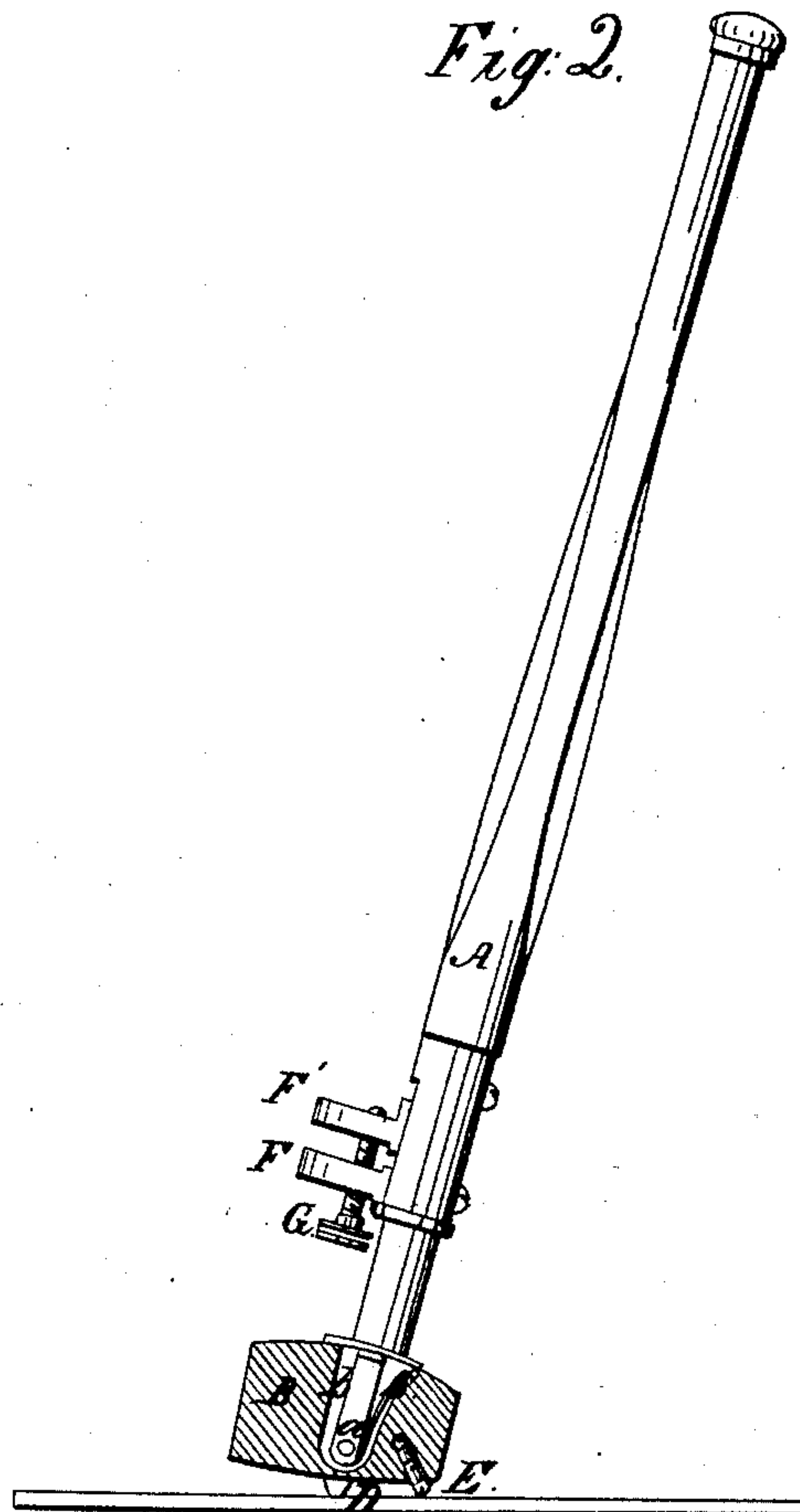
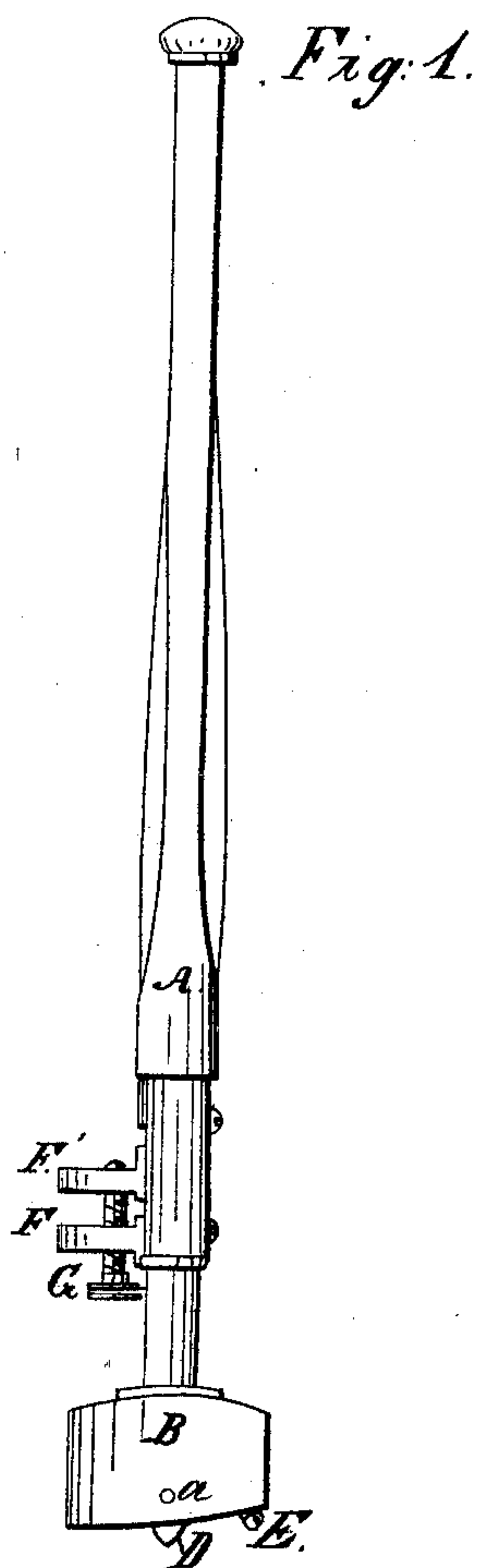


