

(No Model.)

2 Sheets—Sheet 1.

W. L. ZUMBRO.
BAND SAW GUIDE.

No. 452,408.

Patented May 19, 1891.

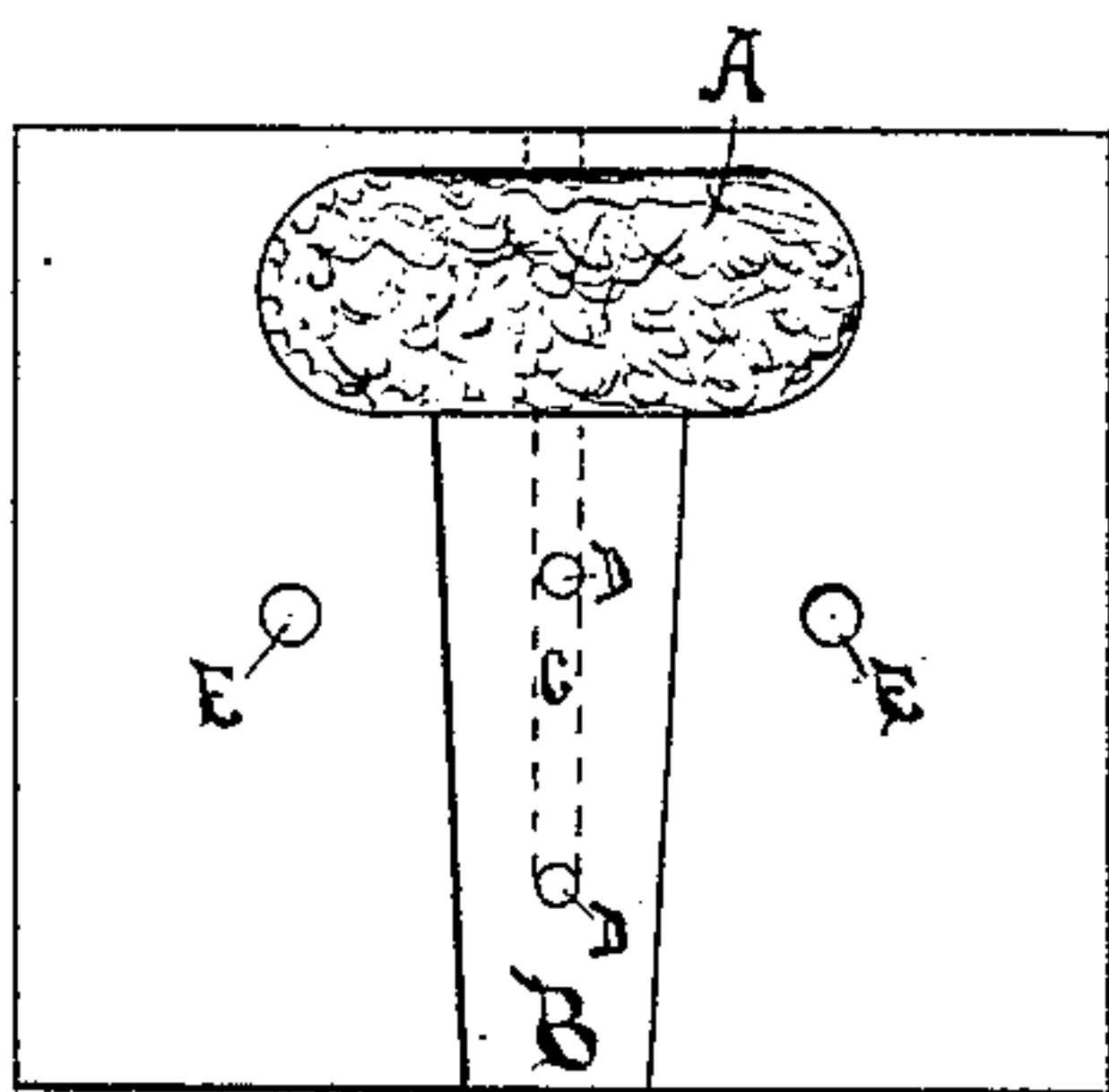


Fig. 1.

