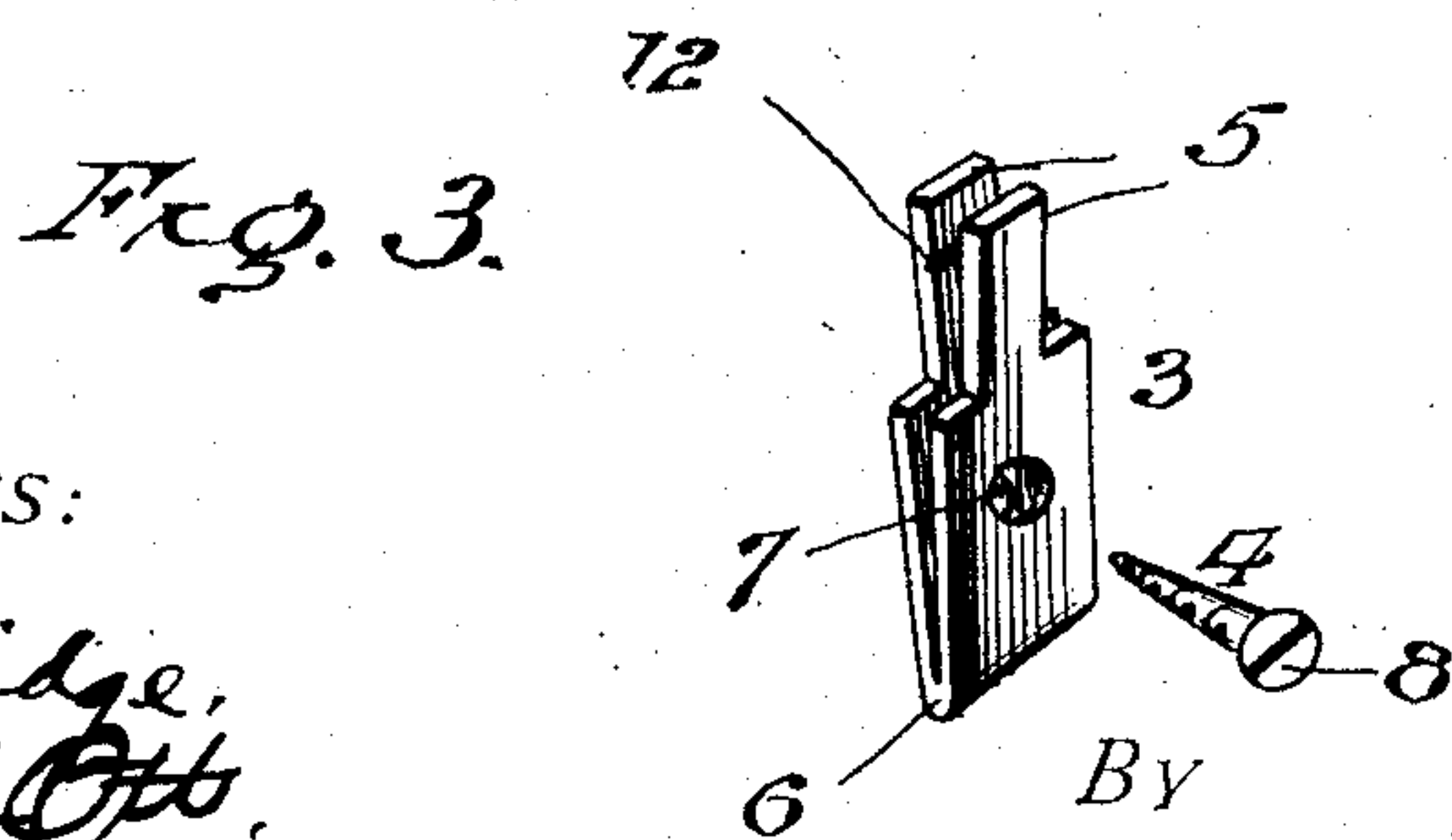
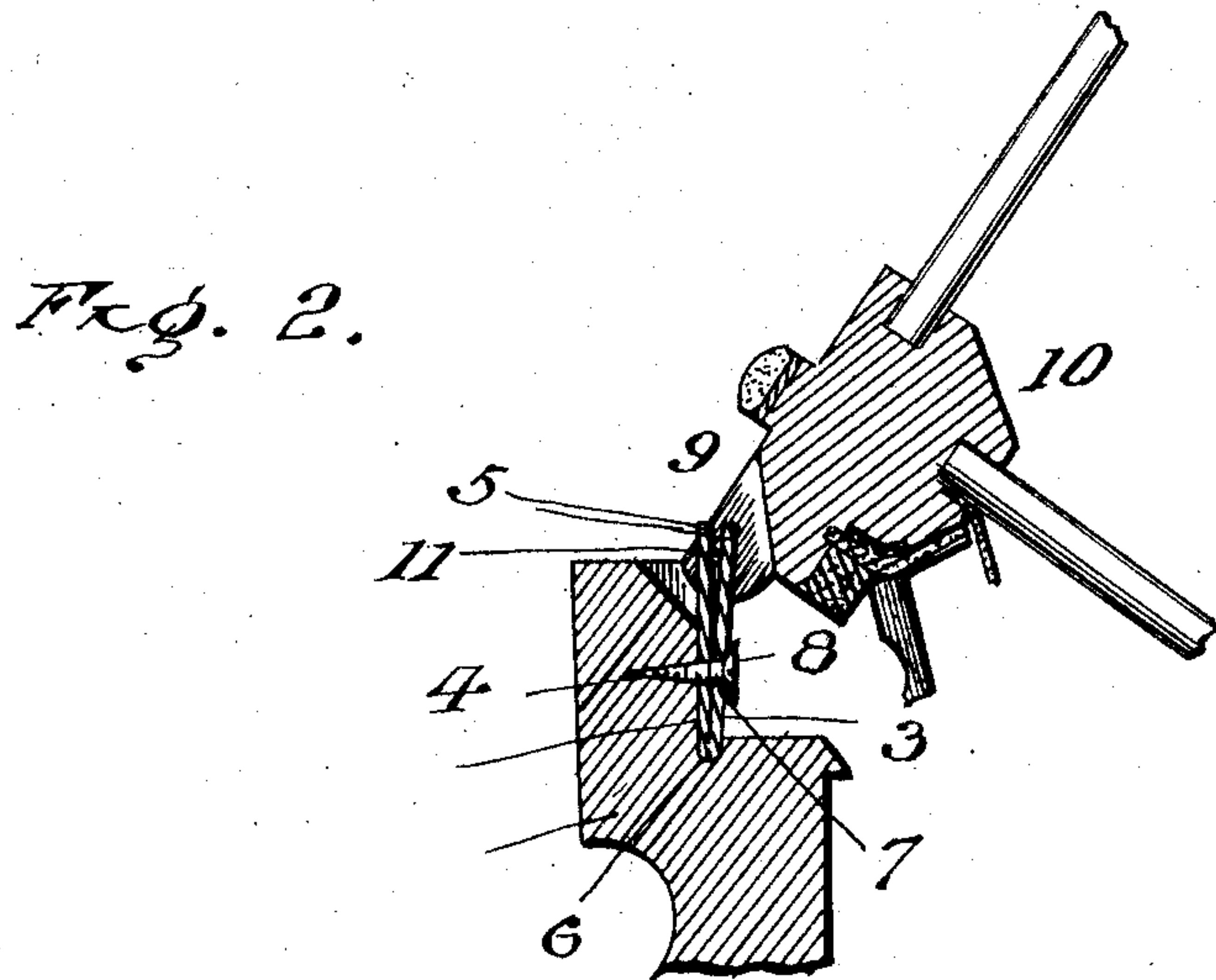
