

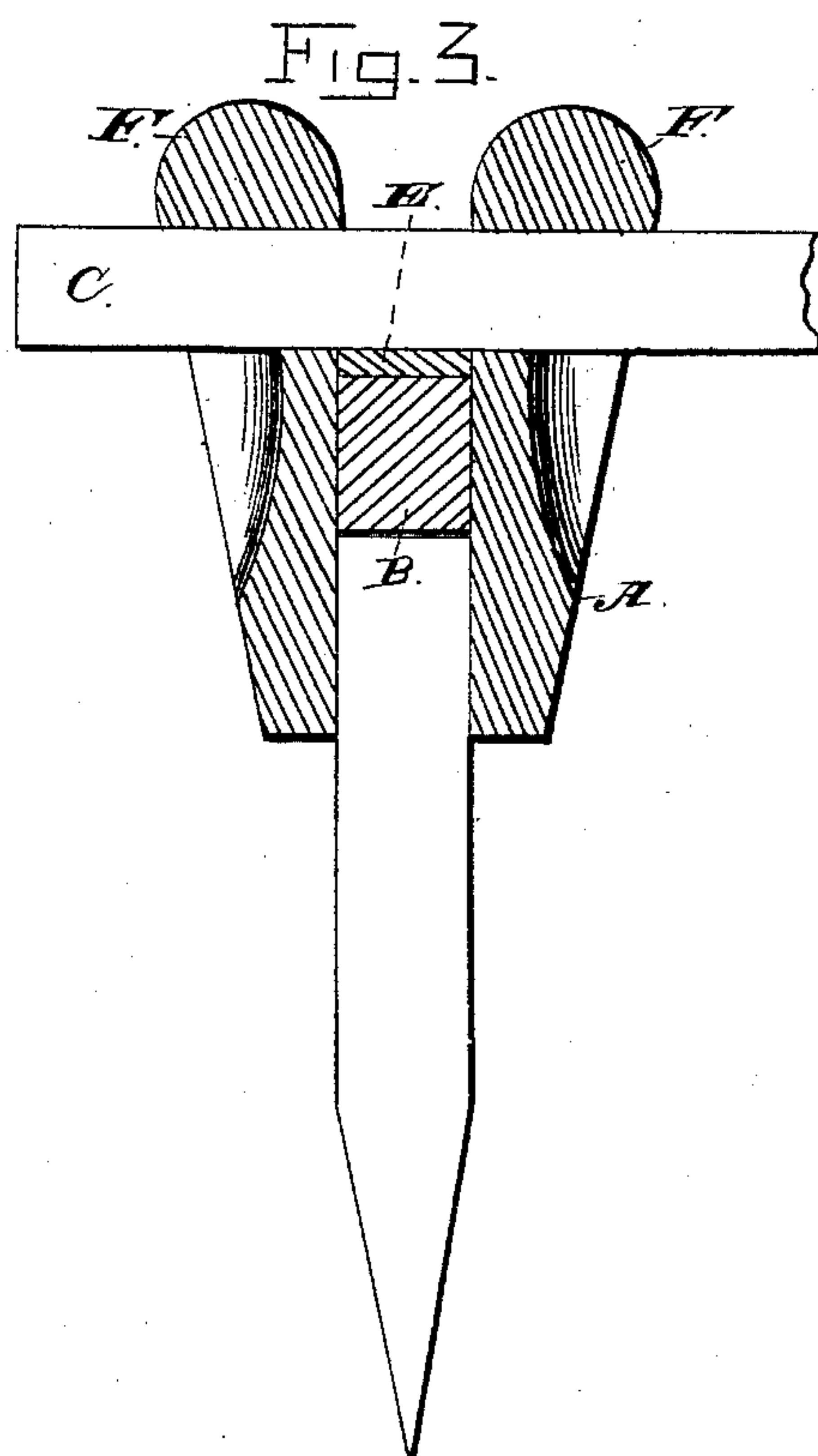
