

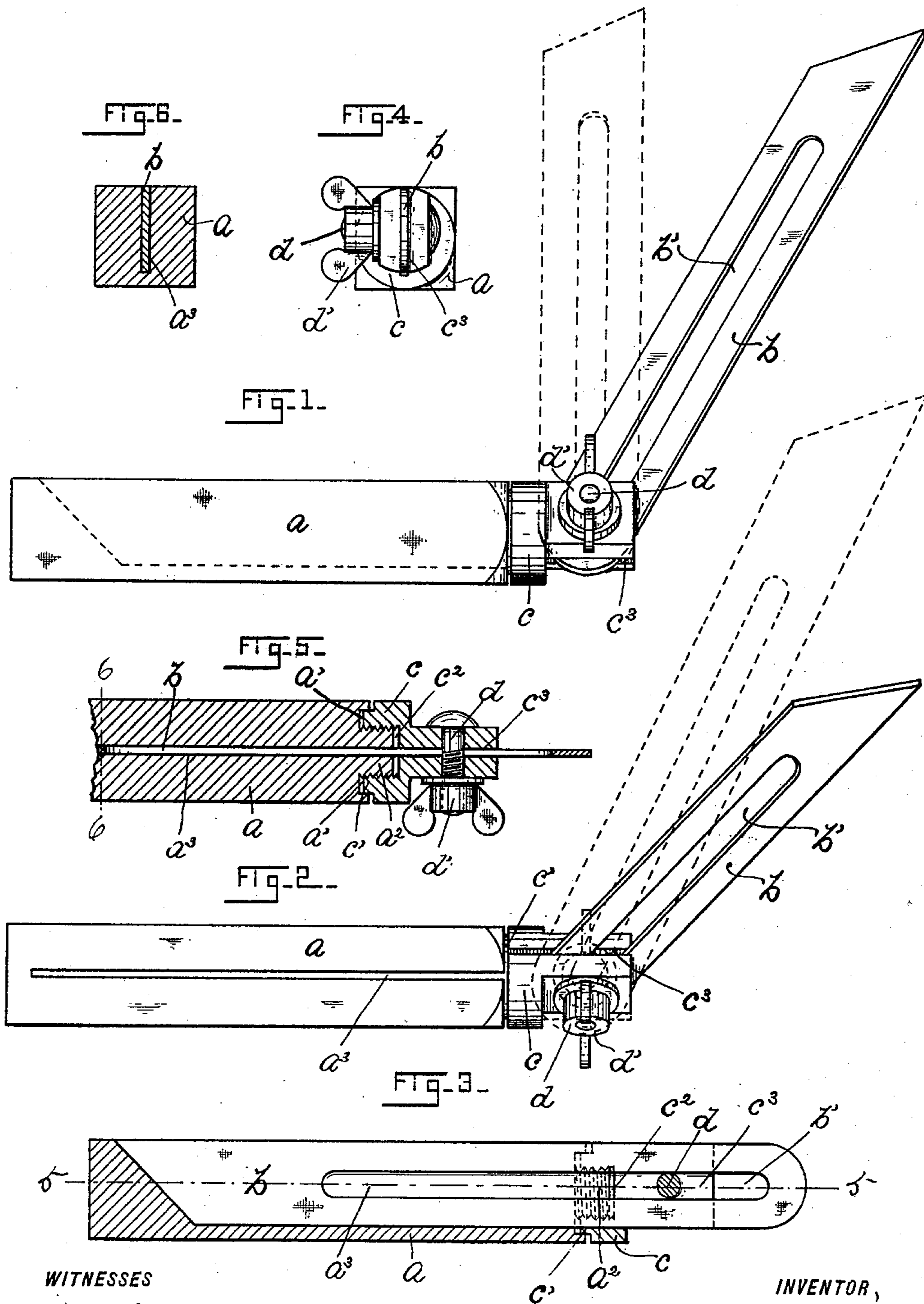
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Patented Jan. 2, 1900.

G. L. GRISWOLD.
BEVEL.

(Application filed May 1, 1899.)

(No Model.)



WITNESSES

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BEVEL.

SPECIFICATION forming part of Letters Patent No. 640,194, dated January 2, 1900.

Application filed May 1, 1899. Serial No. 715,081. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. GRISWOLD, a citizen of the United States, residing at Norwich, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Bevels, of which the following is a full, clear, and exact description.

