

CULP & KEENEY.  
Harvester Cutter Bar Connection.

No. 39,633.

Patented Aug. 25, 1863.

Fig. 1.

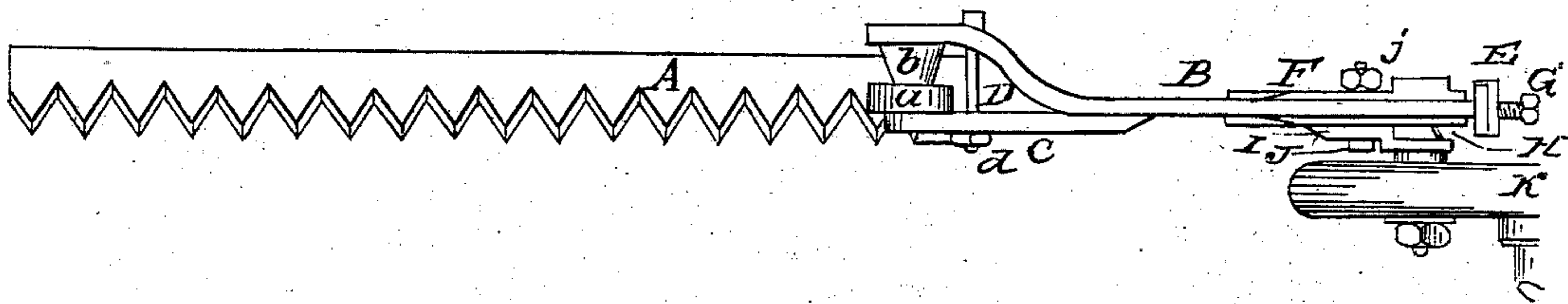


Fig. 2.

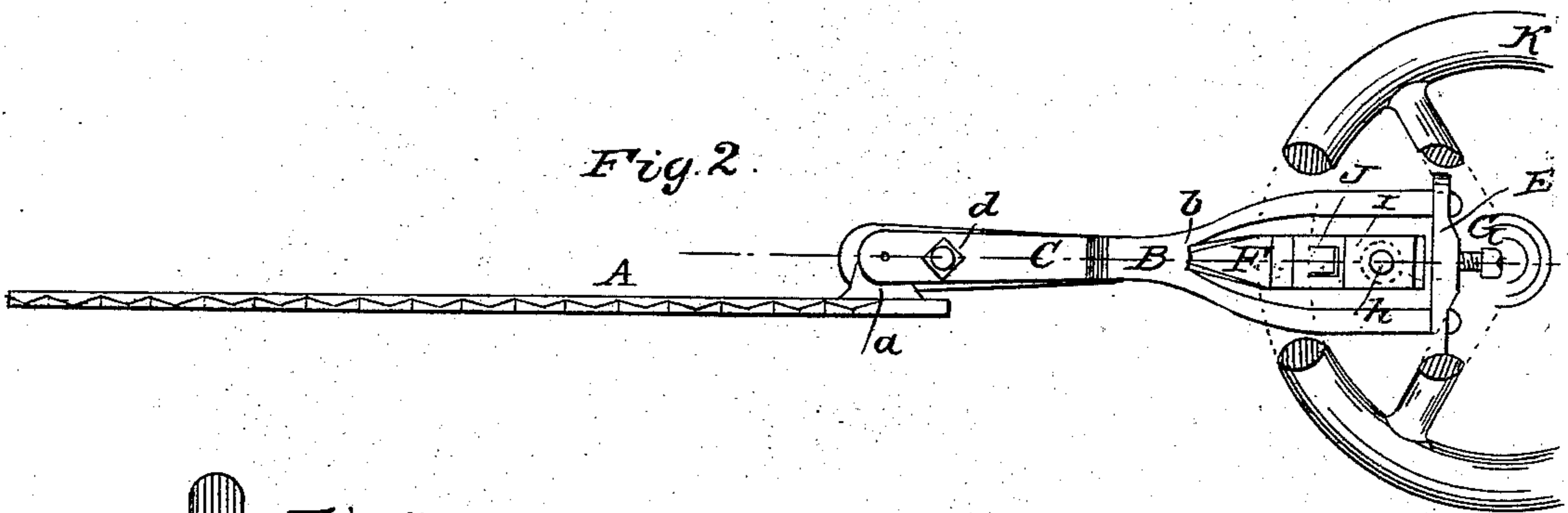


Fig. 4.