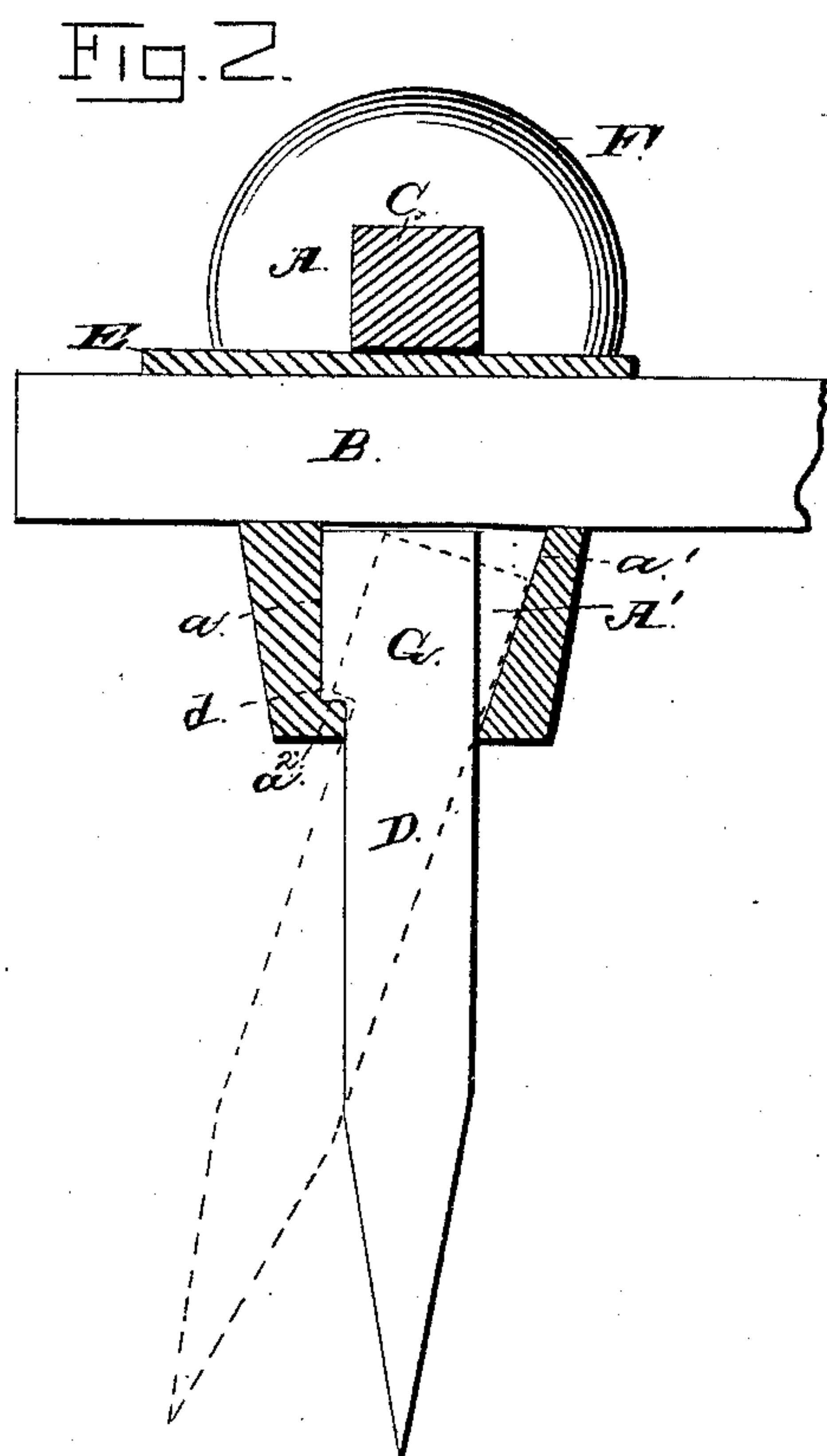
