

(No Model.)

C. W. B. FULLER.
BEVEL.

No. 450,823.

Patented Apr. 21, 1891.

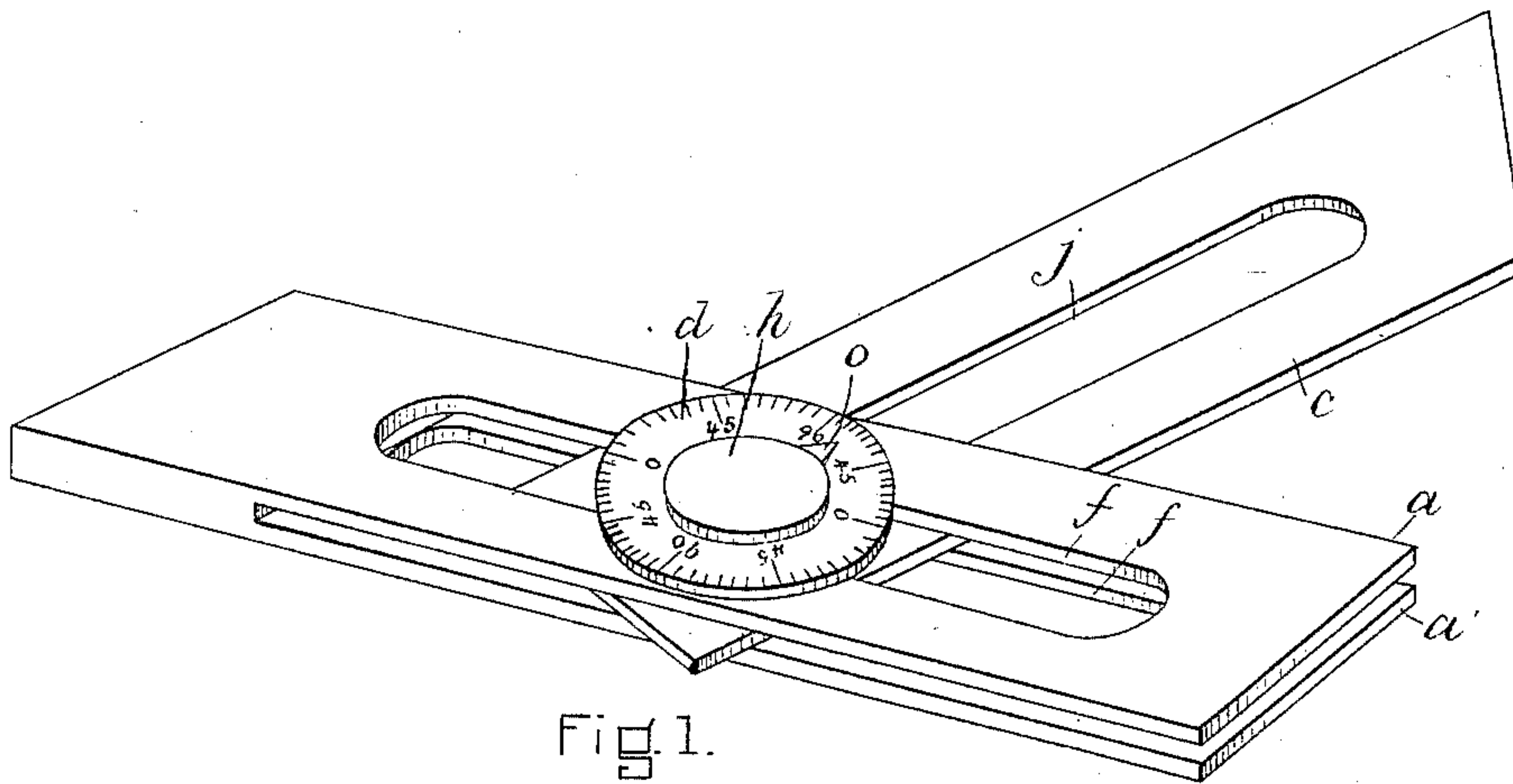


Fig. 1.