This invention is in bevels for mechanics' use, and has for its object the provision of a simple and efficient tool of this class which shall have a wider range of adjustment than is attainable in bevels as most commonly constructed.

Briefly described my newly-invented bevel consists of a body portion having a blade adjustably secured to one end thereof, which blade may be freely swung from its point of support in any desired plane and may be securely fastened in any position to which it may have been adjusted. The blade may also be folded within the body portion of the tool, thus compacting the same in very small space when not in use.

To assist in explaining my invention, I have provided the accompanying drawings, which illustrate the same as follows:

Figure 1 is a side elevation of my newly-invented bevel, and Fig. 2 is a plan view thereof. Fig. 3 shows the body portion of my bevel in longitudinal central section and shows also the manner in which the said blade is folded within the body portion. Fig. 4 is an end view of my device as seen when the parts are in the positions of Fig. 3. Fig. 5 is a sectional view taken on the line 5 5, and Fig. 6 is also a sectional view taken on the line 6 6.

Referring to the drawings, the letter *a* denotes the body portion of my bevel, which body portion consists of a block, preferably of metal, and square in cross-section, as shown in the drawings.

The blade of the bevel is denoted by the letter *b*, and, as I have already stated, it may be adjusted to any desired angle relatively to the body portion and may also be swung in any desired plane. In order that the blade may be thus adjusted, it is supported in the following manner. One end of the block *a* is provided with a circular recess *a'*, from the

central portion of which projects a threaded stud *a*², which stud is provided to support an extension *c* of the said body portion *a*. The extension *c* is formed with an annular flange *c'*, that is adapted to enter the circular recess *a'* when the extension is mounted upon the stud *a*², the extension *c* being formed with a tapped hole *c*², located centrally of the said boss *c'*. The blade *b* is pivotally mounted in the extension *c*, and the position of such blade relatively to the body portion of the bevel may be readily varied by swinging the blade upon its point of support or by rotating the extension *c*.

To permit the free rotation of the extension *c*, as just explained, the portion thereof adjacent to the block *a* is preferably circular and the projecting portion in which the blade is held is properly cut away, so that no portion of the extension may engage the floor or other support upon which the tool is resting when such rotation is performed.

The body *a* of the bevel and the extension *c* are slotted, as at *a*³ *c*³, respectively, to receive the blade *b*, and when the extension is screwed home on the end of the body said slots are coincident and the blade may then be folded into the body, as seen in Fig. 3. The blade *b* is slotted lengthwise, as at *b'*, and is held in the slot *c*³ of the extension *c* by a bolt *d* and thumb-nut *d'*, the bolt extending through the extension and through the blade-slot *b'*. When the nut *d'* is screwed home, it draws together the two split parts of the slotted extension *c* and not only clamps the blade between said parts, but also by the same operation clamps the extension firmly upon the threaded projection *a*², thus securely holding the blade in any desired position relatively to the body *a* of the bevel. When it is desired to readjust the blade, it is only necessary to unscrew the nut *d'*, when the blade is free to be slid longitudinally or swung on its pivotal support, (the bolt *d*) or the combined extension *c* and blade may be rotated on the body *a* to vary the angle of the blade relatively to the said body.

The rotary adjustment of the blade relatively to the body portion of the bevel is particularly convenient for machinists and tool-

makers, as they are thus able to indicate and lay out combined angles and bevels not possible with ordinary bevels.

My newly-invented tool as a whole is of
5 very simple construction, has very few parts, and performs in a very satisfactory manner the office for which it is intended.

Having thus described my invention, I claim—

10 1. In combination, in a bevel, a body portion that is angular in cross-section, an extension revolubly mounted on said body, and a blade swiveled in the said extension.

15 2. In combination, in a bevel, a body portion that is angular in cross-section, an extension revolubly mounted on said body, a

blade swiveled in the said extension, and means for clamping the body, extension and blade together.

3. In combination, in a bevel, a body portion, an extension revolubly mounted on said body, a blade swiveled in the said extension, the said body and extension being slotted as set forth, and means for clamping the blade within the extension and for clamping the extension upon the said body portion.

Signed at Norwich, Connecticut, this 12th day of April, 1899.

GEORGE L. GRISWOLD.

Witnesses:

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