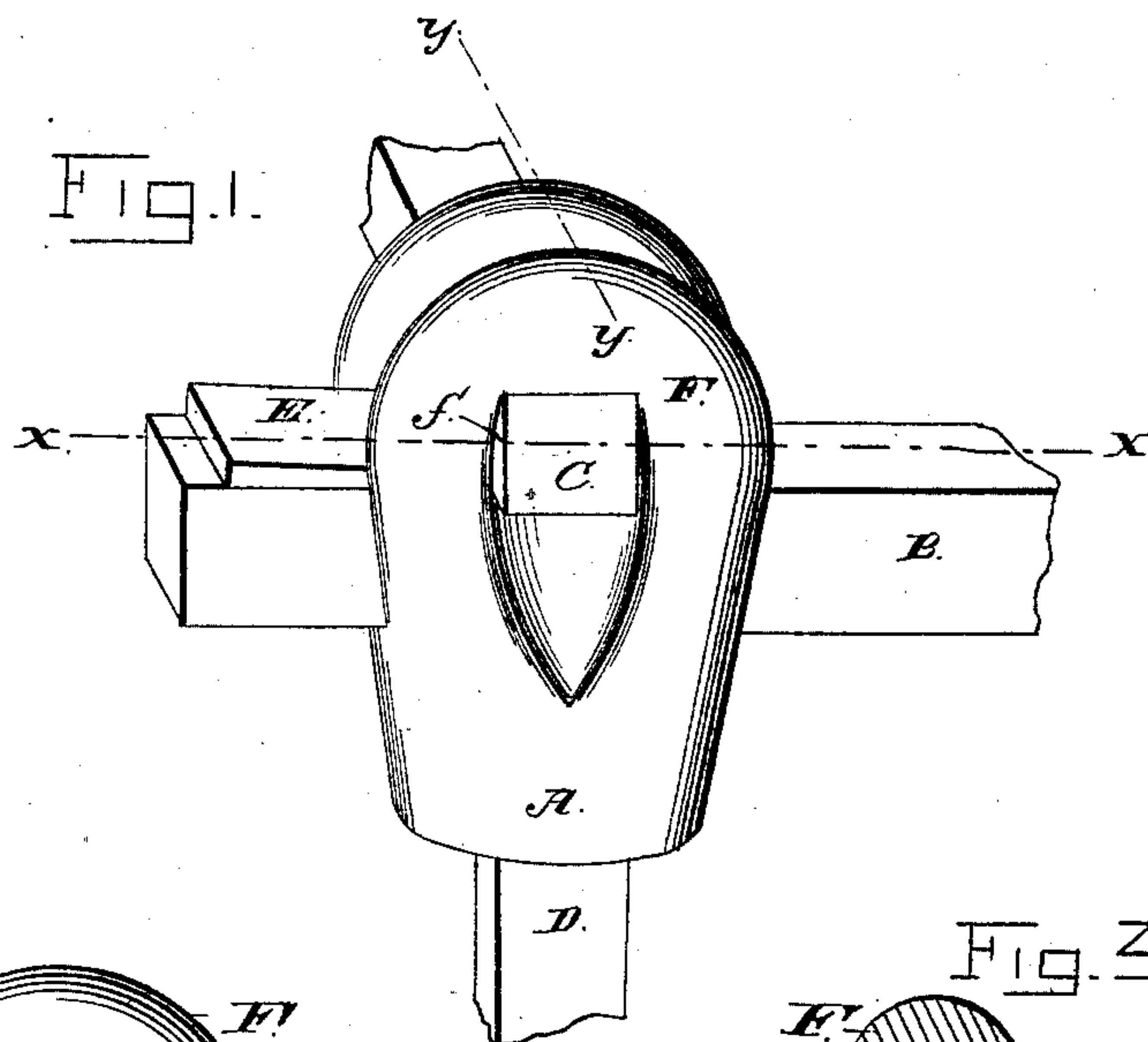
(No Model.)