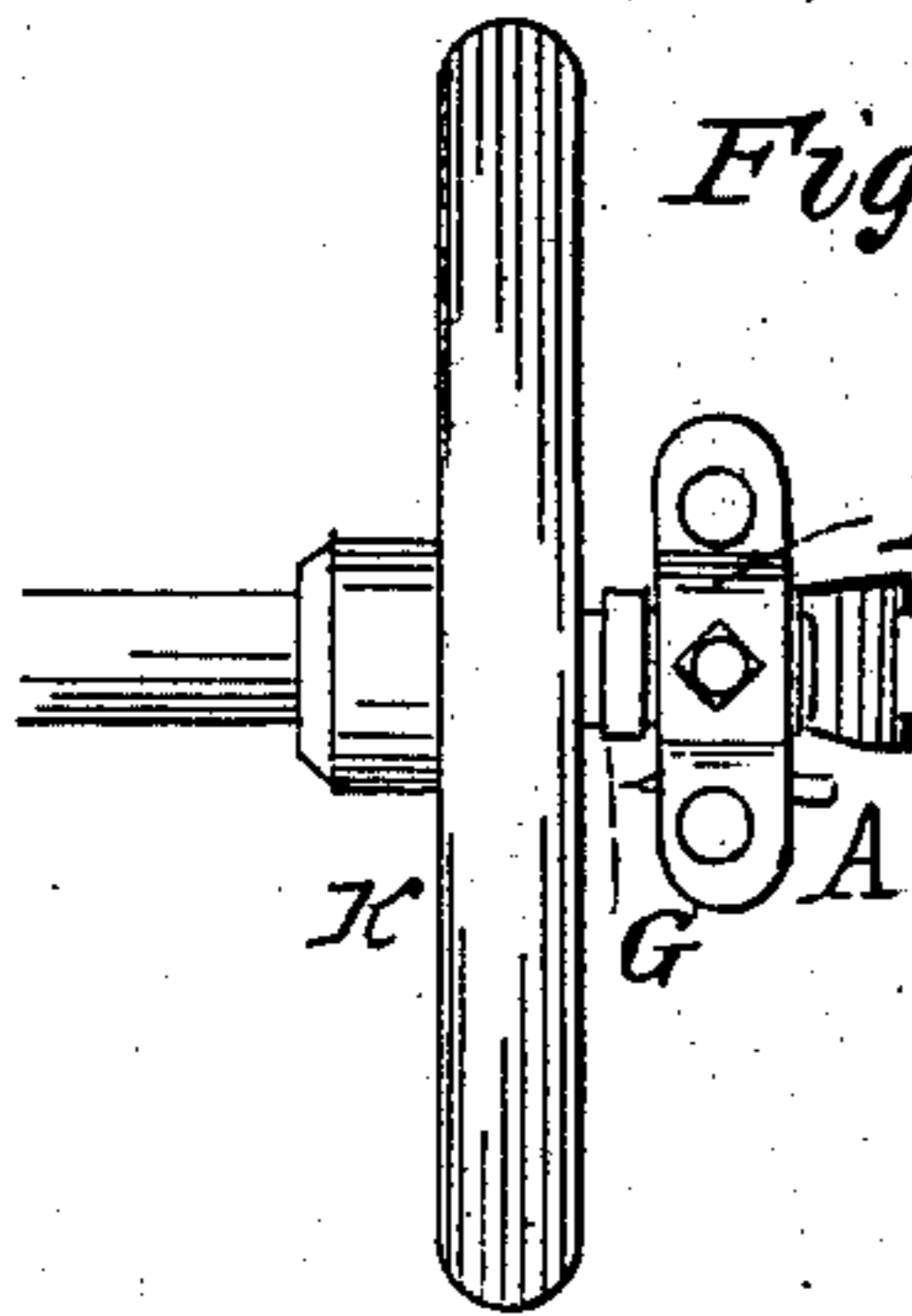
