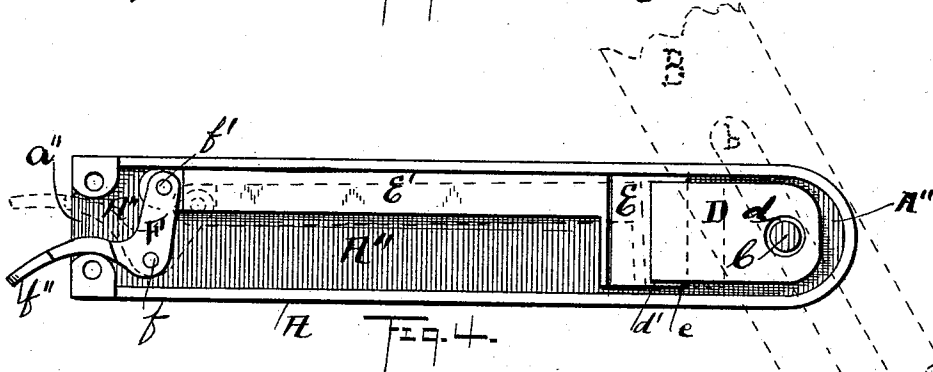
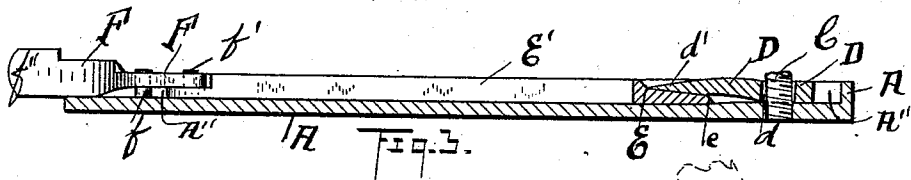
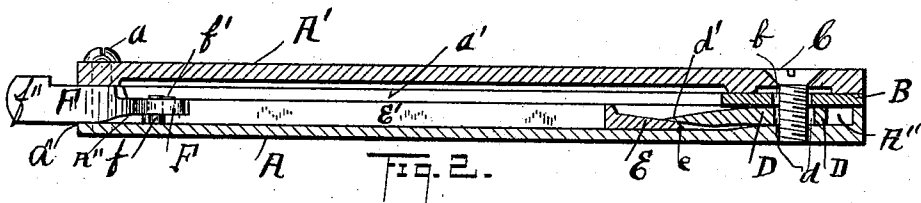
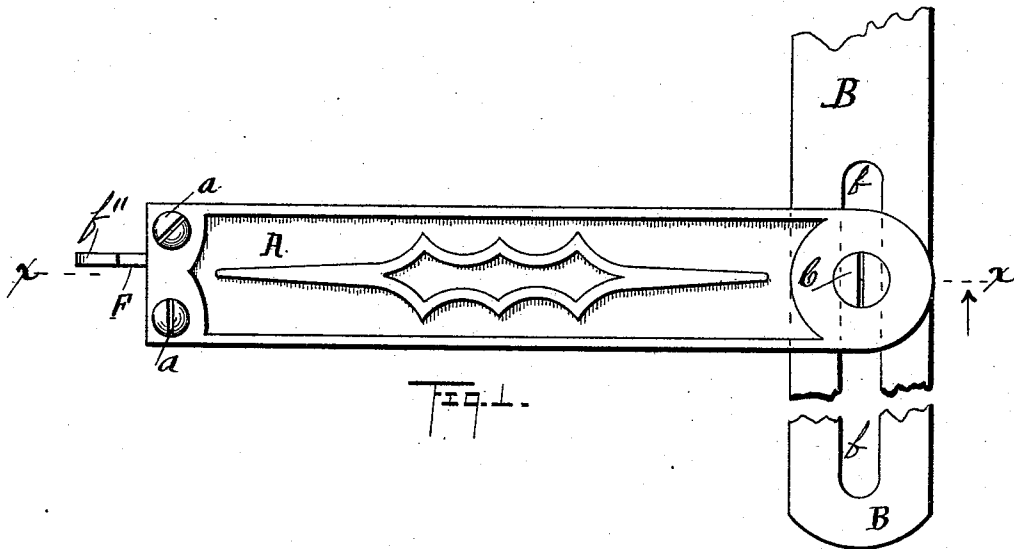


(No Model.)

W. G. AVERY.
BEVEL.

No. 487,010.

Patented Nov. 29, 1892.



WITNESSES.

Charles S. Lowrie,
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UNITED STATES PATENT OFFICE.

WILLIAM G. AVERY, OF CHICAGO, ILLINOIS.

BEVEL.

SPECIFICATION forming part of Letters Patent No. 487,010, dated November 29, 1892.