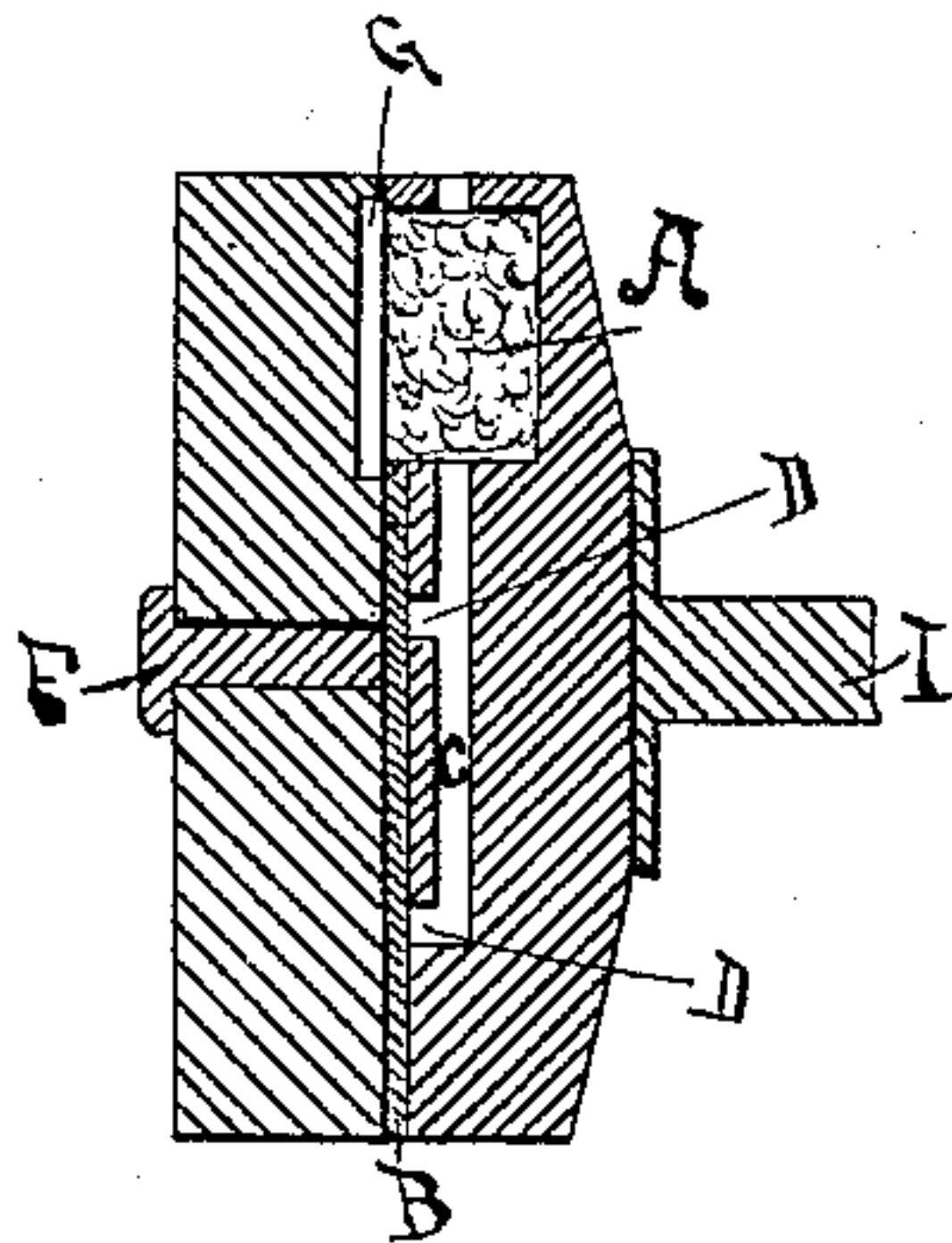


Fig. 4.

