

(No Model.)

A. & J. L. KERSHAW.
BEVEL.

No. 468,386.

Patented Feb. 9, 1892.

Fig. 1

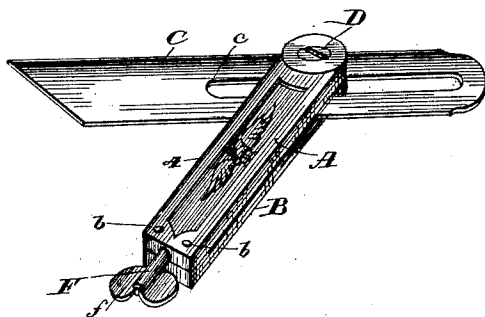


Fig. 2

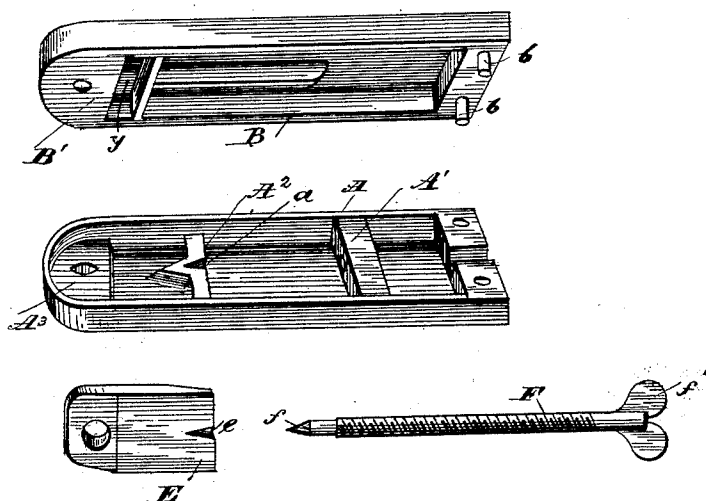
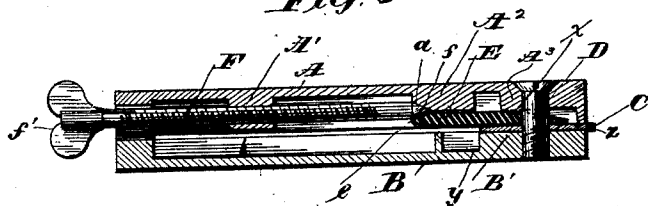


Fig. 3



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UNITED STATES PATENT OFFICE.

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BEVEL.

SPECIFICATION forming part of Letters Patent No. 468,386, dated February 9, 1892.

Application filed February 19, 1891. Serial No. 382,095. (No model.)

To all whom it may concern:

Be it known that we, ADOLPHUS KERSHAW and JAMES L. KERSHAW, citizens of the United States, and residents of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Mechanics' Bevels, of which we hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in mechanics' adjustable bevels in which the adjustable blade is inclosed within a hollow case when not in use and is extensible at will at any angle.

The object of our invention is to give increased power for securing the blade.

Our invention consists in means for rigidly securing the blade at any angle with the case or closed within the case, as will be hereinafter described, shown in the accompanying drawings, and more particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective view of the complete bevel. Fig. 2 illustrates the several details separated from one another, and Fig. 3 is a longitudinal vertical central section showing the relative position and mode of operation of the various parts.

In the drawings, A and B are the respective halves of the case secured together by means of the rivets *bb* at one end and by the screw D at the other.

C is the blade adapted to lie between the halves of the case and provided with the longitudinal slot, through which the screw D passes to serve as a pivot for the blade. The mechanism for securing the blade in any position is placed in connection with the pivot-screw and operates upon the principle of the lever to pinch the blade between the halves of the case and thus prevent motion of the parts. In Fig. 3 this mechanism is shown in section, E being a narrow plate lying between the portion A and the blade C, the pivot-screw D passing through both and compressing them together. The plate E extends to some distance from the pivot D in the direction of the riveted end of the case and projects for some distance over the boss B', which supports the blade upon a flat surface, the re-

mainder of the case being cored out, except where it is shown projecting in the drawings.

F is a long screw provided with the pointed extremity *f* and thumb-piece *f'*, which penetrates the threaded boss A' longitudinally of the case and passes its pointed extremity between the inner end of the plate E and a boss A² upon the upper half of the case. To assist the pointed extremity *f* to find a bearing a slight tapering cavity is cut in both the plate and boss, as at *a* and *e*, into which the point is inserted.

The plate E is made of substantially the same width as the hollow in the case, and when moved sidewise by the rolling motion of the screw F will strike the side of the case before the movement is communicated to the blade C, thus preventing any change of position in the blade when clamping it.

In operation when it is desired to secure the blade in any position the point *f* is screwed forward between the boss A² and plate E, thus forcing the lower side of the plate E against the inner edge of the blade C and jamming it against the boss B'. This will also have the effect of buckling the lower part of the case at *y*, left purposely weak for this purpose, and thereby will pinch the outer edge of the blade at *z* between the halves of the case, thus giving two points of compression on the extreme edges of the blade, one point not being sufficient for this purpose.

We are aware that a form has been devised whereby a wedge-joint has been utilized to jam the blade against the case in connection with a rounded boss and washer. Such is not, however, of the nature or spirit of the invention and fails to give sufficient power; also, no mechanism has heretofore been devised which would give sufficient power.

It will be seen that the extended plate E acts with very great leverage, and it will be seen that by lengthening the plate additional leverage will be obtained.

What we claim, therefore, as new, and desire to secure by Letters Patent, is—

The improved bevel herein described and shown, consisting of a case made in two sections A B, the section A having the boss A², provided with the notch *a*, and the threaded boss A', and the section B having the boss B', provided with a flat upper surface, the sections

being secured together by rivets at one end and
by a screw D at the other end, the blade resting
on the flat boss B' and provided with a cen-
tral longitudinal slot through which the screw
5 D passes, a lever-plate of substantially the
same width as the case mounted on the said
screw, bearing on the blade, extending be-
yond the boss B', and provided with a notch
e in its inner edge, and a screw mounted in
10 the boss A' and the end of the section A and

having its end engaging the notches *a e*, sub-
stantially as specified.

In testimony whereof we hereby set our
hands this 7th day of February, 1891.

ADOLPHUS KERSHAW.
JAMES L. KERSHAW.

Witnesses:

WM. M. MONROE,
F. H. MOORE.