H. W. OLIVER.

LATHE-CARRIER.

No. 183,962. Patented Oct. 31, 1876.

Fig. 1.

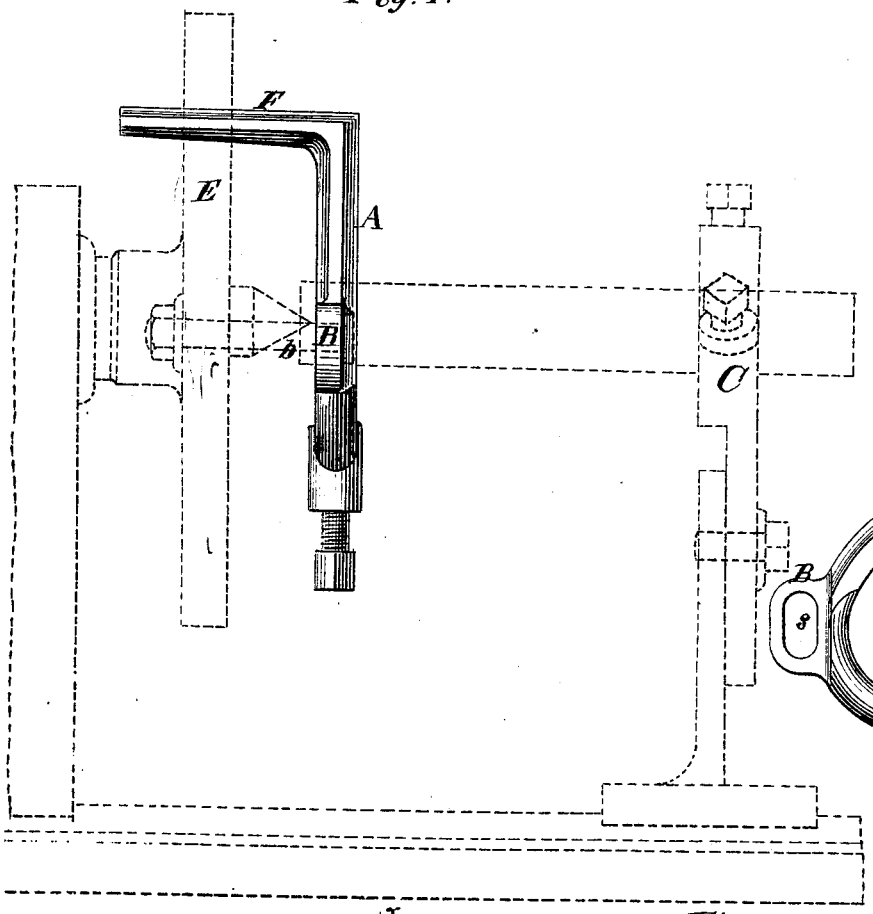


Fig. 2.

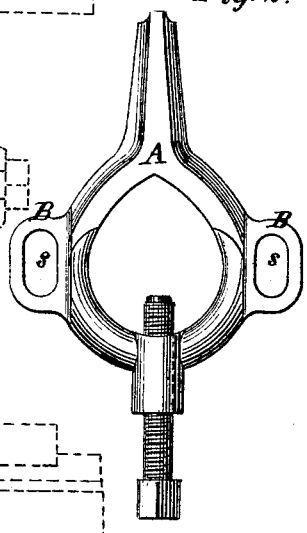


Fig. 3.

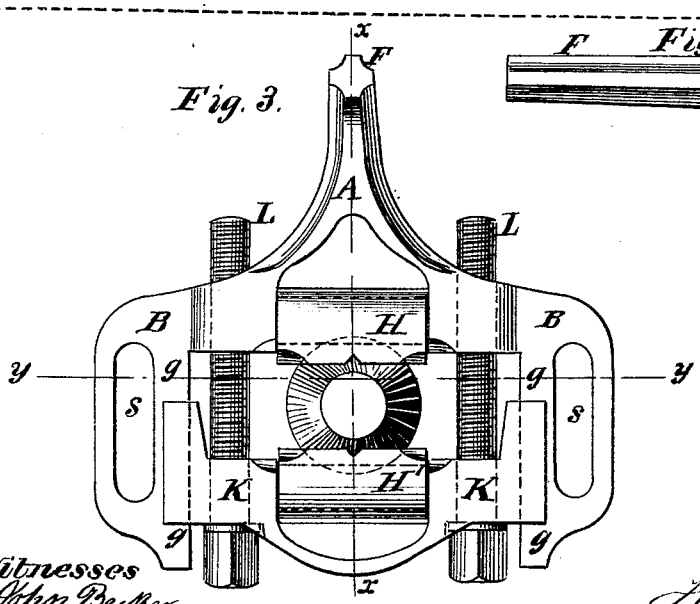


Fig. 4.