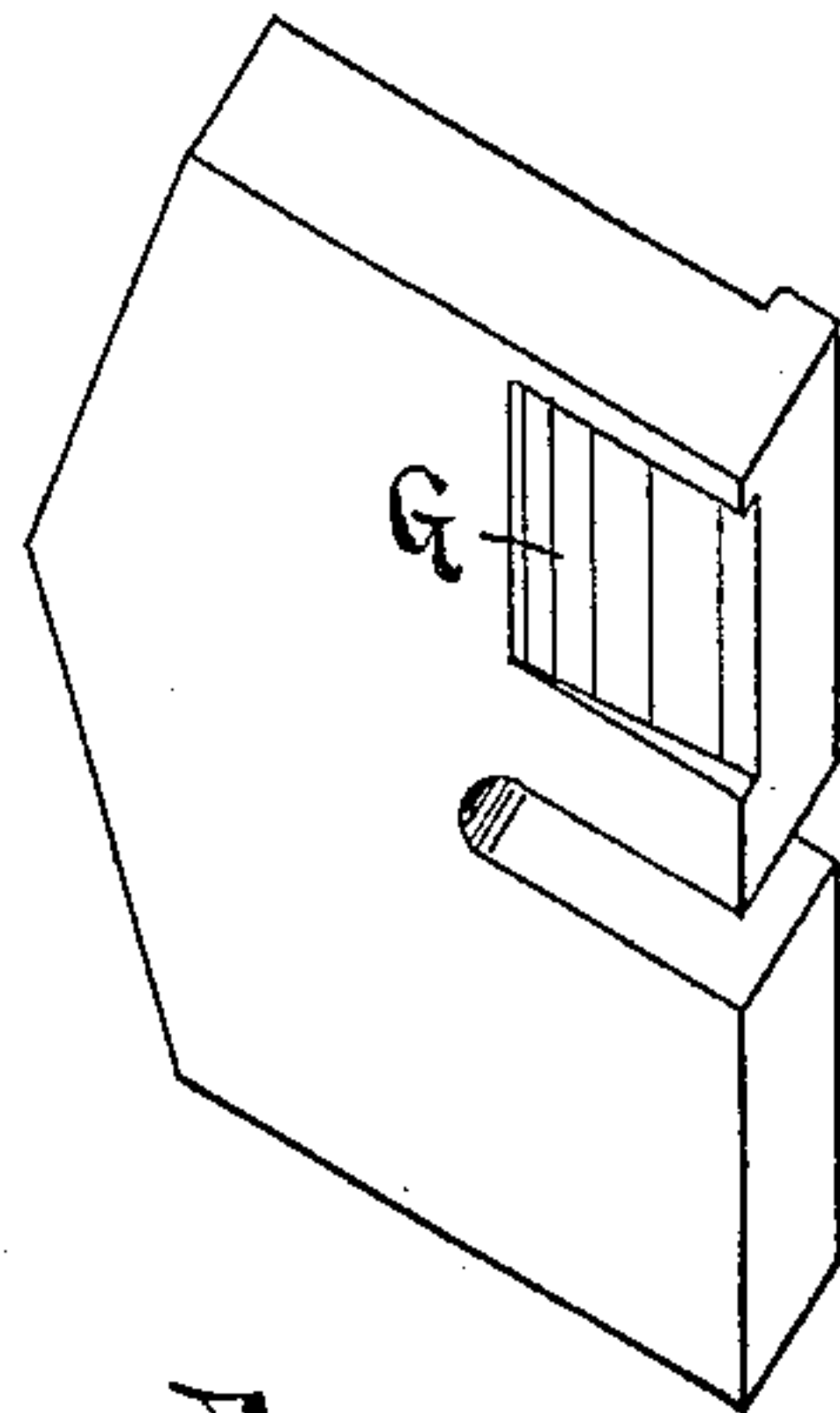


Fig. 3.

