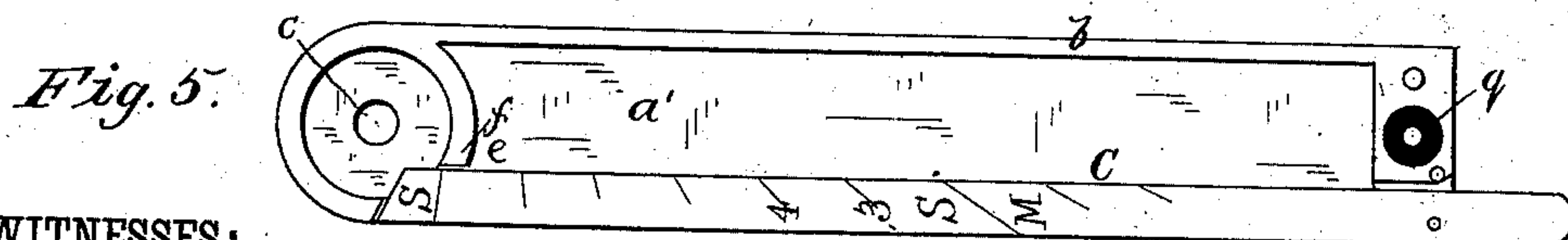
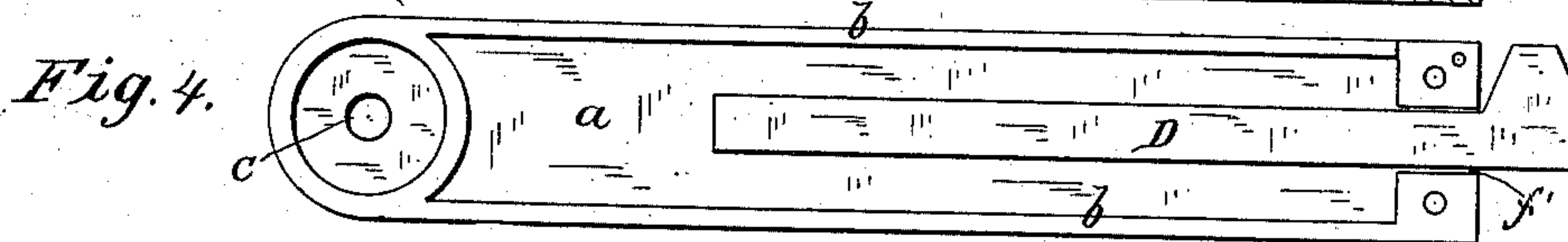