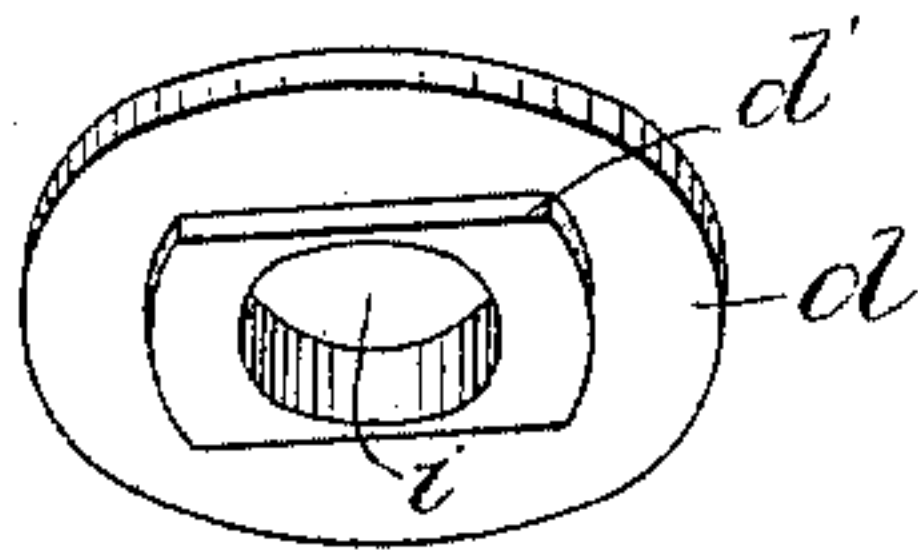


Fig. 3.

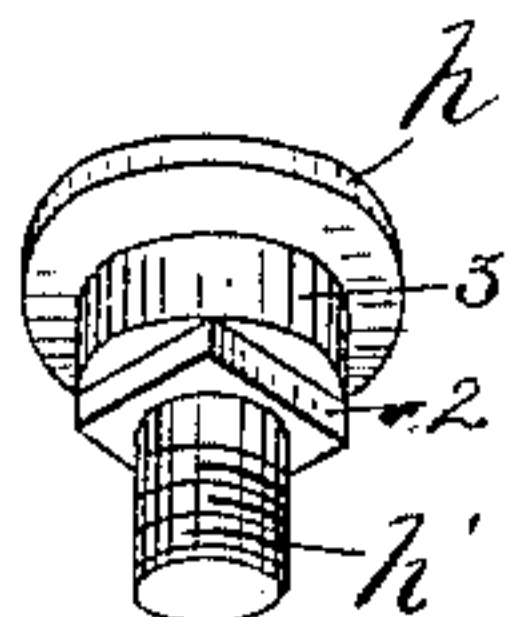


Fig. 4.

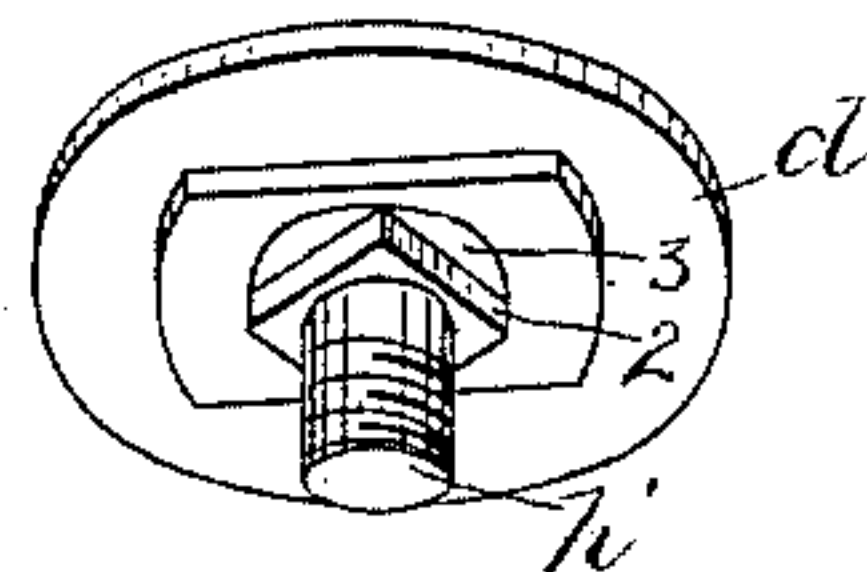


Fig. 5.