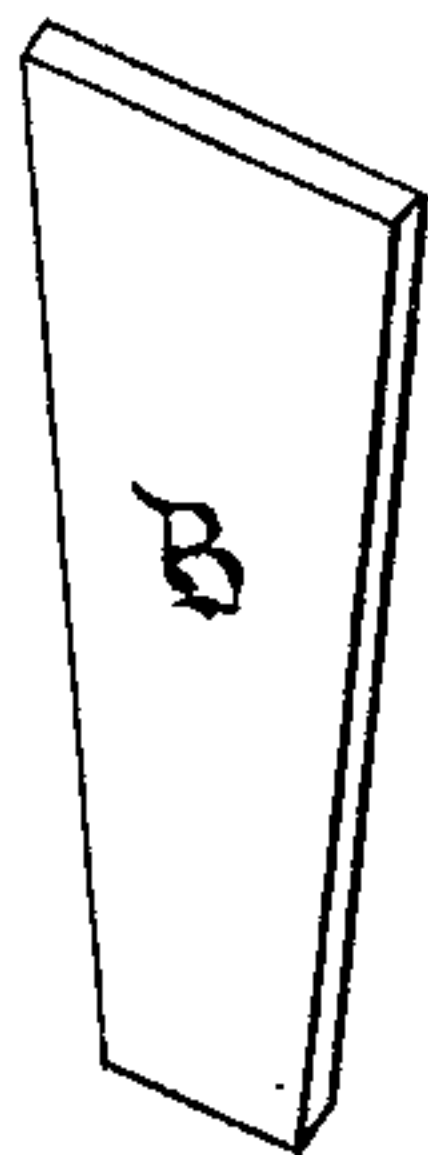


Fig. 5.

