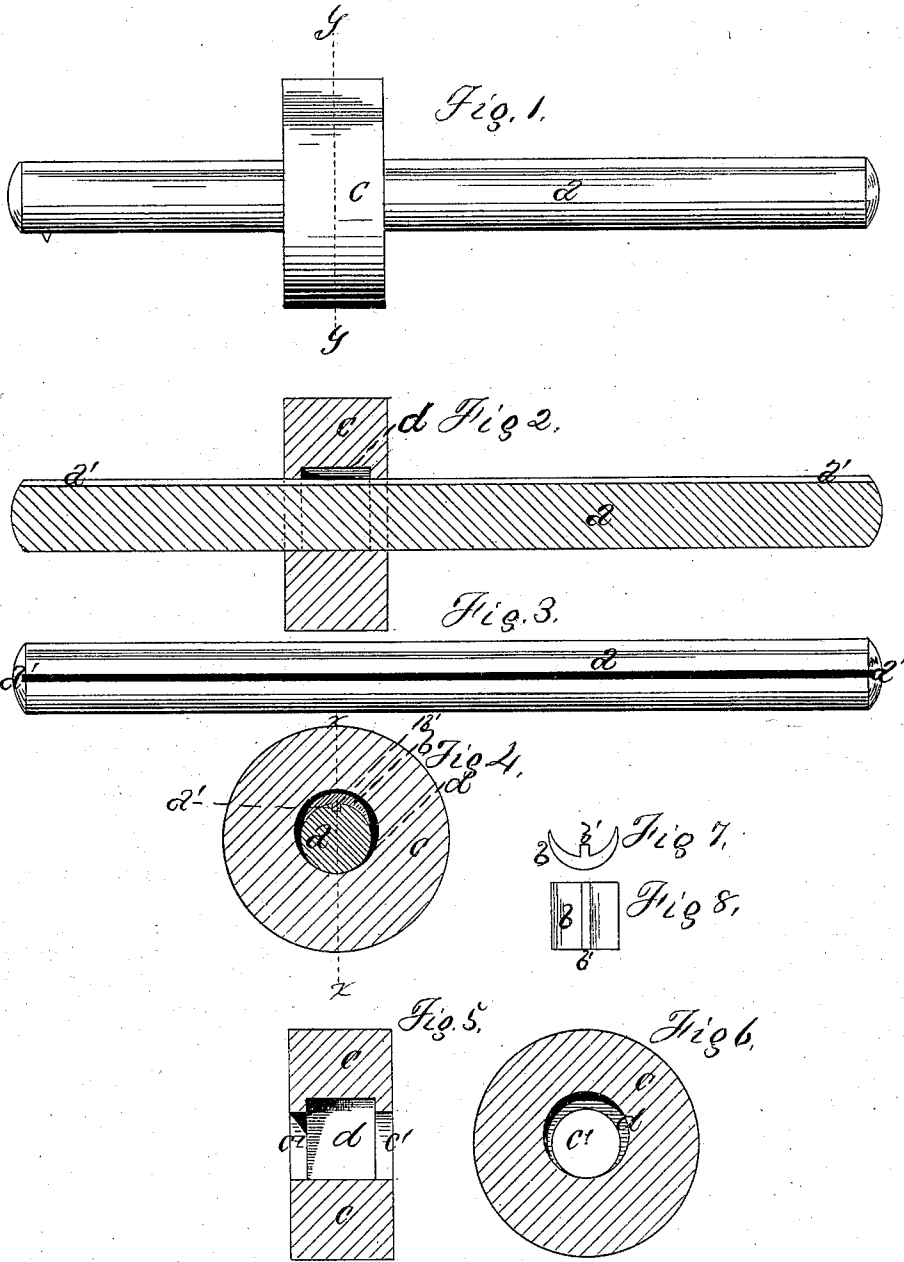


J. W. BUTLER.

Gages.

No. 134,729.

Patented Jan. 14, 1873.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN W. BUTLER, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN GAGES.

Specification forming part of Letters Patent No. 134,729, dated January 14, 1873.

To all whom it may concern:

Be it known that I, JOHN W. BUTLER, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Gages, of which the following is a specification, reference being had to the accompanying drawing, in which—

Figure 1 is a side view of the complete gage; Fig. 2 is a view of the same in central longitudinal section, the plane of the section being on the line *x x* in Fig. 4; Fig. 3 is a detached view of the gage-bar; Fig. 4 is a view of the complete gage in cross-section through the line *y y* in Fig. 1; Fig. 5 is a detached view in central cross-section of the slide; Fig. 6 is a detached view in section of the slide only through the line *y y* in Fig. 1; Fig. 7 is an end view of the double wedge made use of; and Fig. 8 is a view of the inner concave side of this double wedge.

In the common gage the slide is fastened to the bar at any desired point by a set-screw running through the slide. In my improved gage the slide is made fast on the bar by simply rotating the slide partially in either direction.

The letter *a* indicates the bar, a solid cylinder having a small groove, or crease, *a'*, running from end to end. The double wedge *b* fits with its concave side upon the bar, its rib

b' fitting into and sliding in the groove *a'*. The slide *c* has a central hole, *c'*, just fitting upon the bar. Within the slide there is a circular enlargement, *d*, somewhat larger than the hole *c'* and eccentric to it, but the outlines of the two circles coincide at one point. The double wedge lies upon the bar within the eccentric enlargement *d*, and when the parts are in the position shown in Fig. 4 the slide is free to move upon the bar; but if the slide is partially rotated upon the bar in either direction, it will wedge tightly on the double wedge *b* and thus be secured in place.

It is evident that a piece of almost any shape projecting from the bar will serve as a wedge; but I prefer that this piece should have double wedge ends, so that it may not wear ruts or shoulders in the slide.

This device may be used not only in gages, but in other places to serve a similar purpose.

I claim as my invention—

The combination of the bar, the slide, and the wedge, or its equivalent, lying in a circular enlargement larger than and eccentric to the bar, constructed, arranged, and designed to operate substantially as described, for the purpose set forth.

JOHN W. BUTLER.

Witnesses:

MORRIS BENHAM,
WILLIAM G. KINLOCK.