shaft having a bearing in the side A of the block. The springs *y* and *y'* serve to keep the pawls to their places on the ratchet. The ends of said pawls that engage with the ratchet are wider than the latter, and extend over the elliptic, M. The pawls P and P' are operated by lever *d*, and move simultaneously in the same direction, in consequence of their both being connected with the sleeve *a*, on the same side of the latter, thus making each stroke of the hand-lever operative, resulting in almost a continuous motion of the feed. H represents a collet on the end of shaft *b*, having a projection or stop, *h*, which latter (as the shaft is operated by lever *d*) strikes alternately the eccentrics *n* and *n'*, the object of which is to regulate the throw of the pawls, and thus, by changing the eccentrics with their longest or shortest radius to the stop *h*, the feed is adjusted. The aforesaid eccentrics are secured to the side of the blocks by screws, or in any convenient manner for changing their position. The longest diameter of the elliptic, M, is greater than the diameter of the ratchet K, by which means, "as the said elliptic is turned, with its ends in a vertical position," the pawls are thrown out of gear with ratchet K, which permits rack C to be moved freely back and forth.

In the operation of sawing, the ends of the log rest on the blocks, and against the vertical end G of the rack, where it is held by means of a dog attached to the rack, and which is made to clasp said log, thus preventing the latter from rolling while being fed to the saw.

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

1. I claim connecting the pawls P and P' with the sleeve *a* on the same side of the latter, by which a simultaneous action of said pawls is produced, resulting in the alternate operation on the ratchet, substantially as set forth.

2. I claim the collet H, having the projection *h*, in combination with the eccentrics *n* and *n'*, for adjusting the feed, substantially as set forth.

Witnesses:

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BENJAMIN P. PERRY.