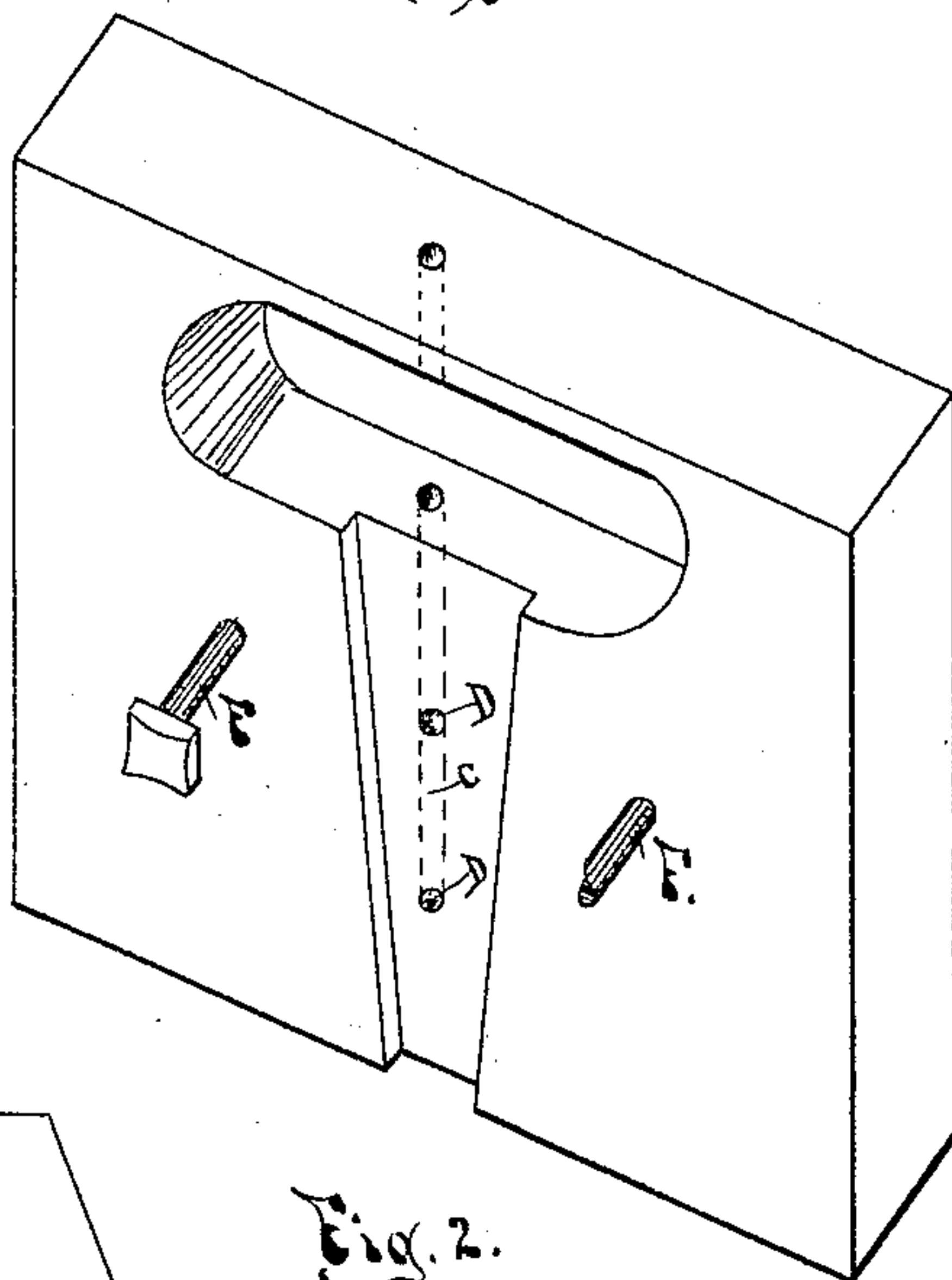


Fig. 2.