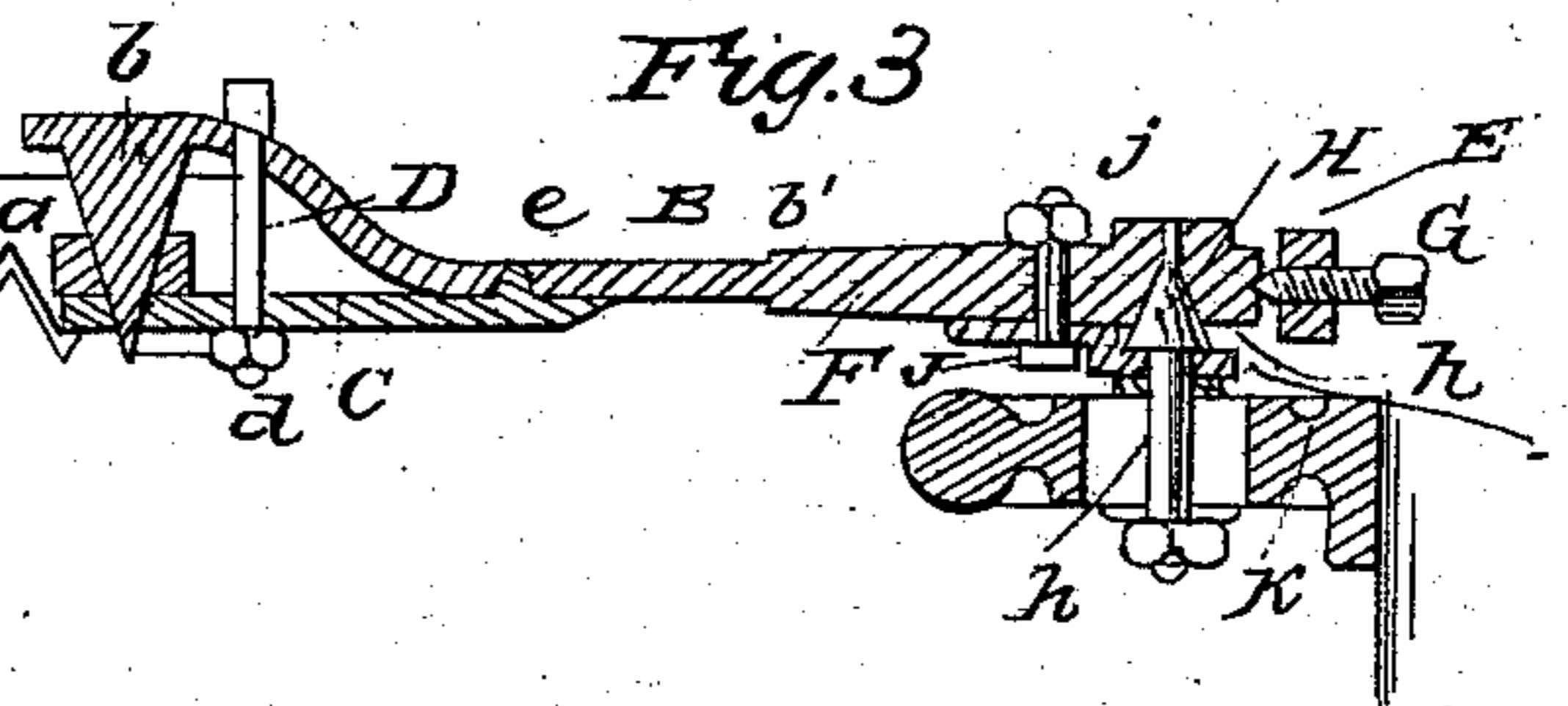