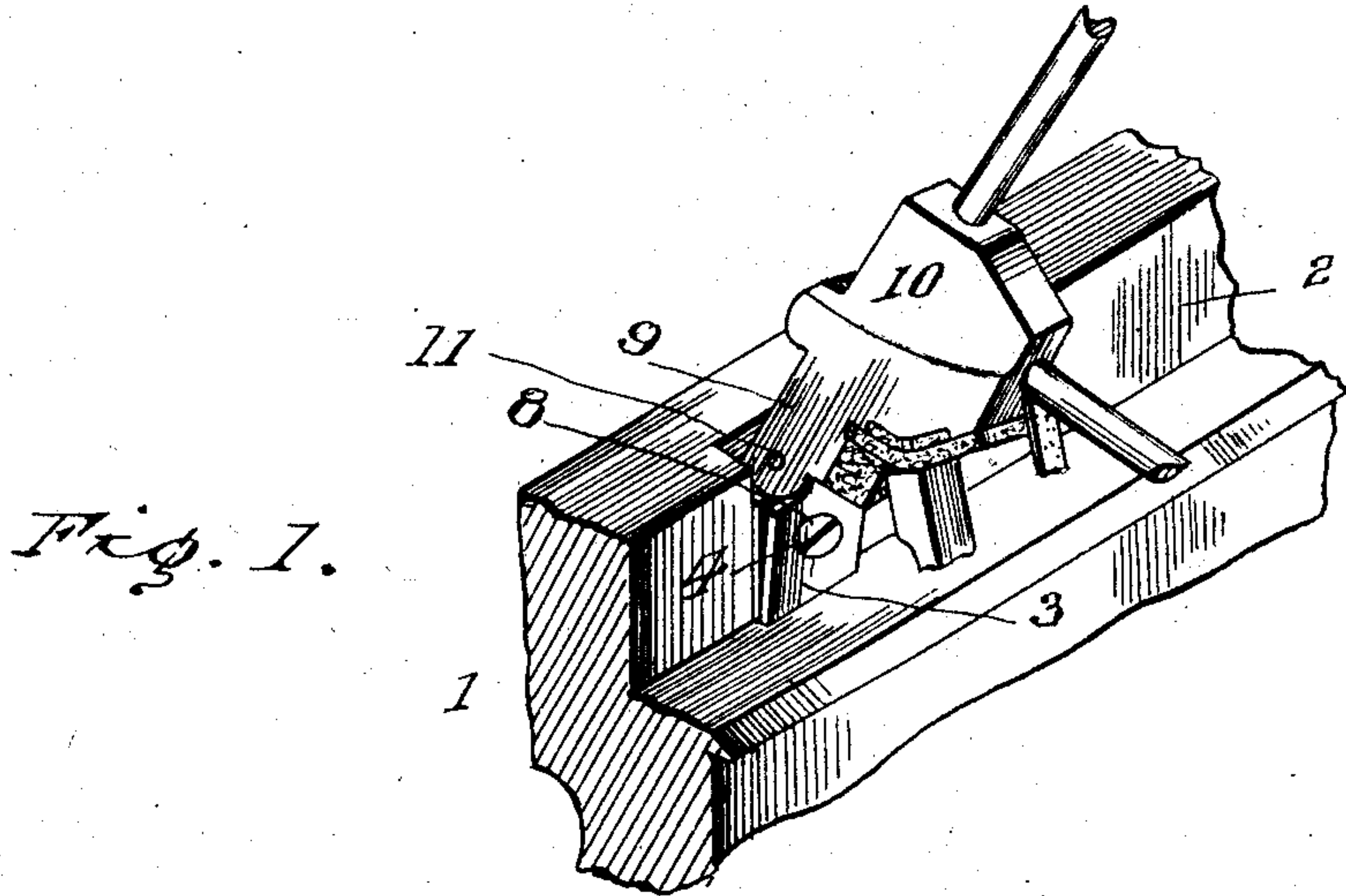


