(No Model.)

F. CRAMBLITT.

KEY SEAT RULE.

No. 568,192. Patented Sept. 22, 1896.

Fig. 1.

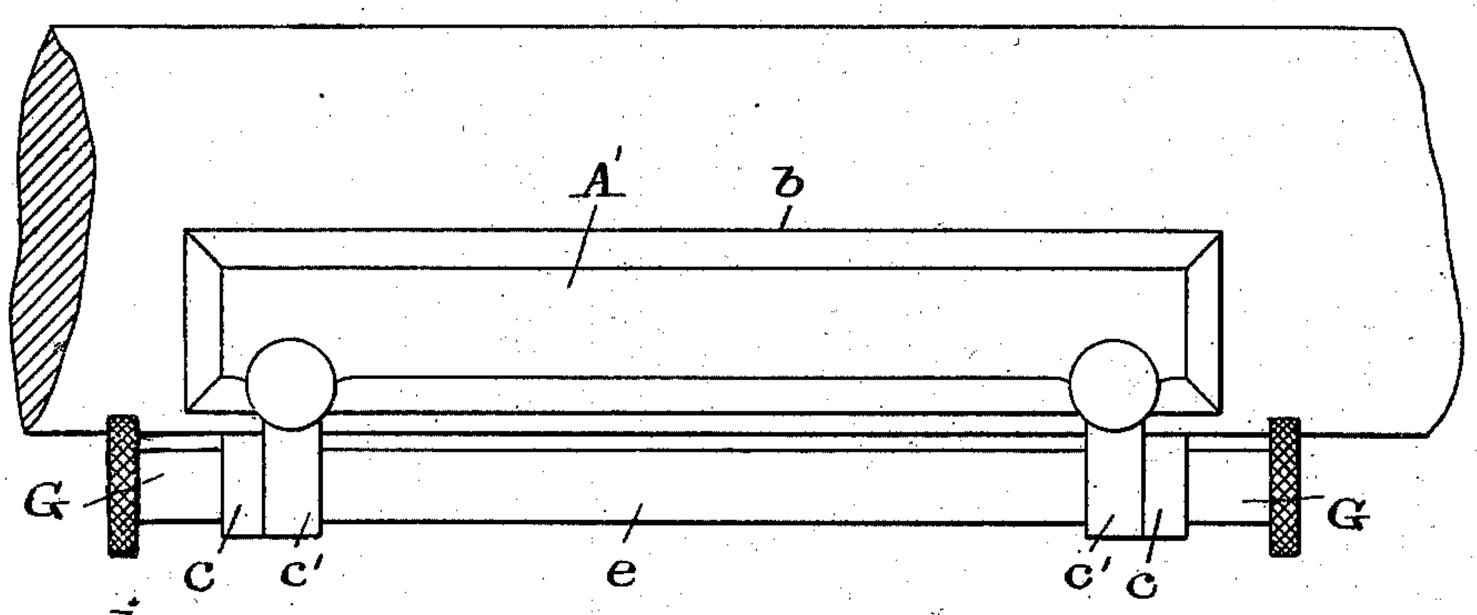


Fig. 2.

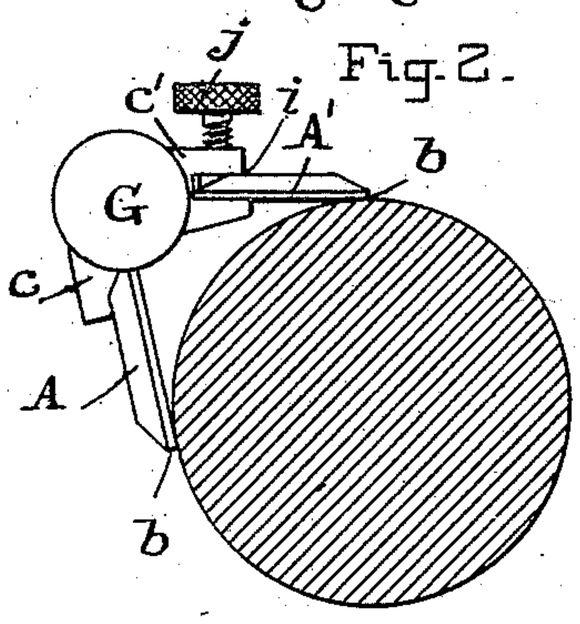


Fig. 3.