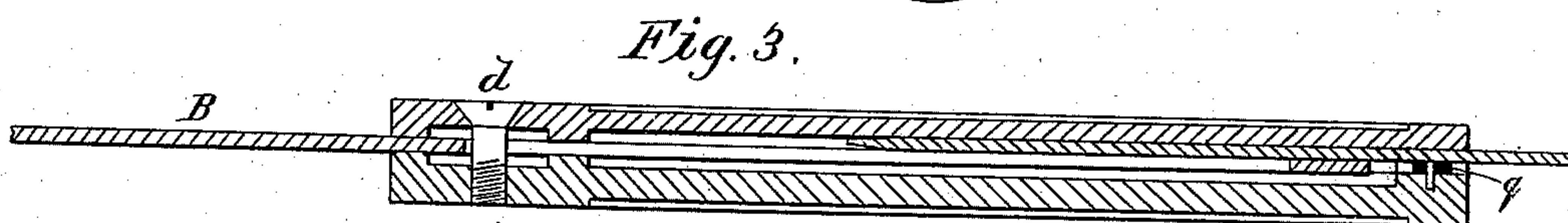
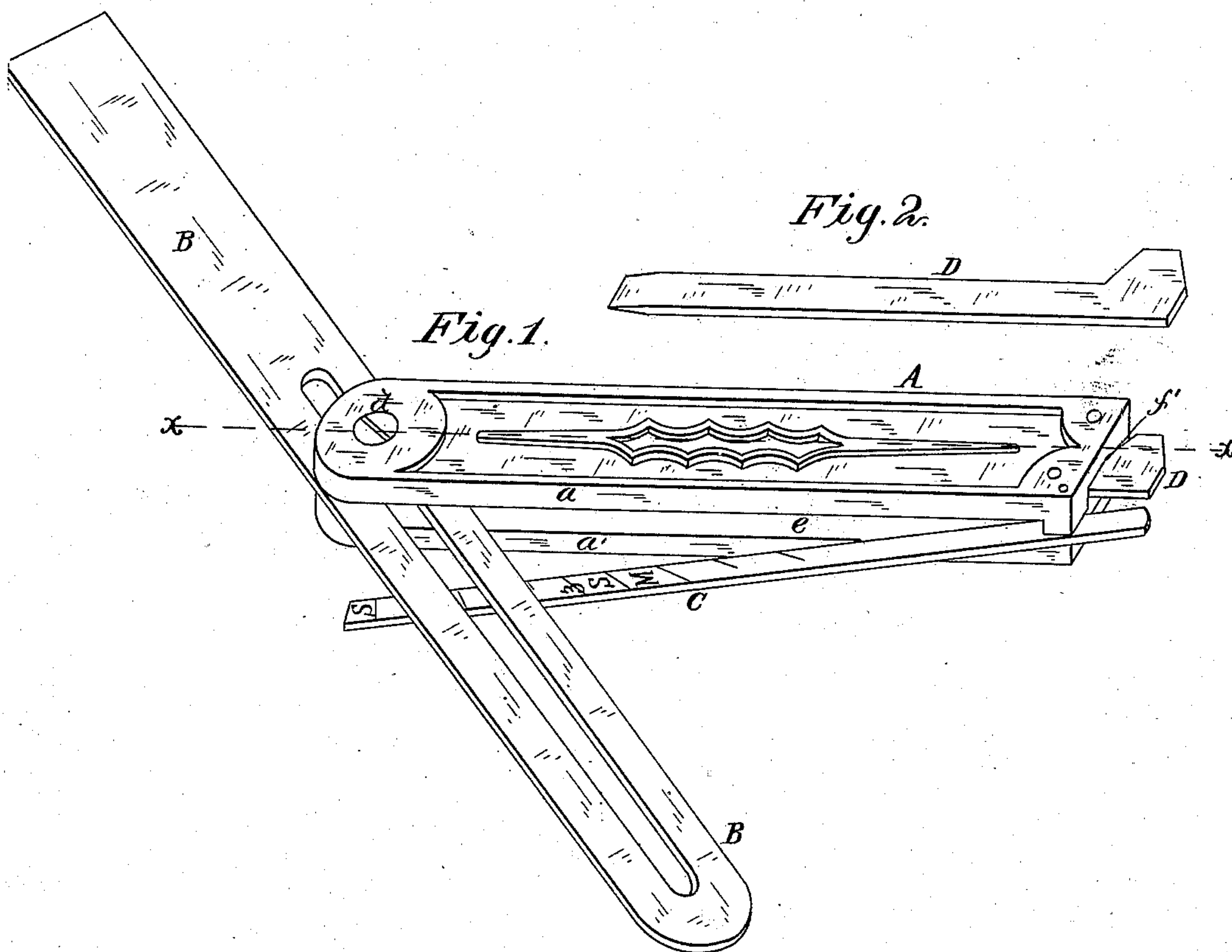


