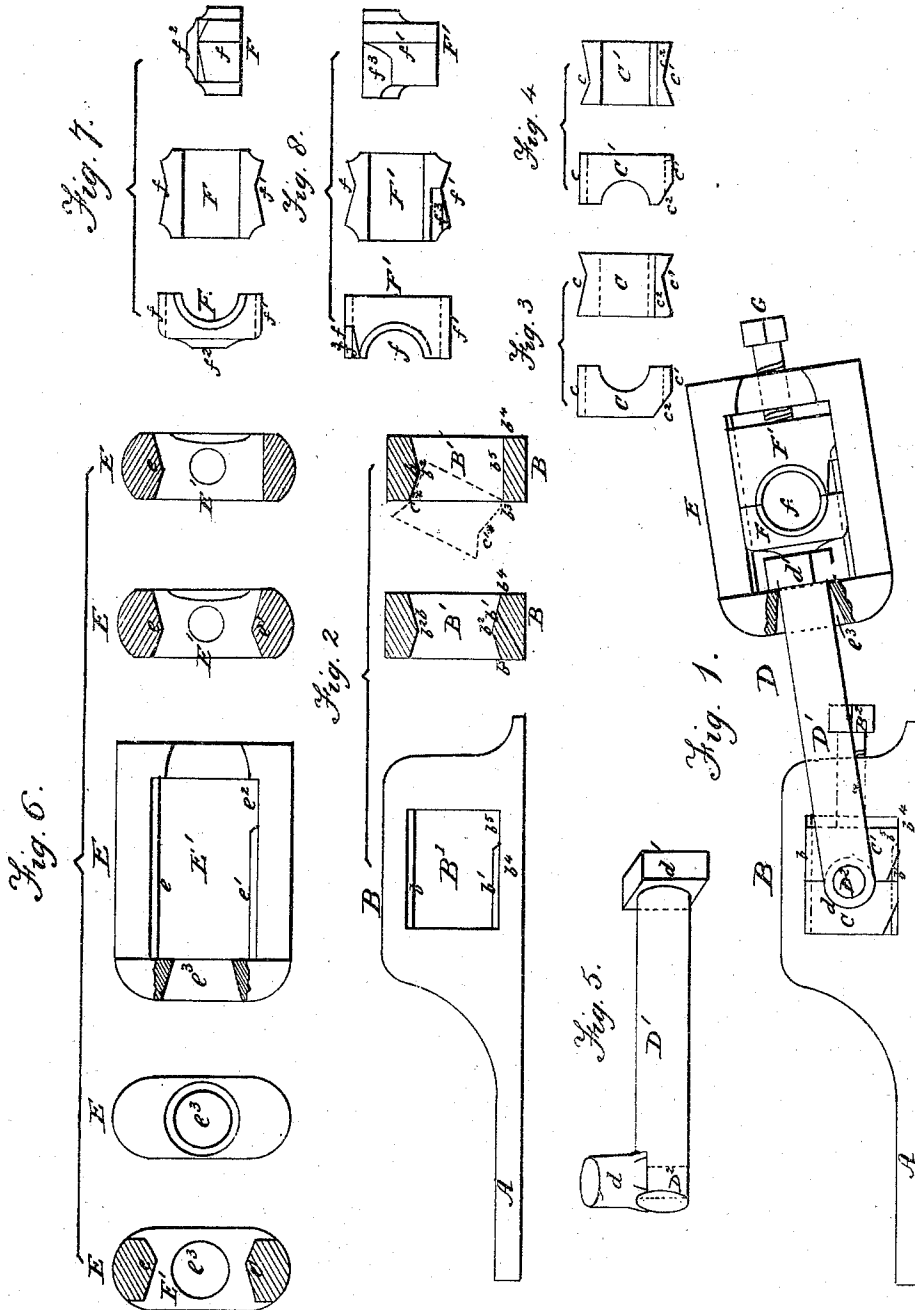


R. H. KERR.
Pitmen.

No. 148,124.

Patented March 3, 1874.



WITNESSES
Colborne Brooks
J. B. Kolderby

INVENTOR
Robert H. Kerr
per R. & A. Lacey
attorneys.

UNITED STATES PATENT OFFICE.

ROBERT H. KERR, OF RICHMOND, OHIO.

IMPROVEMENT IN PITMEN.

Specification forming part of Letters Patent No. 148,124, dated March 3, 1874; application filed February 13, 1874.

To all whom it may concern:

Be it known that I, ROBERT H. KERR, of Richmond, in the county of Jefferson and State of Ohio, have invented certain new and useful Improvements in Pitman Attachments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in the arrangement and construction of the pitman-connection of reaping and mowing machines, whereby the same are rendered less liable to wear, and when worn are more easily adjusted than heretofore.