Application filed April 30, 1892. Serial No. 431,319. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. AVERY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bevels, of which the following, with the accompanying drawings, is a specification.

My invention relates to means for locking the blade of a bevel.

The object of my invention is an improved means of locking the blade of a bevel, whereby the use of a screw is avoided and which gives an even wedge-bearing surface over the whole locking-plate instead of being confined to a single point, and thus saves the plate from tipping laterally.

The invention consists in the details of construction and combination of parts as shown and described.

In the drawings, Figure 1 is a plan of a bevel containing my improvement, part of the blade being broken away. Fig. 2 is a longitudinal section of Fig. 1 on the line xx , and illustrates the position of the parts when the blade is free. Fig. 3 is a central longitudinal section of the lower portion of the stock and the locking device, illustrating the position of said parts when the blade is locked, and Fig. 4 is a plan of the locking device and the lower portion of the stock, the upper portion of the stock and the blade being removed.

The stock consists of two parts A and A' , which are secured together at the back end by means of screws a , or by other suitable means, leaving a space a' between the parts of the stock through most of its length in which the blade B works. The blade B has a slot b made through a part of its length. The stock and blade are bound together at the front end of the bevel by means of a screw C , which passes through a hole in the upper portion A' of the stock, through the slot b of the blade B , and screws into the lower portion A of the stock, as illustrated. This is the same means heretofore employed for binding the stock and blade together, and is well understood by persons skilled in the art. The lower portion A of the stock is chambered at A'' to hold the locking apparatus. The locking-plate D has a bore d through which the screw C passes, said bore d being large enough to not bind

upon the screw C as the locking-plate is tipped. The inner end d' of the locking-plate D is wedge-shaped. The upper face of the locking-plate D is in conjunction with the lower face of the blade B . The locking-plate D is made nearly the width of the chamber A'' .

A wedge E , having a bar E' secured thereto or formed integral therewith, is placed in the chamber of the portion A of the stock, the edge e of the wedge being under the edge d' of the locking-plate. The wedge E is made nearly the width of the chamber A'' in the lower portion A of the stock, being loose enough to work freely and yet wide enough to be guided by the sides of the chamber A'' . An opening a'' is made through the back end of the lower portion A of the stock, to communicate with the chamber A'' . Near the back end of the chamber A'' is pivoted a bell-crank F by means of a pivot f . One arm of the bell-crank F is pivoted to the bar E' by means of the pivot f' , the other arm of the bell-crank projecting through the opening a'' . The projecting end of the bell-crank F is flattened, as seen at f'' , and adapted to be pressed by the thumb or finger of the user.

In assembling the parts, the bar E' and the bell-crank F are fastened together by the pivot f' . The said bar E' , with its wedge E and the bell-crank F , are then placed within the chamber A'' , and the bell-crank is secured by the pivot f . The locking-plate D is then put into the chamber A'' with its edge d' upon the edge e of the wedge E . The blade B is then placed upon the lower portion A of the stock above the locking-plate D . The upper portion A' of the stock is placed upon and secured to the other parts by the screws a and the binding-screw C , as hereinbefore described. The screw C should be turned down far enough to allow the blade B to pass snugly but smoothly between the parts of the stock.

In the operation of my device, when the parts are in the position indicated by Fig. 2 and by the full lines of Fig. 4, the blade B may be slid back and forth and turned at any angle between the portions A and A' of the stock. When the blade shall have been adjusted as described, it will be firmly locked by pushing upon the projecting end f'' of the bell-crank F , thus throwing the parts into the position illustrated in Fig. 3, and as indicated by the

dotted lines in Fig. 4. When in this position,
 the blade B is gripped between the locking-
 plate D and the upper portion A' of the stock.
 This form and arrangement of parts gives a
 5 locking-bearing that is as wide as possible to
 secure and an even pressure, avoiding the tip-
 ping of the blade crosswise of the stock, and
 there is no screw device for operating the
 locking-plate to wear out and get out of ad-
 10 justment.

What I claim as my invention, and desire
 to secure by Letters Patent, is—

15 The combination, in a bevel, of a stock
 formed into two parts, which are secured together
 at one end and left free at the other end, one
 of said parts being chambered, a slotted blade
 between the free ends of the stock, a locking-

plate below the blade, a screw passing through
 the free ends of the stock, the slotted blade,
 and the locking-plate, a wedge below the lock- 20
 ing-plate, a bar attached to the wedge, and a
 pivoted bell-crank, one end of the bell-crank
 being pivoted to the bar attached to the wedge
 and the other arm of the bell-crank extending
 through the back end of the stock, substan- 25
 tially as shown and described.

In testimony whereof I affix my signature
 in presence of two witnesses, this 27th day
 of April, 1892.

WILLIAM G. AVERY.

Witnesses:

FERDINAND L. BARNETT,
 GEO. H. POPE.