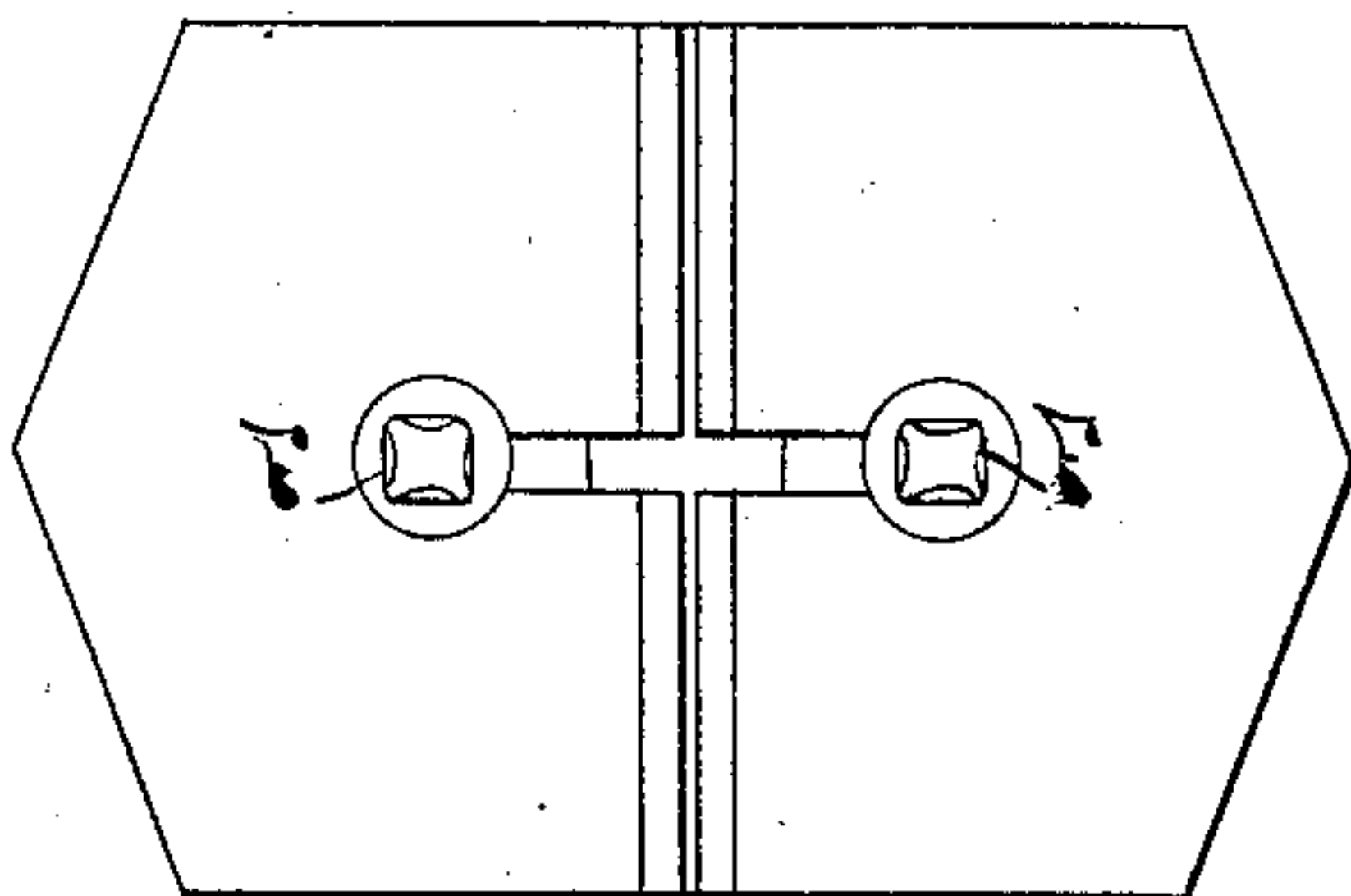


Fig. 6.

WITNESSES:

J. M. E. Riedel.
Paul Beyer.

William L. Zumbro INVENTOR

(No Model.)

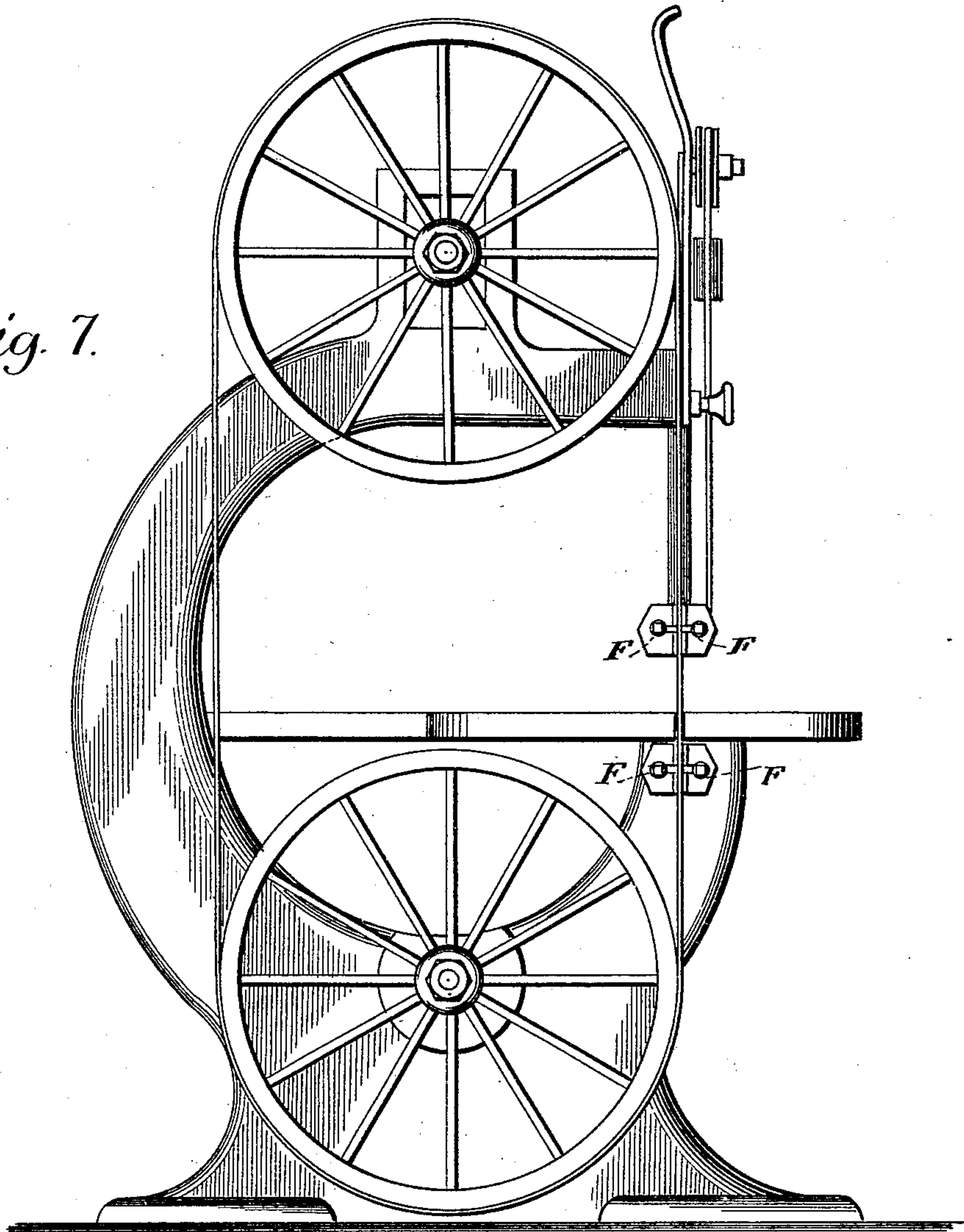
2 Sheets—Sheet 2.