In the accompanying drawings, which form part of this specification, Figure 1 represents a side view, partly in section; and Figs. 2, 3, 4, 5, 6, 7, and 8, detail views of parts of a pitman-connection constructed according to my invention.

In each of the views similar letters of reference are employed to indicate corresponding parts.

A represents the knife-heel of a mower or reaper, which is provided with a head, B, in which is formed a rectangular opening, B', for the reception of a pair of bearing blocks or brasses, C C', which are bored out to receive a projecting pin, *d*, extending from one end of the pitman-shaft D, the opposite end of which is retained by means of its head *d'* in a bearing, *e*³, in the end of a rectangular block, E, which is formed to receive the bearing-blocks F F', which are bored out at *f* to receive a pin or stud supported and carried eccentrically by a plate or crank arm affixed to a driving-shaft of the apparatus, as is well understood. The head B is formed in one piece, and the upper and lower faces of the metal forming the rectangular opening B', are so constructed as to form flattened V-shaped guides *b b*¹, the apex ¹/₂ of each guide being formed nearer to the side *b*³ than to the side *b*⁴ of the head B, but exactly over one another. The guide *b* extends the whole width of the opening B', while the guide *b*¹ only extends partially across, being cut away at *b*⁵, as shown by Fig. 2, for the

purpose of enabling the blocks C C' to be inserted, as hereinafter described. The blocks C C' are formed with recesses *c c*¹ in their upper and lower edges, corresponding in shape with the guides *b b*¹, a portion of each block on its under side being cut away at *c*² to facilitate its insertion into the recess B'. The blocks C C' are inserted into the recess B' by first placing them in position, as shown by dotted lines *c*^x *c*^{1x} in Fig. 2, and afterward pushing them inward, when they will assume a vertical position, as shown by Fig. 1, the block C being inserted first, and afterward the block C'. The blocks are then held in position by a retaining-screw, B², working in a screw-thread formed in the rear of the head B. The rectangular block E is forged or cast in one piece, and is provided with a rectangular recess, E', which is provided with flattened V-shaped guides *e e*¹, constructed similarly to the guides *b b*¹, which are received into correspondingly-formed recesses *f f*¹, in the blocks F F'. The block F is formed narrower than the block F', and of a width to allow of its easy insertion into the recess E'. It is also provided with an extension or bearing, *f*², which rests against and holds the head *d'* of the pitman-shaft in proper position, while the block F' is rectangular in its form, and is provided with a notch or recess in its under side at *f*³, to enable its lower front edge to clear the end of the guide *e*¹, which is cut away at *e*², in order to allow the rear end of the block F' to pass into position. G is a retaining-screw for holding the blocks F F' in position. The stud or pin *d* is formed in a separate piece from the rod D¹ of the pitman-shaft D, and is inserted in the end of the rod D¹, after the end of such rod has been pushed through the bearing *e*³ in the rectangular block E. *e*² is a recess in the opposite end of the block E to facilitate the insertion of the rod D¹, and allow of the passage of the head *d'* thereof. After the rod D¹ has been inserted, as described, the stud *d* is affixed in position by screwing or riveting its shank into a recess, D², in the end of the rod D¹. The pitman-shaft having been thus placed in position, the blocks F F' are then inserted, and the pitman-connection is complete.

By this means I am not only enabled to produce a novel arrangement and construction of

pitman-connection for reaping and mowing machines, which is much stronger and less liable to wear than those now in use, and when the bearings of the blocks are worn they may be readily adjusted by means of the retaining-screws, but I am also enabled, by inserting the blocks, as described, to dispense with the retaining plates and screws, which are required in other arrangements where blocks or brasses such as described are employed.

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

1. In combination with the knife-heel of a mowing or reaping machine having a head, B, and guides $b\ b^1$, constructed as described, the blocks or brasses C C' and retaining-screw B², constructed substantially as and for the purpose shown and described.

2. A pitman-shaft, D, having a rod, D¹, stud

d , and rectangular head d' , constructed and operating as shown and described.

3. The combination, with the block E, of a pitman-shaft having a rectangular recess, E', and guides $e\ e^1$, constructed as described, the blocks or brasses F F', constructed substantially as set forth.

4. The combination with a knife-heel having a head, B, and blocks or brasses $b\ b^1$, constructed substantially as described, the pitman-shaft D, having a stud, d , rod D¹, and rectangular head d' , block E and blocks or brasses F F', constructed and operating substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of February, 1874.

ROBERT H. KERR.

Witnesses:

JOSEPH SWAN,
JAMES BLUE.