(No Model.)

D. BISSELL.
Bevel Square.

No. 228,027.

Patented May 25, 1880.



WITNESSES:

Henry N. Miller
C. Sedgwick

INVENTOR:

D. Bissell

BY

Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

DAVID BISSELL, OF DETROIT, MICHIGAN, ASSIGNOR TO HIMSELF AND
JAMES A. FOSTER, OF SAME PLACE.

BEVEL-SQUARE.

SPECIFICATION forming part of Letters Patent No. 228,027, dated May 25, 1880.

Application filed March 24, 1880. (No model.)

To all whom it may concern:

Be it known that I, DAVID BISSELL, of Detroit, in the county of Wayne and State of Michigan, have invented a new and Improved Bevel-Square, of which the following is a specification.

The object of this invention is to provide for the use of machinists, carpenters, and others a bevel-square in which the head can be set at any required angle quickly and with certainty, which contains in the stock or handle a pocket for the reception of a combined marker and screw-driver, and which possesses great strength and durability.

It consists of a graduated arm pivoted at one end to the end of the handle opposite the head, by which, when thrown out of the pocket in the handle, the head is set to the required angle, and, lastly, of a pocket in the handle for the reception of the combined marker and set-screw, provided with a rubber cushion for holding the same in the pocket.

In the accompanying drawings, Figure 1 is a perspective view of my bevel-square. Fig. 2 is a detail view of the screw-driver and marker belonging to the bevel-square. Fig. 3 is a longitudinal sectional elevation of the bevel-square on the line *x x*, Fig. 1. Fig. 4 is an inside view of the top plate of the bevel-square. Fig. 5 is an inside view of the bottom plate of the bevel-square.

Referring to the drawings, A represents the handle or stock of the implement. It is composed of two parts, *a a'*, both provided with a recess, *b*, on adjacent faces, so that when placed together and secured at the lower end by transverse rivets a slot is formed extending from the riveted end out through the opposite end. At the open end of the handle a hole, *c*, is made through the two parts of the handle, screw-threaded on one side and countersunk on the other.

B represents the blade or head of the square with a slot made through it for about half its length. This blade is placed in the slot in the handle, with the slot therein between the two parts of the hole in the handle, and the blade is secured to the handle by a set-screw, *d*, made of steel and having a chamfered head, so that it will sink into the countersunk hole in the handle. By this arrangement the head or

blade is held in any desired position with relation to the edges of the handle, and, further, the countersinking of the screw gives two smooth or even sides to the handle, and thus enables one or the other to be used at pleasure.

C represents the graded bar for the angle of the bevel. At its lower fixed end it is pivoted to the handle near one edge of the latter, so that it will fold in the pocket *e*, formed by a recess in the part *a'* of the handle, extending from near the pivot of the arm or head through the fixed end of the handle, so that the graded bar folds in with its edge flush with the edge of the handle. A stop, *f*, prevents it from going too far in the pocket, while its end, projecting out of the handle beyond the pivot, enables it to be thrown out readily from its pocket. Between the graded bar and the other side of the handle there is sufficient space for the blade B.

In the part *a*, at the lower end, is made a slot or pocket, *f'*, extending up into the handle, and having on one side, near the end, a cushion, *g*, of rubber or leather. In this pocket is placed the combined marker and screw-driver D. The cushion, bearing upon it, holds it in place, while the head, projecting out, enables it to be withdrawn easily.

The device is used as follows: The graded bar C is prevented by a stop from moving out farther than shown in the drawings. So when a bevel is to be set this bar is thrown out into the position it occupies in Fig. 1, the set-screw is loosened to release the blade B, and this is then turned until its lower edge coincides with the line on the graded bar corresponding to the required angle of the bevel. By means of the set-screw it is then secured in this position and the graded bar turned into its pocket, and the implement is ready for use in marking off the bevels, and this can be done by the tool D, which is adapted to serve either as a marker or screw-driver.

Thus a compact bevel-square is furnished with which any angle can be obtained quickly and with perfect accuracy, as the grading on the bar C can be arranged to any scale, and so as to give a range of ninety degrees, while the pockets for the grading-bar and marker D give compactness to the implement, and the

countersinking of the set-screw enables both sides of the handle to be used.

Having thus described my invention, I claim as new and desire to secure by Letters

5 Patent—

1. As an improvement in bevel-squares, the graduated arm or bar for obtaining the angle for the head or blade, pivoted in the lower end of the handle A and adapted to fold in the
10 pocket *e* in the handle, in combination with the head or blade B, substantially as described.

2. The pocket *f'*, with cushion *g*, in the handle, for the reception of the combined marker and screw-driver D, substantially as described.

DAVID BISSELL.

Witnesses:

FRED A. BAKER,

W. R. MONTGOMERY.