W. L. ZUMBRO.
BAND SAW GUIDE.

No. 452,408.

Patented May 19, 1891.

Fig. 7.



Witnesses.
A. Ruppert.
H. A. Daniels

Inventor.
W. L. Zumbro,
Per
Thomas P. Simpson,
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM L. ZUMBRO, OF LAUD, INDIANA.

BAND-SAW GUIDE.

SPECIFICATION forming part of Letters Patent No. 452,408, dated May 19, 1891.

Application filed August 14, 1889. Serial No. 320,693. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. ZUMBRO, a citizen of the United States, residing at Laud, in the county of Whitley and State of Indiana, have invented a new and useful Improvement in Band-Saw Guides, of which the following is a specification.

My invention relates to an improvement in band-saw guides by supplying a cavity for the deposits of cotton waste and oil and the use of the latter in conjunction with a key made of rawhide by conducting and allowing the oil to drip through a channel in the back of the guide and through orifices therein, whereby it is brought in contact with and keeps such key continuously saturated with the oil; and the object of my improvement is to provide a continuously-lubricated surface against and upon which the saw constantly presses when in motion, thereby keeping the same continuously oiled, and hence reducing the amount of friction and preserving the elasticity of the saw and preventing the heating thereof and the danger of breaking or lessening the same. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 shows the rear block of the guide made of wood or metal supplied with waste and oil in the cavity provided therefor and the rawhide key in the back ready for the front block or plate, which is arranged to be bolted thereon with clamping-bolts in sections in such manner as to leave a fissure between, into which the back of the saw enters and in which it plays when in motion; Fig. 2, the rear block of the guide also, but with waste and oil and key removed; Fig. 3, the front blocks or plates of guide with chamfer to fit against cavity for waste and oil in back block or plate; Fig. 4, a vertical section of the guide. Fig. 5 is a perspective view of the key; Fig. 6, a plan view of the saw-guide. and Fig. 7 a side elevation showing my guide applied to a band-saw.

Similar letters refer to similar parts throughout the several views.

A is the cavity for cotton waste and oil; B, the rawhide key; C, the channel for the oil to trickle down; D D, perforations in the block or plate along the track of the channel to assist in retaining the oil with which to saturate the key; E E, the orifices for the bolts which clamp together the back and front plates or blocks; F F, the bolts themselves; G, the chamfer which fits against cavity for waste and oil; I, the stem of the guide, consisting of an iron pin or rod to be adjusted into the frame of the saw, by which means the guide is held in its place at a point and in such position that the back of the saw enters and works when in motion in the fissure between the two sections of the front plate or block.

By my invention there is provided a continuously-lubricated bearing for the back and sides of the saw-blade which passes through the oil-saturated cotton waste and is thereby prevented from heating and gumming, as well as from losing its elasticity.

I am aware that prior to my invention band-saw guides have been made with back and front blocks or plates bolted together and space left between the front sections, in and by which to receive and guide the saw. I therefore do not claim such invention, broadly; but

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

A band-saw guide having a cavity through which the saw passes, filled with oil-saturated cotton waste, a rawhide key B, a channel C, having perforations D through the bottom thereof, and a stem I, said guide being in sections bolted together, whereby the band-saw blade may preserve its elasticity and be prevented from heating or gumming, as set forth,

WILLIAM L. ZUMBRO.

Witnesses:

S. R. WHITE,
E. R. RICHARD.