

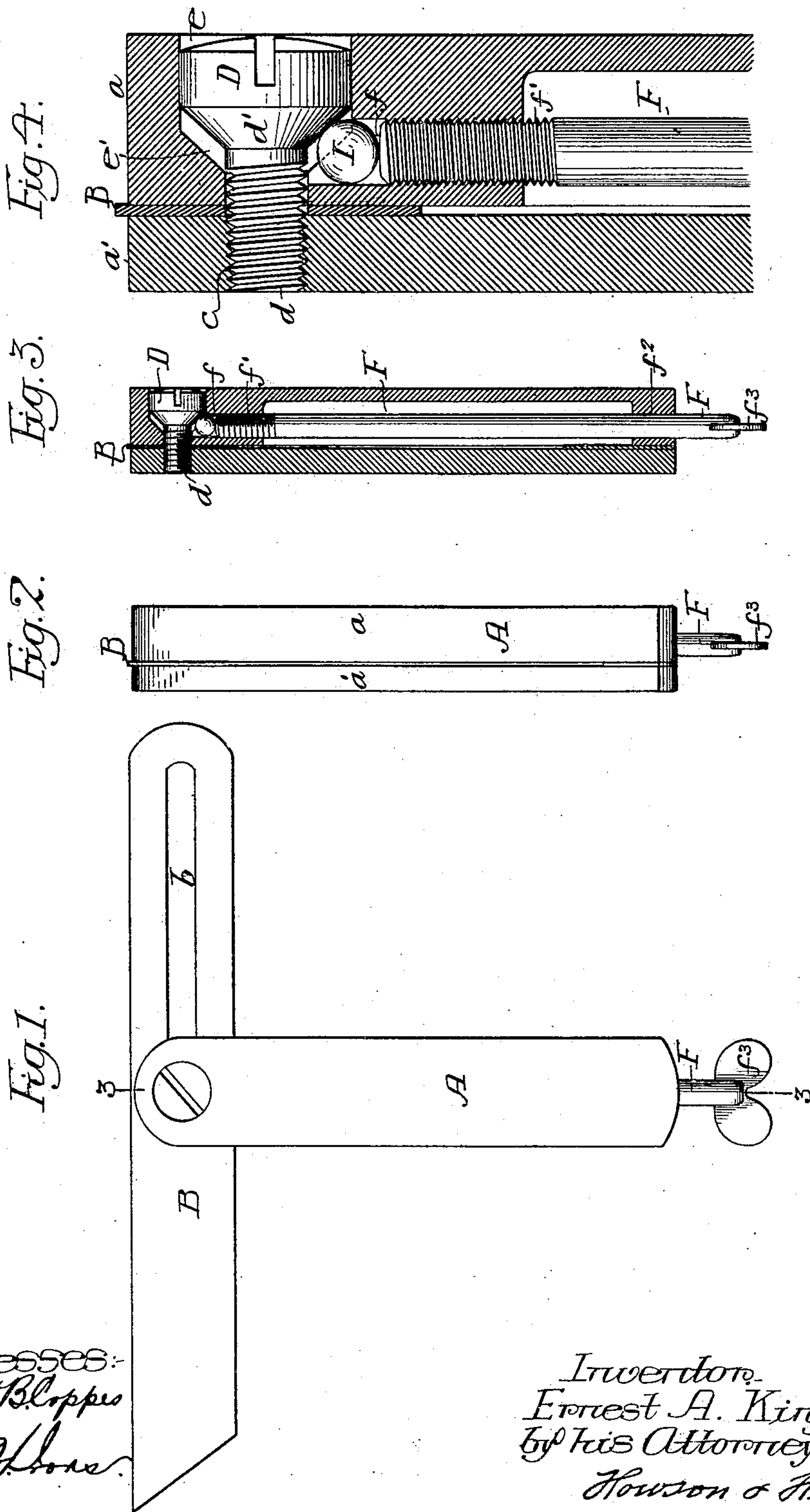
No. 869,851.

PATENTED OCT. 29, 1907.

E. A. KING.

BEVEL.

APPLICATION FILED AUG. 3, 1907.



Witnesses:
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UNITED STATES PATENT OFFICE.

ERNEST A. KING, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HENRY DISSTON & SONS, INCORPORATED, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

BEVEL.

No. 869,851.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed August 3, 1907. Serial No. 386,894.