2 Sheets—Sheet 1.

A. J. GILLESPIE
HARROW TOOTH HOLDER.

No. 328,211.

Patented Oct. 13, 1885.



WITNESSES

n. a. Clark.

R. B. Turpin

INVENTOR

Alfred J. Gillespie

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FIG. 4.

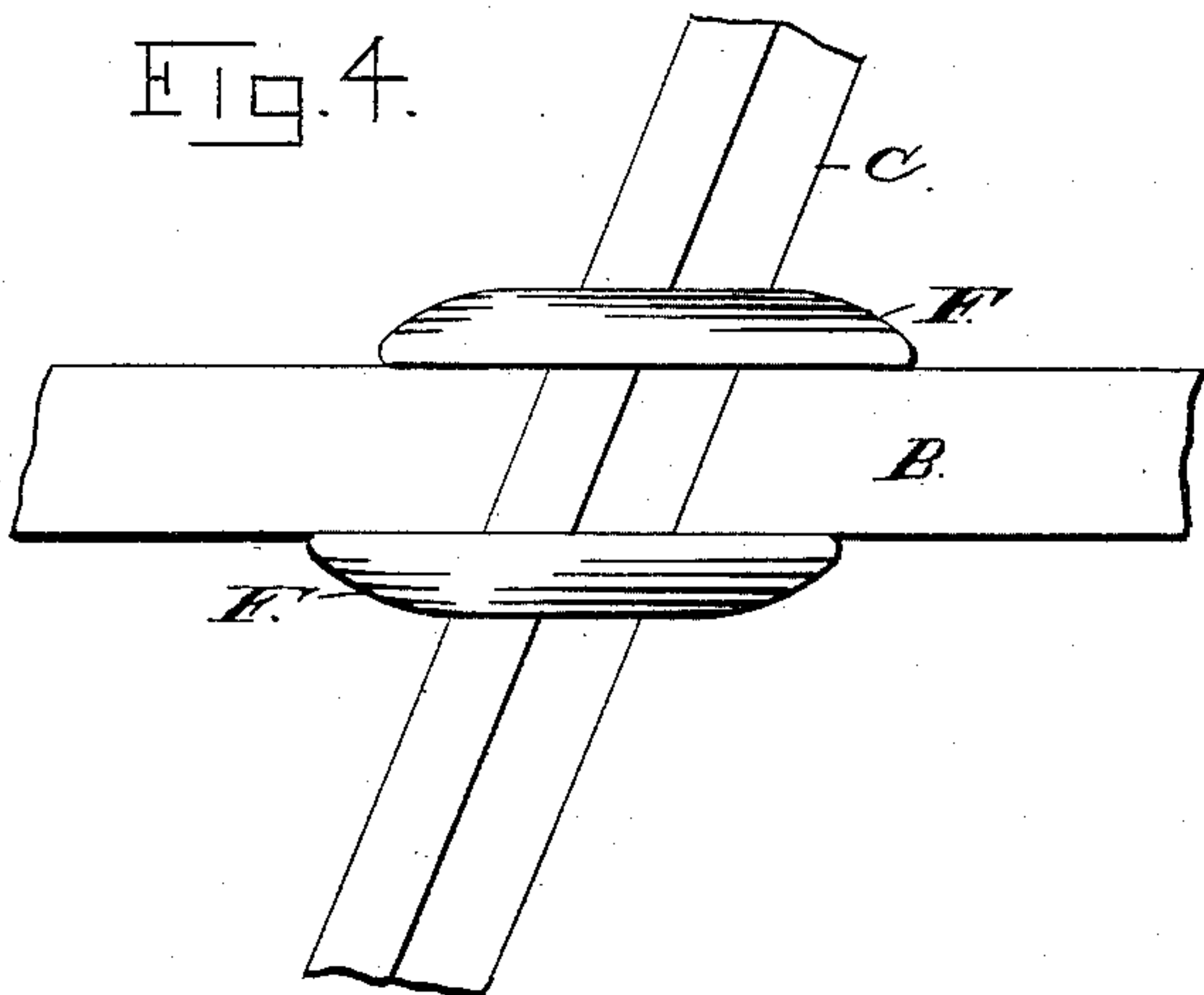


FIG. 5.

