

(No Model.)

I. W. HEYSINGER.  
Glazier's Tool.

No. 231,225.

Patented Aug. 17, 1880.

Fig. 1.

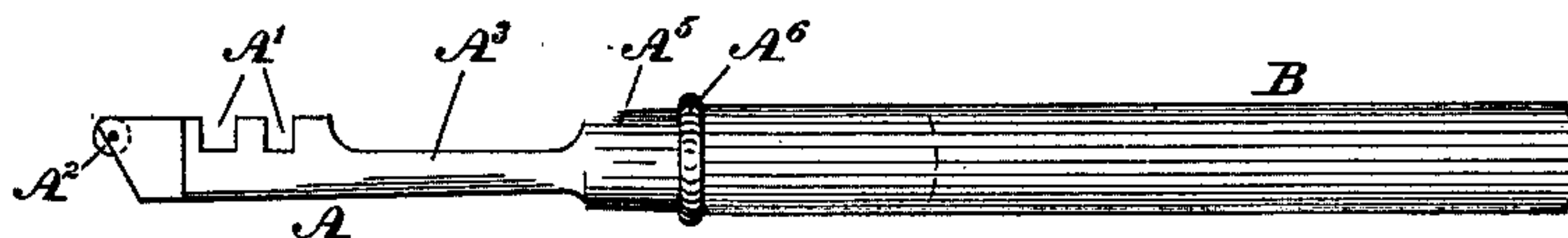
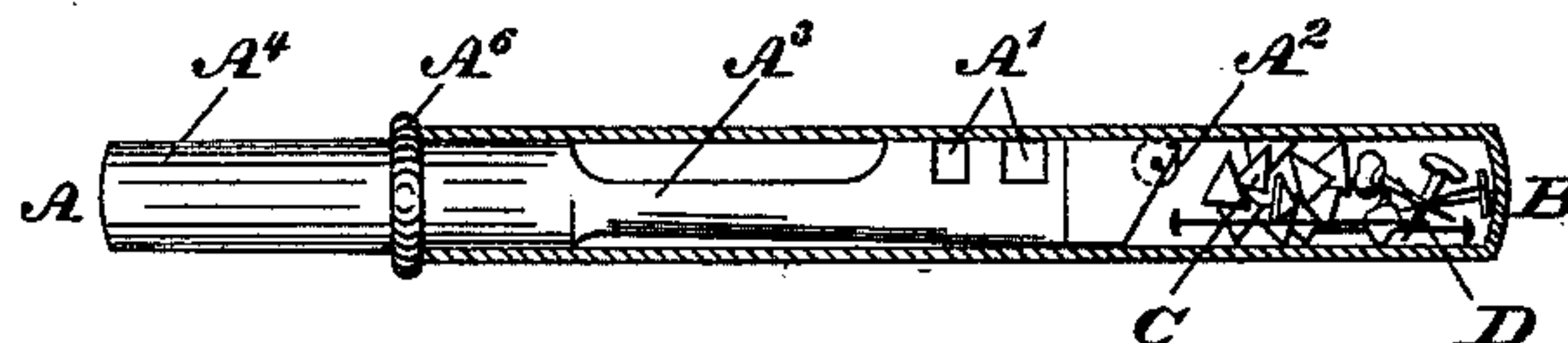


Fig. 2.



Witnesses:

*John A. Diederichsen*  
*W. F. Kircher*

Inventor:

*Isaac W. Heysinger*

# UNITED STATES PATENT OFFICE.

ISAAC W. HEYSINGER, OF PHILADELPHIA, PENNSYLVANIA.

## GLAZIER'S TOOL.

SPECIFICATION forming part of Letters Patent No. 231,225, dated August 17, 1880.

Application filed June 17, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC W. HEYSINGER, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented an Improvement in Glaziers' Tools, of which the following is a full, clear, and exact description, reference being had to the drawings accompanying and forming part of this specification.

Figure 1 is a view of the device open and ready for use. Fig. 2 shows the same closed for the pocket, a number of glaziers' points, &c., being seen in the case, which is here exhibited in section.

The lettering of the figures is uniform.

The object of my invention is to produce a glass-cutting tool for the use of glaziers and others, suitable, by reason of its small size and lightness, to be carried in the pocket, the cutting portion thereof, when thus carried, being contained in an air-tight chamber for protection against rust and other injury, (the said chamber also forming a pocket-case for glaziers' points, &c.,) the said tool being capable of extension to a suitable length for use as an ordinary glass-cutting tool.

The glass-cutter proper which I prefer is the well-known rotary cutter of any of the various forms in general use, though the device is equally adapted to steel or diamond points, or any other material desired.

Referring to the drawings, B represents a tubular case closed at one end, in which is inserted, as shown in Fig. 2, one end of the stub part A, carrying the cutter proper, A<sup>2</sup>. When the part A is reversed in its socket the tool assumes the form shown in Fig. 1, and is ready for use, the tubular case B forming an extension of and a portion of the handle thereof.

The reversible stub part A is substantially of the general form shown. It is preferably made of cast metal, and consists of two cylin-

drical or slightly tapered stubs, A<sup>4</sup> A<sup>5</sup>, separated by a raised part, A<sup>6</sup>, to prevent the same from entering too deeply into their socket. A crease turned into the tubular case at some distance from its open end would answer equally well; but I prefer the form shown. These stubs A<sup>4</sup> A<sup>5</sup> are fitted to the open end of the tubular case B, so as to be firmly held when inserted therein, the stub A<sup>4</sup> being made longer than the opposite one, A<sup>5</sup>, in order to give increased resistance against lateral strain when the tool is in use.

At A<sup>3</sup> the stem is flattened so as to give support to the fingers and prevent the tendency of the tool to rotate in the hand when in use. A' A' show square notches which are used for breaking off fragments of glass when imperfectly cut. A<sup>2</sup> is the glass-cutter proper, and at C and D are seen a number of glaziers' points, which are thus carried securely in the pocket to be used as occasion may require. When desired the tubular case B may be left open at both ends, some other pocket-tool being carried in the opposite end, though for simplicity and utility I prefer the invention in substantially its present form.

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

1. In combination with the tubular case B, the reversible stub part A, having the flattened finger-support A<sup>3</sup> and the wheel A<sup>2</sup>, substantially as and for the purpose described.

2. The tubular receptacle B for glaziers' points, &c., closed for the pocket by the reversible stub part A, the same being provided with cylindrical portions A<sup>4</sup> A<sup>5</sup>, stem A<sup>3</sup>, and glass-cutter A<sup>2</sup>, substantially as described.

ISAAC W. HEYSINGER.

Witnesses:

P. O'DONNELL,  
F. L. ROEPKE.