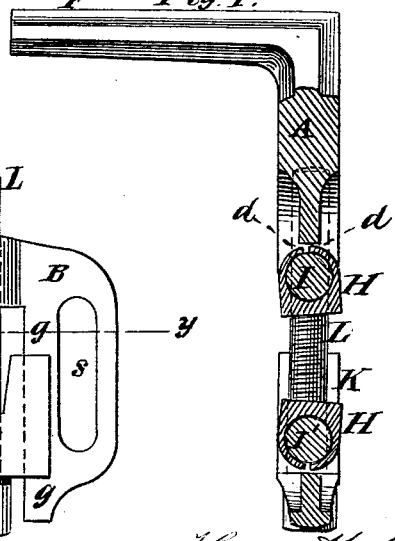
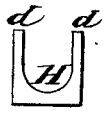


Fig. 6.



Witnesses
John Becker
Fred. Haynes

Fig. 5.

Henry W. Oliver
by his Attorneys
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UNITED STATES PATENT OFFICE.

HENRY W. OLIVER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN LATHE-CARRIERS.

Specification forming part of Letters Patent No. **183,962**, dated October 31, 1876; application filed August 31, 1876.

To all whom it may concern:

Be it known that I, HENRY W. OLIVER, of Brooklyn, in the county of Kings and State of New York, have invented Improvements in Lathe Carriers or Dogs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification:

My invention has for its object the increase of convenience and efficiency in lathe-carriers.

The first part of my invention is applicable both to ring and clamp carriers; and it consists in such a construction of a lathe carrier or dog that it may be directly bolted to the face-plate of a lathe when it is necessary to avoid the use of the back-center, and use a back-rest in turning on such lathe.

The second part of my invention is applicable to clamp-carriers; and it consists in a construction of such a lathe-carrier whereby it may clamp and hold pieces the sides of which are not parallel with each other, the jaws of said carrier adjusting themselves to the irregular form of the piece, while the clamping-bolts are not strained in any other than a longitudinal direction.

In the drawing, Figure 1 represents a side view of a ring lathe-dog, comprising one of the features of my improvements, and attached to the face-plate of the lathe. Fig. 2 is a front view of the same, detached from the face-plate. Fig. 3 is a back view of a clamp-carrier, comprising all my improvements. Fig. 4 is a vertical section of the same, on the line *x x*. Fig. 5 is a horizontal section of the same, on the line *y y*. Fig. 6 is an end view of one of the jaws of the carrier previous to its attachment to the carrier.

The carrier or dog A (shown in Figs. 1 and 2) is of the common ring variety, having the usual shank F made in a form to combine strength with lightness. My improvement on this kind of carrier consists in slotted projections B, formed on each side of the body of said carrier.

When the back-center cannot be used, and when the back-rest C, Fig. 1, is to be employed, or when for any purpose it is desired to attach the carrier A to the face-plate E, Fig. 1, bolts *b*, shown in dotted outline in Fig. 1, are passed through the slots *s*, Fig. 2, in the projections B, and through said face-plate E, and fastened by nuts to said face-plate. This construction obviates the necessity for the extra piece of iron, with a hole in the middle, slipped over the work up against the carrier, and bolted to the face-plate, commonly employed in such cases, and, by cutting away the front face of the slotted projections B sufficiently to let the heads of the bolts *b* down below the front face of the dog A, as shown in the drawing, the piece held by said dog may be operated upon close up to the dog, which cannot be done by the old method.

Figs. 3, 4, 5, and 6 illustrate the construction of a carrier, comprising all of my improvements. In the said figures, A represents the entire carrier, and B the slotted projections, constructed and operating as hereinbefore described.

In this form of carrier the work is held between the rocking jaws H H′. The jaw H rocks on a journal, I, Fig. 4, said journal being continuous with and a part of the body of the carrier A. A cross-section of the jaw H has the outline shown in Fig. 6 previous to its being placed on the journal I, to which it is fitted, and its upper edges *d* are closed down around said journal, as shown in Fig. 4, by compression, in such manner as to allow the free rocking of the said jaw on the said journal I. The jaw H′ is constructed like the jaw H, and fitted in a similar manner to the journal I′, said journal I′ forming part of the locking-slide K. The slide K works on guideways *g*, and the rocking jaws are forced toward each other by the screws L, which fit female screws formed in the body of the carrier A.

It will be seen that this construction allows tapered bars and irregular-shaped pieces to be firmly held by the full faces of the rocking jaws H H′ without side strain to the clamping-bolts L, and that the slotted projections B, formed as described, allow the carrier to be bolted to the face-plate, the slots *s* allowing the free adjustment of the carrier to the work to be held; but simple holes in the projections B, in place of the slots *s*, may be employed.

I claim—

1. In combination with a lathe-dog, the perforated ears or projections on each side for the

purpose of allowing said dog to be clamped to the face-plate of the lathe, in order to adapt the dog to hold the work independently of the back-center, substantially as set forth.

2. The combination, with the body B and the locking-slide K of the lathe-carrier, of the journals I and I′, respectively, attached to and forming parts of said body and locking-slide, substantially as described, and the rocking jaws H H′, fitted and attached to said journals I I′, substantially as and for the purpose set forth.

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Witnesses:

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