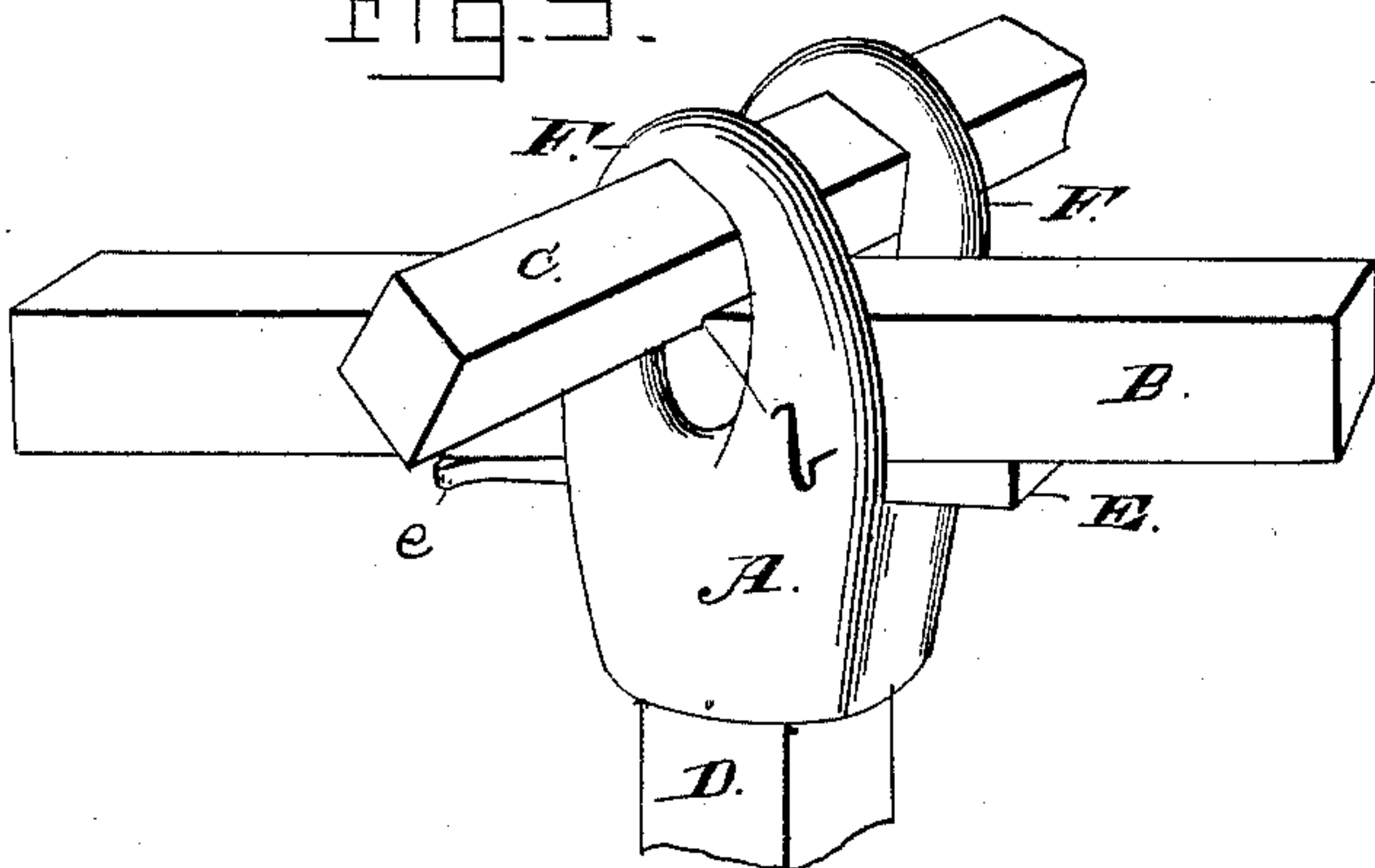
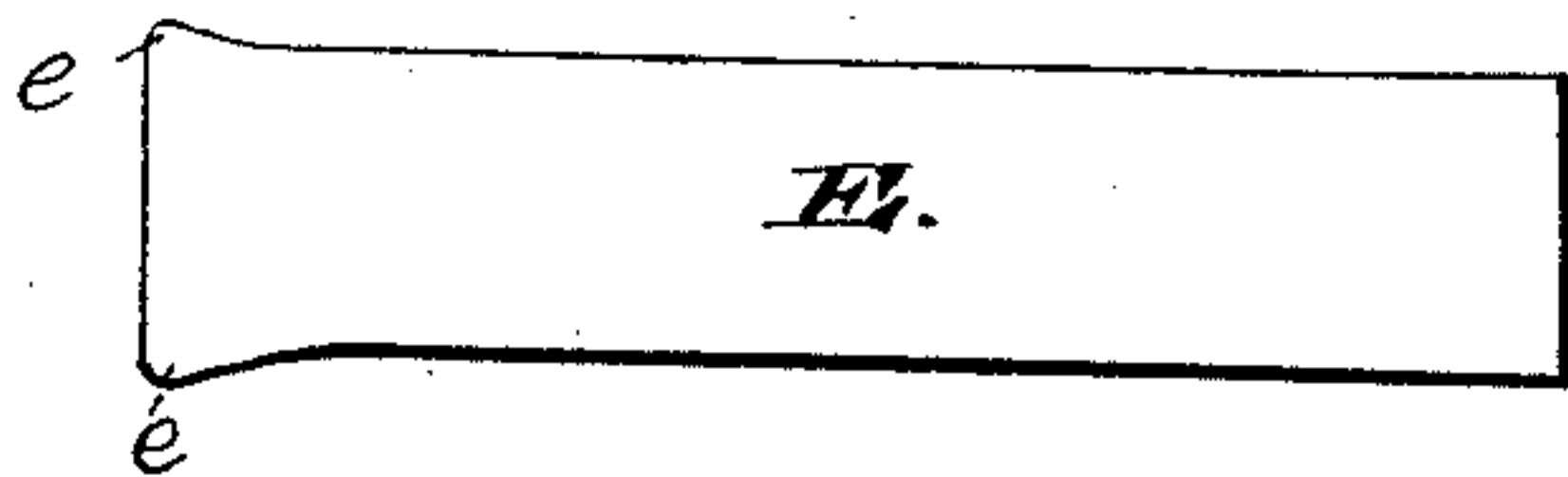


FIG. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALFRED J. GILLESPIE, OF ATLANTIC, IOWA.