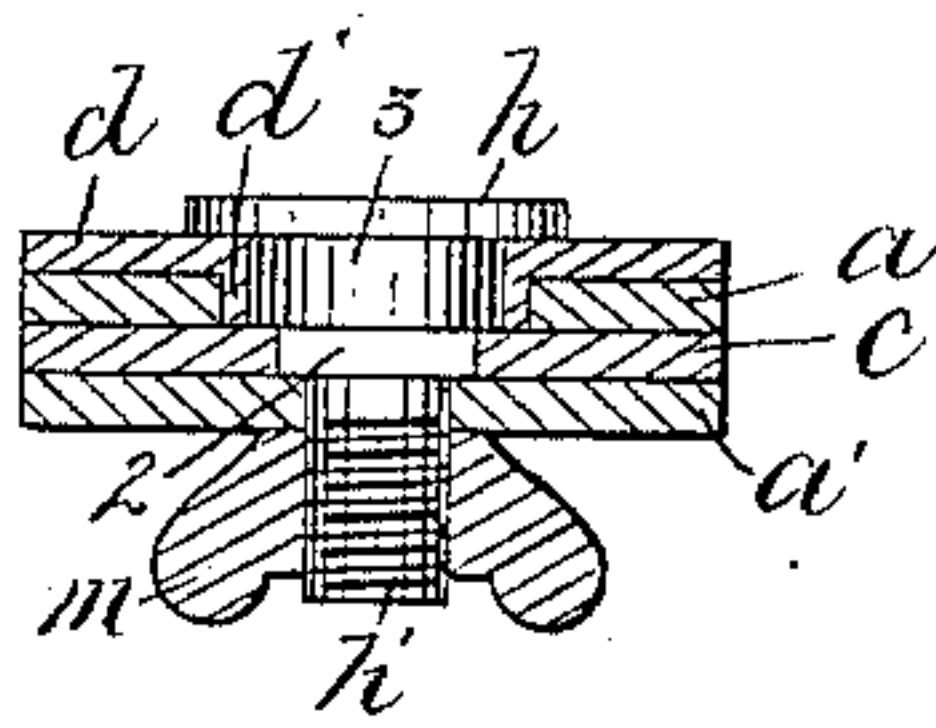


Fig. 2.

WITNESSES.

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A. D. Harrison

INVENTOR.

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UNITED STATES PATENT OFFICE.

CHARLES W. B. FULLER, OF MALDEN, ASSIGNOR OF TWO-THIRDS TO JAMES R. TAYLOR, OF LYNN, AND GEORGE K. HOLBROOK, OF SAUGUS, MASSACHUSETTS.

BEVEL.

SPECIFICATION forming part of Letters Patent No. 450,823, dated April 21, 1891.

Application filed July 30, 1890. Serial No. 360,401. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. B. FULLER, of Malden, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Bevels and Protractors, of which the following is a specification.

This invention has for its object to provide a bevel-gage and protractor which shall be simple and inexpensive in construction; and it consists in the improved construction which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of my improved bevel and protractor. Fig. 2 represents a transverse section of the same. Figs. 3, 4, and 5 represent perspective views of detached parts of the device.

The same letters and numerals of reference indicate the same parts in all of the figures.

The body portion of my improved bevel and protractor is composed of two parallel blades $a a'$, which are rigidly connected at one end and are separated throughout the greater part of their length by a slot or space which receives the adjustable blade c , said blade being adapted to swing between the blades $a a'$.

h' represents a pivot-bolt, which passes through slots $f f$ in the blades $a a'$ and a slot j in the blade c , the portion of said bolt that passes through the slot j being square and of such size that its sides are in contact with the edges of the said slot, so that when the blade c is turned the bolt h' must turn with it, the head h of said bolt having an indicator o , which co-operates with an annular scale-plate d , engaged, as hereinafter described, with the blade a in indicating any angle which the edges of the blade c may assume with relation to the edges of the blades $a a'$. The scale d is an annular plate or disk having a central orifice i , through which the bolt h' passes, the said orifice being of such size that the circular portion 3 above the square portion 2 of said bolt h can turn freely in it. The under side of the plate d has an offset or projection d' , the parallel edges of which are formed to bear against the edges of the slot f in the blade a , so that the plate d , while adapted to slide lengthwise of the

blades $a a'$, cannot turn with the bolt h' . The plate d is marked off in degrees on its upper side, the markings or graduations co-operating with the indicator o in showing the degree at which the blade c stands with relation to the edges of the blades $a a'$, the plate d being prevented from turning, while the indicator o turns with the blade c , as above described.

The bolt h' is screw-threaded at the end opposite the head h , and is provided with a thumb-nut m , which, when turned up against the blade a' , secures the bolt h' at any point to which it may be moved along the slots f , and also secures the blade c at any angle to which it may be adjusted.

It will be seen from the foregoing that the improved tool is extremely simple and constitutes a convenient and efficient bevel and protractor which is capable of being made at small expense as compared with many other tools for the same purpose now in use.

I claim—

The improved bevel and protractor consisting of the body portion having the slotted blades $a a'$, separated by a blade-receiving space, the adjustable blade c , inserted in said space and having a slot j , the graduated scale-plate d , having a central orifice i and an offset d' , the edges of which bear on the edges of the slot in the blade a to prevent said plate from turning on the body portion of the tool, and the bolt h' , having at one end a head h bearing on the scale-plate d and an indicator o on said head, and at the other end a clamping-nut bearing on the under side of the body portion of the tool, said bolt being adapted to turn freely in the orifice o of the scale-plate and provided with flat sides bearing against the edges of the slot j in the blade c , whereby the bolt and its indicator are engaged with the blade c , the swinging movements of said blade causing corresponding movements of the indicator over the non-rotating scale-plate, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 22d day of July, A. D. 1890.

CHARLES W. B. FULLER.

Witnesses:

C. F. BROWN,

A. D. HARRISON.