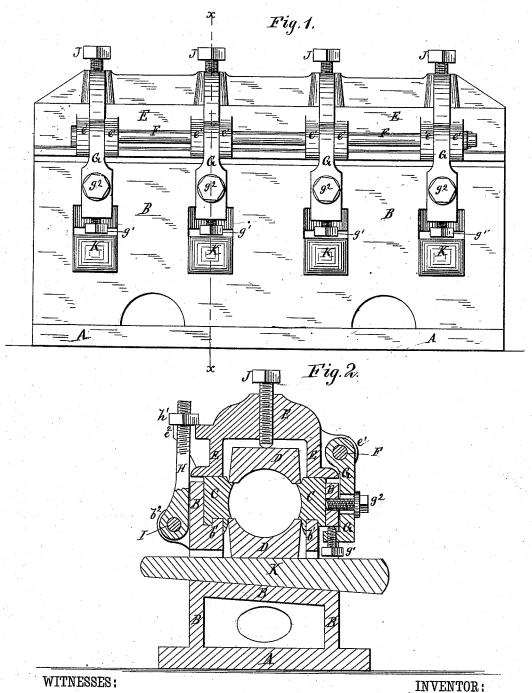
## R. H. BRIGGS & J. H. DOUGHERTY Chuck for Boring Car-Brasses.

No. 217,329.

Patented July 8, 1879.



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## UNITED STATES PATENT OFFICE

RICHARD H. BRIGGS AND JAMES H. DOUGHERTY, OF WHISTLER, ALABAMA.

## IMPROVEMENT IN CHUCKS FOR BORING CAR-BRASSES.

Specification forming part of Letters Patent No. 217,329, dated July 8, 1879; application filed April 23, 1879.

To all whom it may concern:

Be it known that we, RICHARD H. BRIGGS and JAMES H. DOUGHERTY, of Whistler, in the county of Mobile and State of Alabama, have invented a new and useful Improvement in Chuck for Boring Car-Brasses, of which the following is a specification.

Figure 1 is a side view of our improved chuck. Fig. 2 is a vertical cross-section of the same, taken through the line x x, Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish an improved device for holding the brasses for car journal-boxes while being bored, which shall be so constructed as to hold the brasses securely in place while being bored, which will insure the brasses being bored true, which may be adjusted for boring brasses for journals of different diameters, and which shall be simple in construction and convenient in use.

The invention consists in the combination of the box provided with the grooved shoulders and the lugs, the detached grooved and rabbeted bars concaved upon their inner sides, the cover provided with the lugs, the adjustable hinging-bars and their set and clamping screws, the hinged bolts, the set-screws, and the wedges with each other for holding carbrasses while being bored, as hereinafter fully described.

A represents the base-plate of the chuck, which is designed to be bolted to the bed of the boring-machine. Upon the upper side of the base-plate A is formed, or to it is attached, a box, B, made with its top and ends open. Upon the lower part of the sides of the box B are formed shoulders  $b^1$ , at a distance apart a little more than the width of the brasses, and of a height about equal to half the distance from the floor to the tops of the sides of the said box.

The shoulders  $b^1$  are grooved along the sides of the box B to form tongues to enter grooves in the lower edges of the bars C, which are made of a length equal to the length of the box B, of a thickness a little greater than the width of the shoulders  $b^1$ , and of such a breadth that their upper edges may rise a little above the upper edges of the sides of the said box B.

longitudinally upon the arc of a circle, as shown in Fig. 2.

In the upper and lower edges of the inner sides of the bars C are formed rabbets to receive the edges of the brasses D.

E is the cover of the box B, which is recessed upon its lower side to form a space to receive the upper brasses D. Upon the rear side of the cover E are formed lugs  $e^1$ , to receive a bolt, F, and serve as hinges to the said cover.

The bolt F passes through holes in the upper ends of the bars G, which pass down along the rear side of the box B, and have their lower ends bent inward at right angles to enter holes in the rear side of the said box B.

The bent or flanged lower ends of the bars G have screw-holes formed in them to receive set-screws  $g^1$ , as shown in Figs. 1 and 2, so that the cover E may be raised and lowered as the thickness of the brasses D may require. The bars G have short longitudinal slots formed in them to receive the screws or bolts  $g^2$ , by which the said bars are clamped to the rear side of the box B.

Upon the forward side of the cover E are formed lugs  $e^2$ , which are notched or slotted to receive the bolts H. The lower ends of the bolts H have holes formed through them to receive the rod I, which passes through lugs  $b^2$ , formed upon the forward side of the box B, and hinges the said bolts to the said box.

Upon the free ends of the bolts H are cut screw-threads to receive the nuts h', which, when the hinged bolts H are swung up into the notches of the lugs  $e^2$ , are turned down against the upper side of the said lugs to support the forward side of the said cover E against upward pressure. The cover E is strengthened by longitudinal and cross webs, which cross each other over the centers of the brasses D. The brasses D are held down by set-screws J, which pass through the cover E and its webs at their points of intersection, and the forward ends of which bear against the centers of the said brasses. The lower brasses D are held up by the wedges K, driven into cross grooves in the bottom of the

The wedges K are tapered upon their lower The inner sides of the bars C are concaved | sides and made flat upon their upper sides,

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and the bottoms of the cross-grooves are inclined, so that the upper sides of the wedges K may always be flat, and may thus raise the brasses D squarely.

Having thus described our invention, we claim as new and desire to secure by Letters

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The combination of the box B, provided with the grooved shoulders  $b^1$  and the lugs  $b^2$ , the detached grooved and rabbeted bars C, concaved upon their inner sides, the cover E,

provided with the lugs  $e^1$   $e^2$ , the adjustable hinging-bars G and their set and clamping screws  $g^1$   $g^2$ , the hinged bolts H, the set-screws J, and the wedges K with each other for holding car-brasses while being bored, substantially as herein shown and described.

RICHARD H. BRIGGS.
JAMES HENRY DOUGHERTY.

Witnesses:

L. CRABTREE, GEO. W. DALY.