HARROW-TOOTH HOLDER.

SPECIFICATION forming part of Letters Patent No. 328,211, dated October 13, 1885.

Application filed April 18, 1884. Serial No. 128,415. (No model.)

To all whom it may concern:

Be it known that I, ALFRED J. GILLESPIE, a citizen of the United States, residing at Atlantic, in the county of Cass and State of Iowa, have invented certain new and useful Improvements in Harrow-Tooth Holders and Frames; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to harrows; and it consists in the novel construction hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a section of harrow constructed according to my invention. Fig. 2 is a vertical longitudinal section on line $x x$, Fig. 1. Fig. 3 is a vertical transverse section on line $y y$, Fig. 1. Figs. 4 and 5 are side views of my holder, differing slightly in construction from the holder shown in the other figures. Fig. 6 shows the preferred form of wedge.

The beams B, it will be understood, represent the beams of the frame parallel to the line of draft, and C represents the transverse beams.

The holder A is provided in its lower end with the socket A', having a straight side, a , and an inclined side, a' . At the lower end of the straight wall I provide a retaining-ledge, a^2 , which serves to hold the tooth D in place in the socket. This tooth D has a head formed by the shoulder d on one side near its upper end. This shoulder is so arranged when the tooth is in its vertical position, as shown in full lines, Fig. 2, that the upper end of the tooth will rest firmly against the beam B, and that when in its tilted or inclined position one of the upper corners of the tooth will bear against the said beam, as indicated in dotted lines same figure.

By the construction described I secure the tooth in the holder and provide means for supporting same in a straight or inclined position, according to the line of draft.

The holder is formed on its opposite sides with upwardly-projected ears F, which fit up

over the beams B. Perforations f are formed through these ears above the beams B, and of suitable size to receive the transverse beams C. The wedge E is driven between the beams B C, and clamp same and the holder firmly together. By preference I form this wedge with lateral lugs e at its point or thinner end, so that the wedge cannot be drawn through between the ears from its thicker end, as will be understood.

The construction shown in Figs. 4 and 5 is intended to be used when it is desired to arrange the transverse beams at an angle other than right angle to the beams B, also on edge, as shown. It will be seen the ears F are arranged one slightly in advance of the other. The same result would be secured by forming openings f out of line with each other, as will be evident. In this construction I also cut notches b in the upper side of the beam B, in which to seat the corner of the transverse beam. In this arrangement the fastening-wedge is driven between the top of the holder and the under side of the draft-beams B. It is manifest such arrangement of wedge could be substituted, when desired, for that shown in Figs. 1, 2, and 3.

While I prefer the clamping means shown, consisting of a wedge, it is manifest the same might be modified without departing from my invention. For instance, a set or clamping screw might be turned through one of the beams and bear against the other, or various other well-known expedients could be used.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A harrow-tooth holder having in its lower end a tooth-holding socket, and provided with ears projected upward from two of its opposite sides, and having openings formed laterally through said ears, substantially as set forth.

2. A harrow-tooth holder having in its lower end a tooth-holding socket provided with straight and inclined walls, and provided with ears projected upward from two of its opposite sides, and having openings formed laterally through said ears, substantially as set forth.

3. The combination of a harrow-tooth hold-

er having in its lower end a tooth-holding socket, and provided with ears projected upward from two of its opposite sides, and having openings formed laterally through said ears, an under beam seated between the ears, and a transverse beam passed through the opening in said ears above the under beam, substantially as set forth.

4. In a harrow, the combination, with the frame-beam, of the holder having in its lower end a tooth-holding socket having closed sides and open at top and bottom, and provided with ears projected upon opposite sides of and above the said beam and secured, substantially as set forth.

5. A harrow-tooth holder provided with a socket formed with a straight and an inclined wall, and having one of its walls provided with a shoulder or ledge, the said socket being reduced in dimension at its lower end approximately to the size of the tooth and gradually widening toward its upper end, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED J. GILLESPIE.

Witnesses:

L. F. MULLINS,
A. BRONDGEEST.