

*B. A. Haycock,
Cam-Rod Hook.*

N^o 41,219.

Patented Jan. 12, 1864.

Fig: 1.

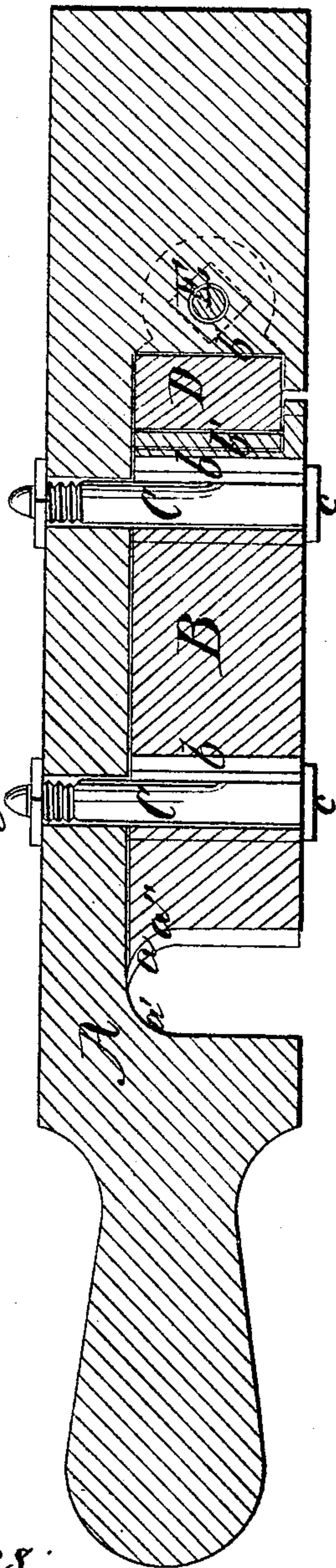
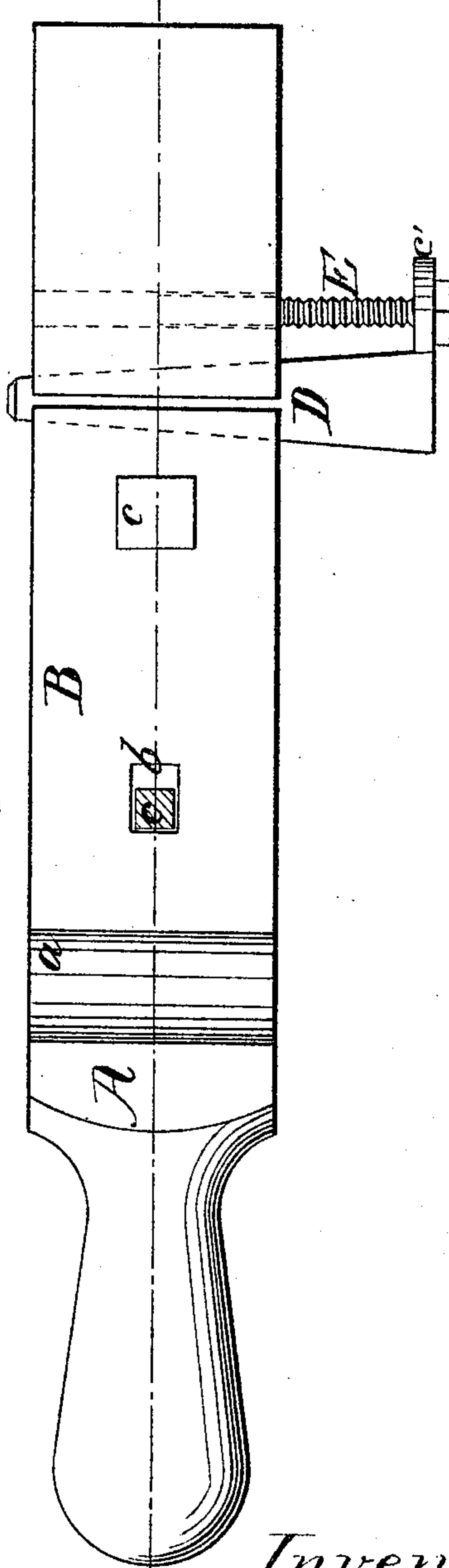


Fig: 2.



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B. A. HAYCOCK, OF RICHLAND, IOWA.

IMPROVEMENT IN HOOKS FOR CAM-RODS OF STEAM-ENGINES.

Specification forming part of Letters Patent No. 41,219, dated January 12, 1864.

To all whom it may concern:

Be it known that I, B. A. HAYCOCK, of Richland, in the county of Keokuk and State of Iowa, have invented a new and useful Improvement in Hooks for the Cam-Rods of Engines, Pitmen of Cranks, &c.; 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 side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a face view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to novel and simple means to compensate for the wear of the hooks of cam-rods of steam-engines and other machinery—such, for instance, as the hooks of pitmen or connecting rods, shake-rods, &c.—where a rod is connected to a crank or lever. These hooks soon become very much enlarged by wear, so much so as to cause a great deal of play of the hooks on the wrist or crank, and a consequent jerking or irregular movement with its attendant wear and tear and, in some cases, loss of motion. To obviate this difficulty is the object of my invention, which consists in having the hook formed with an adjustable slide arranged in such a manner that the hook, by adjusting the slide, may at all times be made to fit snugly on the wrist or crank, the slide being adjusted at any time as the wear may require.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the end of a cam-rod, which has a recess, *a*, made in its under side. This recess may be of any proper length, and within it there is fitted a rectangular bar, B, the lower edge or surface of which is flush with the lower edge or surface of the cam-rod A, as shown clearly in Fig. 1. This bar B is a slide, and it is secured in the recess *a* by two bolts, C C, which pass transversely through the cam-

rod and through two oblong slots, *b b*, in the slide-bar B, the bolts C being provided with heads *c*, which project over the edges of the slots *b b*.

The front end of the recess *a* is rounded in concave form at its front end, as shown at *a'* in Fig. 1, and the front end of the slide-bar B is made of similar form, as shown at *a''*. This space between the front end of the recess *a* and the front end of the slide-bar B forms the hook and receives the crank-pin or wrist of the part to be driven.

In the back end of the slide-bar B there is made a beveled groove, *b*, and a similar groove, *b'*, is made in the back end of the recess *a*. These two grooves *b b'* form a recess to receive a wedge or key, D, which has a plate, *c'*, projecting at right angles from its outer end, through which a screw, E, passes, said screw also passing into the cam-rod, as shown clearly in Fig. 2.

By this arrangement it will be seen that by turning the screw E the wedge or key may be adjusted further in or out, and the slide-bar B and the hook therefor may always be kept closely on its wrist or crank pin and all unnecessary play avoided.

The oblong slots *b* in the slide-bar B admit of the latter being moved to a proper extent to effect the desired end.

I do not confine myself to the precise position of the wedge or key D as herein shown and described, for that may be varied in different ways and the same end attained.

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

The combination of the adjustable bar B and adjusting-wedge D with the hook-bar A, substantially as and for the purpose herein shown and described.

B. A. HAYCOCK.

Witnesses:

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