*Collman & Feenders,*

*Glass Cutter.*

*No 30,722.*

*Patented Nov. 27, 1860.*



*Witnesses:*

*James H. Laidley*

*Wm. York A. Lee*

*Inventor:*

*Knight Brothers*  
*Attys for*

*Collmann & Feenders*

# UNITED STATES PATENT OFFICE.

J. COLLMANN AND H. FEENDERS, OF FREEPORT, ILLINOIS.

## GLASS-CUTTER.

Specification of Letters Patent No. 30,722, dated November 27, 1860.

*To all whom it may concern:*

Be it known that we, JOHN COLLMANN and HARM FEENDERS, both of Freeport, in the county of Stephenson and State of Illinois, have invented a certain new and Improved Instrument for Cutting Glass; and we hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing, making part of this specification.

Our said invention consists, 1st, in the use of a "regulator" or adjustable bearing on the face of the bit, to cause the diamond to bear upon its highest or sharpest point as hereinafter explained; 2nd, in a pivoted and spring connection between the handle and bit; 3d, in the construction and application of an adjustable "breaker," hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of the instrument with the parts in their normal position. Fig. 2 is an elevation partly in section exhibiting the positions of the respective parts when in use.

A represents the handle pivoted at *a* to the bit B, in a cavity *b*, so as to allow the said handle a limited motion in the plane of the bit.

S is a spring acting to restore and hold the bit to a position at right angles to the handle.

D represents the diamond point projecting from the face of the bit in customary manner.

E is a set screw called by us the "regulator" and employed to steady the bit as will be hereinafter explained.

F F' is an adjustable glass breaker consisting of a fixed jaw F, and a sliding jaw F', the proximity of which jaws is adjusted by means of a set screw G to suit various thicknesses of glass.

The operation is as follows: The regulator E is first adjusted to the level of the highest point of the diamond and the instru-

ment is then applied in the usual manner, with the exception that the handle is inclined sufficiently to steady the bit upon the regulator by the pressure of the spring S.

It is well known that every diamond has but one point which is fit for cutting glass, and for this reason great care, skill and steadiness of hand are required in the use of the customary instrument for this purpose, any inclination of the handle from its proper position causing the instant withdrawal of the point from the glass, and consequent interruption of the operation. From the foregoing explanation it will be clearly understood that in the use of our instrument, the position of the diamond in respect to the glass is not affected by a slight motion of the handle in either direction or by a lack of steadiness in holding the same. The skill and care required in cutting glass, are thus greatly reduced.

After cutting, the strip is removed by the application of the breaker F F', the jaws being adjusted to such a distance asunder as the thickness of the glass may require.

We claim as new and of our invention herein and desire to secure by Letters Patent:—

1. The adjustable "regulator" E, applied to the face of the bit B, substantially as and for the purposes set forth.

2. The combination of the cavity *b*, spring S and pivot connection *a*, between the bit and handle, operating in the manner and for the purposes explained.

3. The described combination of the fixed jaw F, sliding jaw F', and set screw G, with the handle A of a glass cutting instrument for the object stated.

In testimony of which invention, we hereunto set our hands.

JOHN COLLMANN.  
HARM FEENDERS.

Witnesses:

FRED. C. INGALLS,  
JOHN A. CLARK.