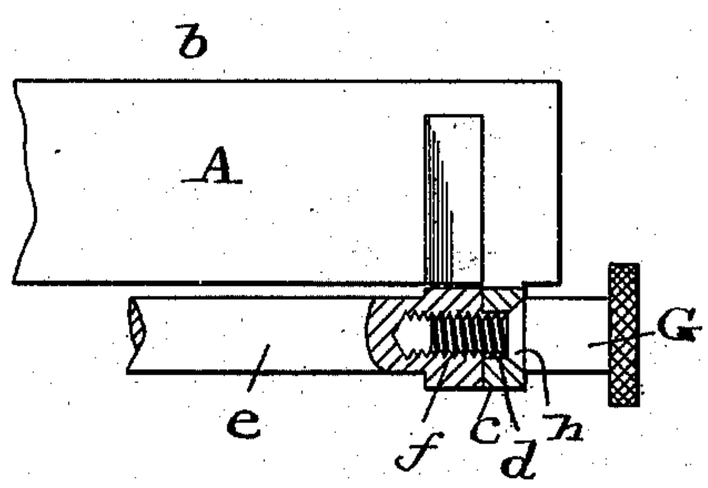


Fig. 4.

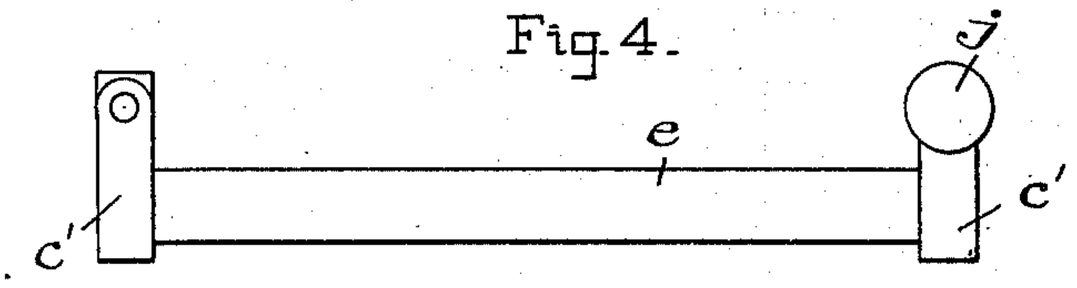


Fig. 5.

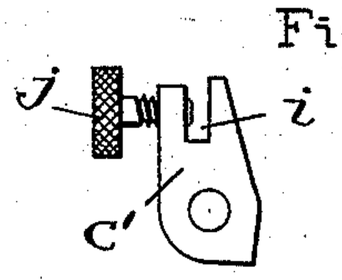


Fig. 6.

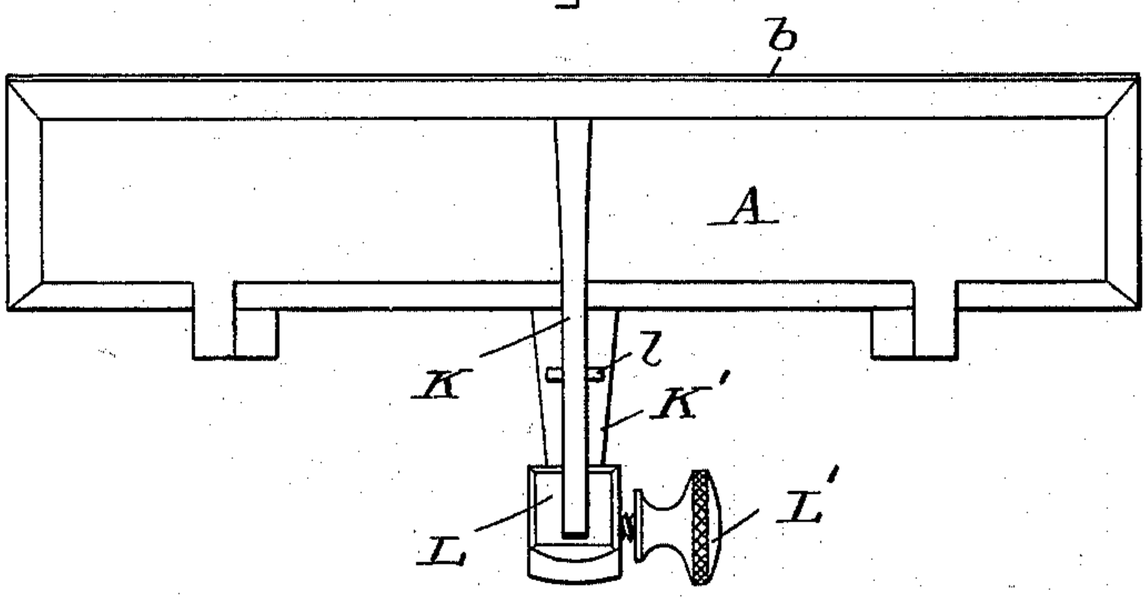
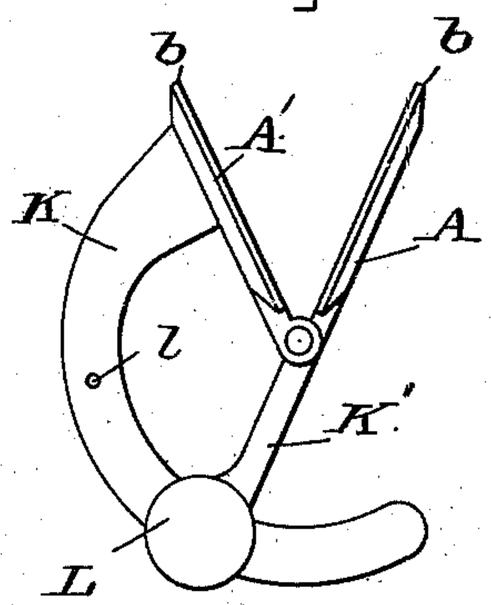