To all whom it may concern:

Be it known that I, ERNEST A. KING, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Bevels, of which the following is a specification.

My invention relates to certain improvements in bevels having adjustable blades, used by mechanics in laying out beveled work.

The object of my invention is to improve the means by which the blade is rigidly secured to the stock of the instrument after adjustment. This object I attain in the following manner, reference being had to the accompanying drawing, in which:—

Figure 1, is a side view of my improved bevel; Fig. 2, is an edge view; Fig. 3, is a sectional view on the line 3—3, Fig. 1; and Fig. 4, is an enlarged sectional view of part of Fig. 3.

A is the stock of the bevel made in two parts a , a' , the two parts being rigidly secured together at one end and adjustably secured together at the opposite end.

B is the blade which may be set at any angle desired; this blade is slotted at b . The blade is mounted between the two parts a , a' of the stock A and in each part is a transverse opening for the passage of a screw bolt D which also passes through the slot b in the blade, as clearly illustrated in Figs. 3 and 4. The threaded portion e of the bolt is adapted to a threaded opening e in the part a' and passes freely through the opening in the part a and through the slot b .

The head of the bolt is beveled at d' and preferably conforms to the conical face e' of the opening e in the part a .

In the portion a is a socket f at right angles, in the present instance, to the opening e , and mounted in this socket f is a ball I arranged to bear against the beveled portion d' of the bolt D.

F is a long adjusting screw, threaded at f' , and the threaded portion is adapted to the threads in the walls of the extension of the socket f , as illustrated in Fig. 4; this screw passes through an opening f^2 in the rear end of the portion a of the stock A and has a winged handle f^3 by which it can be turned.

When in use the screw F is backed off, freeing the transverse bolt D from contact with the ball and the blade B is then free to be moved to any position desired. When it is set to the proper angle it is rigidly confined to the stock by so adjusting the screw F as to force the ball I hard against the beveled portion of the bolt D, causing it to draw the part a' against the part a and thus the blade is gripped rigidly between the two parts of the stock.

I have found by a number of experiments that this construction makes a very rigid fastening and, therefore, is particularly useful in instruments in which the blades have to be set accurately and which must not accidentally shift.

The transverse bolt D may be rigidly secured to the part a' , but I preferably use a screw bolt as shown, so that it can be adjusted to hold the blade in the event of the ball being lost, although not as effectively as by the use of the longitudinal screw and the ball.

I claim:—

1. The combination in a bevel, of a two part stock, a blade mounted between the two parts of the stock, a transverse bolt having a beveled portion, said bolt being attached to one part and free to move in the other part of the stock, a ball arranged to bear against the beveled portion of the bolt, and means for adjusting the ball, substantially as described.

2. The combination in a bevel, of a two part stock, a blade adjustably mounted between the two parts of the stock, a transverse bolt passing freely through one part and secured to the other part, said bolt having a beveled portion, a socket in one part, a ball mounted in the socket arranged to bear against the beveled portion of the bolt, and a screw extending through the stock for adjusting the ball, substantially as described.

3. The combination in a bevel, of a stock made in two parts rigidly connected together at one end and connected together by a screw bolt at the opposite end, a slotted blade mounted between the two parts of the stock, a screw bolt passing through the slot in the blade, said screw bolt having a beveled head, a socket arranged in one part of the stock at right angles to the bolt, a ball in the socket arranged to bear against the beveled head of the screw bolt, and means for adjusting the ball so as to force it against the beveled head of the screw bolt in order to confine the blade between the two parts of the stock, substantially as described.

4. The combination in a bevel, of a stock having a fixed and a movable part, a blade mounted between the two parts near one end, a headed screw bolt passing freely through the fixed part of the stock and screwed into the threaded opening in the adjustable part of the stock, said screw also passing freely through the opening in the blade, the head of the bolt being beveled, a socket arranged at right angles to the bolt, a ball in the socket arranged to bear against the beveled portion of the head, a longitudinal screw mounted in the fixed portion of the stock and having a threaded portion adapted to a threaded opening forming a continuation of the socket, so that on turning the screw in one direction the ball will be forced against the beveled portion of the transverse bolt and will cause the adjustable part of the stock to retain the blade rigidly to the fixed part, substantially as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ERNEST A. KING.

Witnesses:

JOS. H. KLEIN,
WM. A. BARR.