(No Model.)

J. CARR.

KEY SEAT RULER.

No. 428,890. Patented May 27, 1890.

Fig. 1.

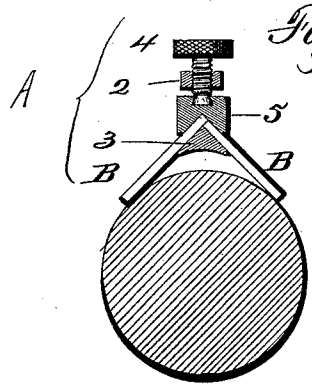


Fig. 2.

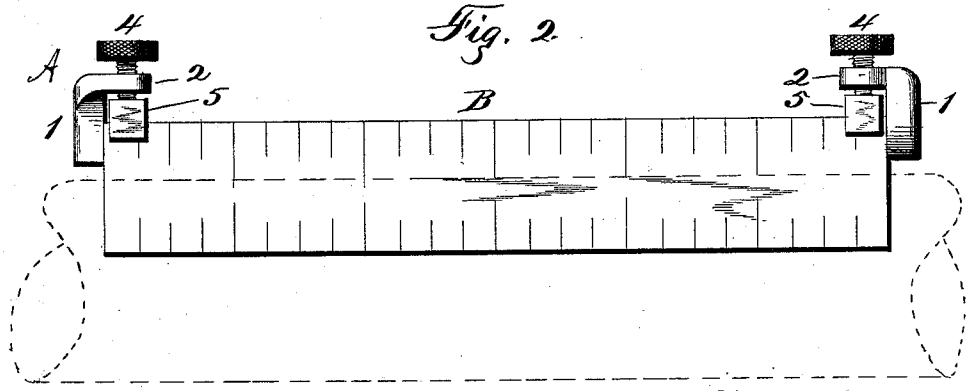


Fig. 3.

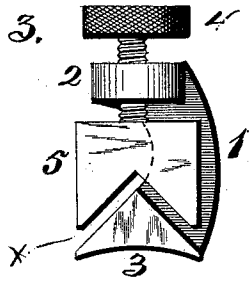
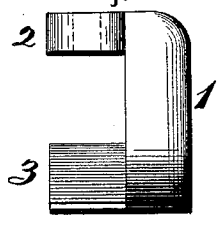


Fig. 4.



Witnesses
H. P. Denison
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James Carr Inventor

By his Attorneys
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES CARR, OF SYRACUSE, NEW YORK.

KEY-SEAT RULER.

SPECIFICATION forming part of Letters Patent No. 428,890, dated May 27, 1890.

Application filed November 29, 1889. Serial No. 331,892. (No model.)

To all whom it may concern:

Be it known that I, JAMES CARR, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Key-Seat Rules, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to devices for marking or laying out and measuring key-seats, grooves, slotways, or rabbets upon rounded surfaces of wood or metal.

My object is to provide a new and improved device for marking or laying out and measuring key-seats, grooves, slotways, or rabbets in or upon rounded surfaces before they are cut out, and which will fit upon any rounded surface at any point between the ends of the shaft, and can be operated to lay out the length and width of the key-seat, groove, slotway, or rabbet before it is cut, and to measure the accuracy of the work done, which is adapted to use straight-edges of varying lengths or width, or any width, and can be adjusted to different lengths, as well as to fit a large bar or a small rod.

My invention consists in the several novel features of construction and operation hereinafter described, and specifically set forth in the claims annexed hereto.

It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional end elevation of my device upon a round bar. Fig. 2 is a side elevation showing a bar in dotted lines. Fig. 3 is an elevation of the inner face of one of my clamping-jaws complete. Fig. 4 is a detached elevation of the bracket carrying the lower jaw and the arm which receives the screw which actuates the upper jaw of the clamp.

A is the clamp, consisting of a bracket having a body 1, curved substantially as shown, and having a top flange 2 and a bottom arm 3, having a concave lower face and above that being of angular form. (Shown in the drawings as a right angle.) A set-screw 4 is inserted through the flange 2, and upon its lower end I mount, by a swivel-joint connection, the movable clamping-jaw 5, the lower face of which is recessed angularly, the angle being the same as that of the bottom arm.

B B are rules or straight-edges, which are secured in the two clamps, and, projecting beyond the edges of the clamps downward, create an angular body, which will stand upon a rounded surface, as shown in Fig. 1, and then a mark can be made along one edge to lay out one side of the key-seat, groove, slot, or rabbet, and then by moving the implement over on the surface until I obtain the desired width I can lay out the other side. Where one or both sides are to be tapered, I bevel off one or both of the outer edges of the straight-edge as much as is necessary.

It will be seen that I can use my clamps upon straight-edges or rules of any equal length or of unequal length or of equal or unequal widths or straight or tapering. It will also be seen that by reason of the curve of the bracket one of the rules, which is inserted, as at x, between the clamping-faces, can pass through or extend beyond the clamps, and, further, that both of the rules can be pushed through a clamp, one one way and the other the other way, thus projecting both beyond the clamps and bringing the clamps close together, and also that one face of the movable jaw-piece will always be a guide for the proper alignment of one of the straight-edges and of their alignment with reference to each other.

What I claim is—

1. The combination of the clamps consisting of a bracket having an angular lower arm and a top flange, a set-screw through the flange, a movable jaw-piece fitting over the lower arm, and straight-edges secured therein at an angle to each other.

2. The combination of the clamps consisting of a bracket, a rigid jaw upon its lower side, a movable jaw concaved to fit upon the lower jaw, a set-screw connected to the movable jaw and actuating it, and straight-edges secured between the jaws.

In witness whereof I have hereunto set my hand this 28th day of November, 1889.

JAMES CARR.

In presence of—
C. W. SMITH,
H. P. DENISON.