Fig. 7.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK CRAMBLITT, OF BALTIMORE, MARYLAND.

KEY-SEAT RULE.

SPECIFICATION forming part of Letters Patent No. 568,192, dated September 22, 1896.

Application filed June 3, 1896. Serial No. 594,082. (No model.)

To all whom it may concern:

Be it known that I, FRANK CRAMBLITT, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Key-Seat Rules, of which the following is a specification.

This invention relates to a key-seat rule for use of machinists.

The object is to provide a simple and convenient tool for accurately marking a shaft where it is desired to cut a key-seat or other groove.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a shaft to which the improved tool is applied. Fig. 2 is a cross-section of the shaft, showing the tool. Fig. 3 is a view of one end of one part and a section showing the cone-clamp. Figs. 4 and 5 show the clamp part which holds one of the plates detachable. Figs. 6 and 7 show views of a modified form of tool.

Two parallel plates A A′ are hinged together, and each plate has a straight edge *b* for ruling or marking accurately, and the two plates are provided with means for clamping and holding them at any desired relative position.

Referring to Figs. 1 to 5, one plate, A, has two half parts *c* of hinges, and each part *c* has a smooth-bore pivot-hole *d*, which on one side is tapered or countersunk. The other plate, A′, has two corresponding half parts *c*′ of the hinges. These are rigidly united by a rod *e*. At each end the half-hinge part *c*′ is tapped, as at *f*, for the pivot-screw and threaded to receive said screw. Two screws G are used. The screw G at each end has its threaded part passed freely through the pivot-hole *d* in one of the hinge parts *c* and into the threaded hole of the part *c*′. Each screw has a cone-shaped shoulder *h*, which bears on the countersunk part of the pivot-hole *d* and acts as a clamp to hold the hinge parts and the two plates immovable, so as to permit said plates to be set to suit larger or smaller shafts and hold wherever set. The two screws G are reversely threaded, so that when turning them to tighten the hinges both screws will be turned in the same direction, and thus avoid the tendency to a torsion twist which results when one is turned oppositely with respect to the other. Provision is made for detaching one of the plates to admit of inserting a longer plate. This is done by making the two half-plates *c*′ of the hinge and the rod *e* one separate piece and providing each of said half parts with a slot *i* and a set-screw *j*. It will thus be seen that a separate plate A′ may be inserted in said slot *i*.

Referring to the modification shown in Fig. 6 it will be seen that the parallel plates A A′ are hinged together, and in this case the half parts of the hinge are cast to each plate. Rigidly secured to the plate A′ is a segment-bar K, with a lug or stop *l*, the purpose of which will be presently pointed out. An arm K′ is rigidly secured to the plate A and has a slotted head L and a set-screw L′. The segment-bar K passes through the slot in the head L and is held in any desired position by the set-screw. The stop-lug *l* limits the spread of the plates. The operation is obvious.

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

1. In a key-seat rule the combination of two parallel plates, each having a straight edge and half-hinge parts, those on one plate being tapped and screw-threaded and those on the other plate being bored and countersunk; and a screw uniting said half-hinge parts and having a cone-shaped shoulder which bears on the countersunk bore, whereby the hinge parts and plates are clamped and held immovable.

2. In a key-seat rule the combination of two parallel plates each having a straight edge and hinged together at the edges opposite the said straight edges, and one of said plates being held by set-screws which allow of its separation and detachment from the other plate; and means for holding said plates more or less open, as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

FRANK CRAMBLITT.

Witnesses:

LEE I. VAN HORN,

CHARLES B. MANN, Jr.