No. 883,387.

PATENTED MAR. 31, 1908.

G. H. CAMPBELL.  
PIANO FLANGE.

APPLICATION FILED MAR. 25, 1907.



WITNESSES:  
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Attorney



# UNITED STATES PATENT OFFICE.

GEORGE H. CAMPBELL, OF HARRISBURG, PENNSYLVANIA.

## PIANO-FLANGE.

No. 883,387.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed March 25, 1907. Serial No. 364,421.

*To all whom it may concern:*

Be it known that I, GEORGE H. CAMPBELL, a citizen of the United States of America, residing at No. 113 Locust street, Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Piano-Flanges, of which the following is a specification.

This invention relates to new and useful improvements in pianos, and has relation more particularly to that part of a piano known as the flanges.

It is an object of the invention to provide a novel device of this character wherein the hammers may each be readily removed by the turning of a clamping screw.

It is a further object of the invention to provide a novel device of this character which possesses sufficient spring or resiliency as to permit the hammers to be easily applied or removed.

Furthermore, an object of this invention is to provide a device of the character noted, which will possess advantages in points of simplicity, efficiency and durability, proving at the same time comparatively inexpensive to manufacture.

With the foregoing and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views in which—

Figure 1, is a perspective view showing the main rail having one of the flanges constructed in accordance with this invention applied thereto, also showing in connection therewith a hammer-butt. Fig. 2, is a vertical section of the rail and flange. Fig. 3, is a perspective view of the flange detached.

In the drawings 1, represents the rail to which the flanges for supporting the hammer-butts are attached. As all of the flanges are similar in construction, a description of but one will be given.

The rail 1, near its upper edge is provided with a longitudinal shoulder 2. To this shoulder the flange 3, is secured through the

medium of the clamping screw 4. It is here to be stated that the shoulder 2, forms no essential features of the invention as the flange may, with equal facility, be secured to an edge of the rail. The shoulder is employed according to the dictates of practice. Each flange extends within a recess in the rail, said recess being shown in the drawings in the base of the shoulder 2, as is more particularly shown in Fig. 2.

The flange 3, is formed of a single strip of metal doubled upon itself, the free ends of the flange being provided with the extensions or tongues 5. The bend 6, of the flange is flattened and this causes the free ends of the metal to be slightly separated. Intermediate the length of the flange through both portions thereof are the alining apertures 7. It is through these openings that the clamping screw 4, passes, said screw engaging the rail 1. The head 8, of the screw contacts with a portion of the flange and compresses it as will, it is thought be readily understood. When the screw is unloosened, the natural resiliency of the metal causes the flange to distend.

The rear end 9, of the hammer-butt 10, is bifurcated as in the usual manner and extending across the bifurcation is the pin 11. In assembling the device this pin 11, is positioned between the tongues 5. In order that the tongues may efficiently hold the pin, one of the tongues is provided with a transverse groove 12.

What I claim is:—

In combination with a rail having a series of recesses of a flange extending within each of the recesses, said flange being formed of a single piece of metal bent upon itself and having registering apertures, the bend of the metal being flattened, and coinciding tongues projecting from the free ends of the metal, one of said tongues being provided with a transverse groove adjacent its free end.

In testimony whereof I affix my signature in the presence of two witnesses, this 18, day of March, 1907.

GEORGE H. CAMPBELL.

Witnesses:

RAYMOND G. STOVER,  
GEO. W. JACOBS.