Fig. 3.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN HARVESTER CUTTER-BAR CONNECTIONS.

Specification forming part of Letters Patent No. 39,633, dated August 25, 1863.

*To all whom it may concern:*

Be it known that we, GEORGE W. D. CULP, of Allensville, in the county of Switzerland and State of Indiana, and WILLIAM J. KEENEY, of Florence, in the same county and State, have invented a new and improved mode of mounting and communicating motion to the cutting apparatus of harvesting-machines; and we do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a top view of the cutter and connecting-rod of a harvesting-machine illustrating our invention. Fig. 2 is a front view of the same. Fig. 3 is a horizontal section at  $x$ , Fig. 2. Fig. 4 is an end view of the heel of the pitman and cutter.

Similar letters of reference indicate corresponding parts in the several views.

Our said invention relates to certain improved modes of connecting the pitman of a harvesting-machine to its cutter-bar or crank-wheel, or both, the principal objects being to compensate for the wear of the journals, permit a free rocking motion of the cutter-bar, reduce the friction upon the bearings, and render the motion smooth and uniform.

In order that others skilled in the art to which our invention appertains may be enabled to fully understand and use the same, we will proceed to describe its construction and operation.

A may represent a cutter-bar of any suitable form, constructed with a lug,  $a$ , projecting upward and perforated to form a socket for the attachment of a pitman, B. The said pitman is curved at its outer end and provided with a conical projection,  $b$ , which, fitting in the socket  $a$ , constitutes the journal by which the pitman is connected to the cutter-bar. The said conical journal  $b$  is confined within the socket  $a$  by a friction-plate, C, bearing against the back of the socket and secured to the pitman by a screw-bolt and nut, D  $d$ , and pin  $c$ . The inner end of the pitman is forked, as shown in Fig. 2, and the two forks connected by a cross-head, E.

F represents a box pivoted within the forks of the pitman, its respective ends being pivoted upon a projecting point,  $b'$ , and center screw, G, the latter passing through the cross-head E.

H represents a conical or conoidal journal or point fitting a socket in the box F and con-

fining therein by a plate, I, bearing against a shoulder or collar,  $h'$ , on the back of the conical journal H, and secured to the box by a screw-bolt, J, and nut  $j$ .

The shank  $h$  of the journal H may constitute the wrist of the crank or fly wheel K; or it may be connected thereto in any other suitable way.

It will be manifest from the foregoing description that the journals at both ends of the pitman B may be made to work as tightly as desired and all wear taken up or compensated for by tightening up the screw-bolts D J, so as to force the conical journals farther into their socket; also that the use of the pivoted box F affords free rocking play to the cutter to permit it to conform to the motion of the finger-beam.

We are aware that other modes, different from that above described, have before been devised for attaching the ends of a pitman by cone and socket joints. The use of two cones entering opposite sides of the socket (which we well know to be an old device) defeats the primary object of our invention, which is to provide an unlimited adjustment to compensate for the wear of the parts. To this end it is essential that the socket shall be occupied by a single cone confined by an adjustable device having no counter projection within the socket.

Having thus described our invention, what we claim as new therein, and desire to secure by Letters Patent, is—

1. Connecting a pitman, B, to a cutter-bar, A, by means of a single conical or conoidal journal,  $b$ , passing through a corresponding socket,  $a$ , in the heel of the cutter-bar, and confined by an adjustable plate, C, as herein shown and described, so as to employ the entire strength of the projection on the heel of the bar and admit of tightening up the cone or journal for the whole extent of its length.

2. Constructing the said point, cone, or conoidal journal with a shoulder or collar,  $h'$ , to constitute a bearing for the confining-plate I, substantially as herein described.

3. Connecting the pitman to the crank or fly wheel by means of a rocking box, substantially as set forth.

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WM. J. KEENEY.

Witnesses:

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DELILA KEENEY.