

S. USTICK.

Improvement in Car-Axle Lubricators.

No. 126,352.

Patented April 30, 1872.

FIG. 1

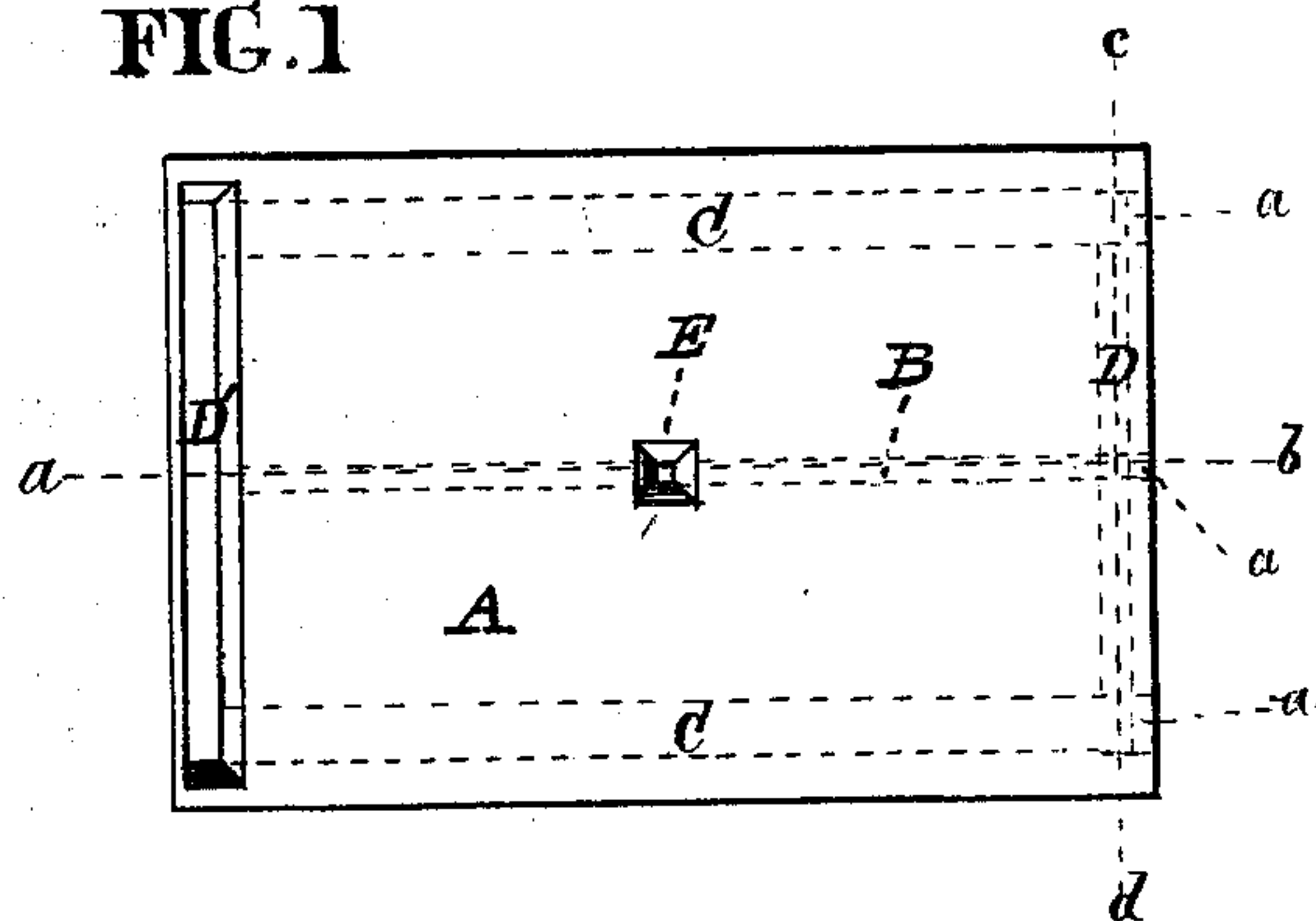


FIG. 2

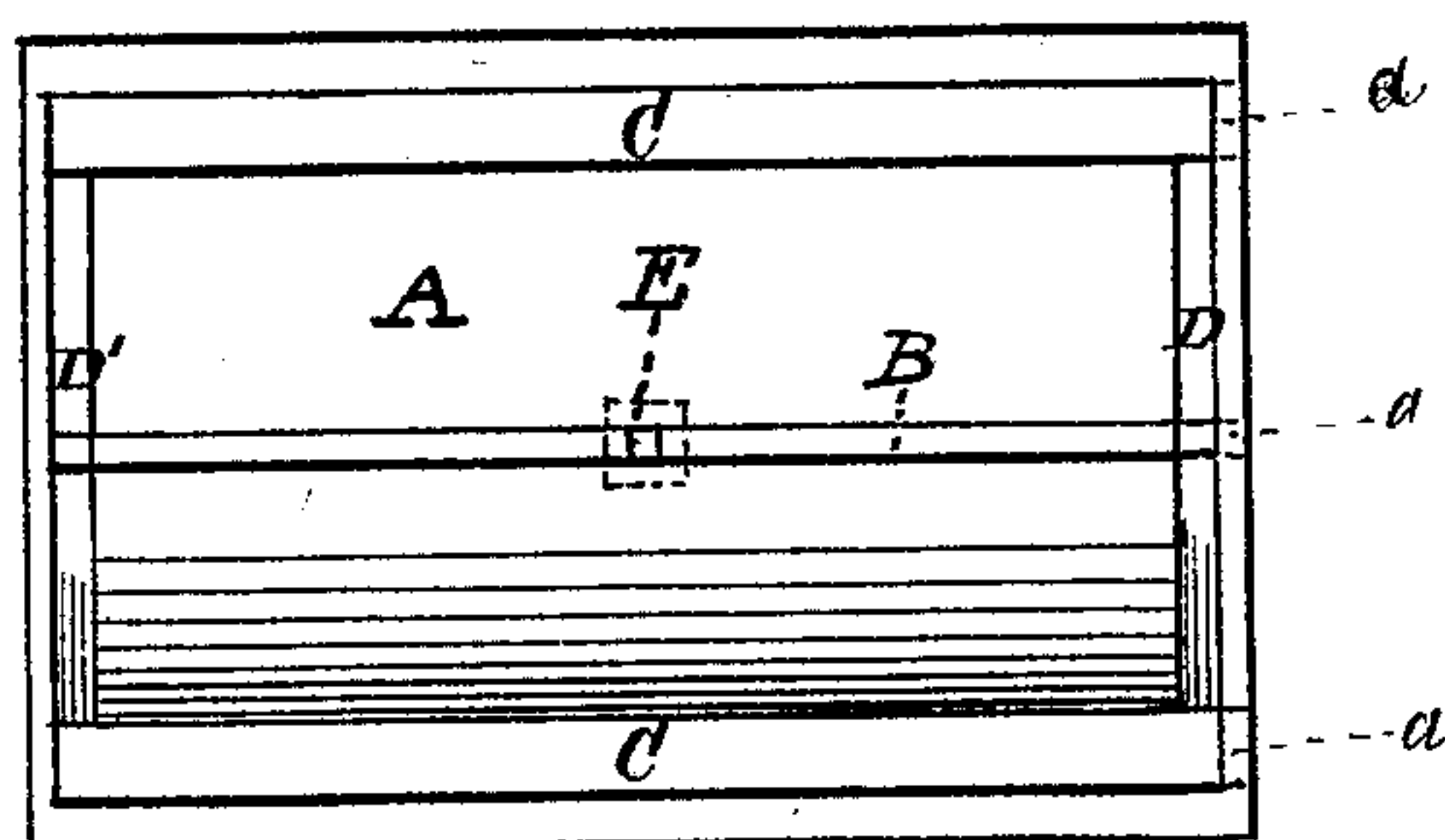


FIG. 3

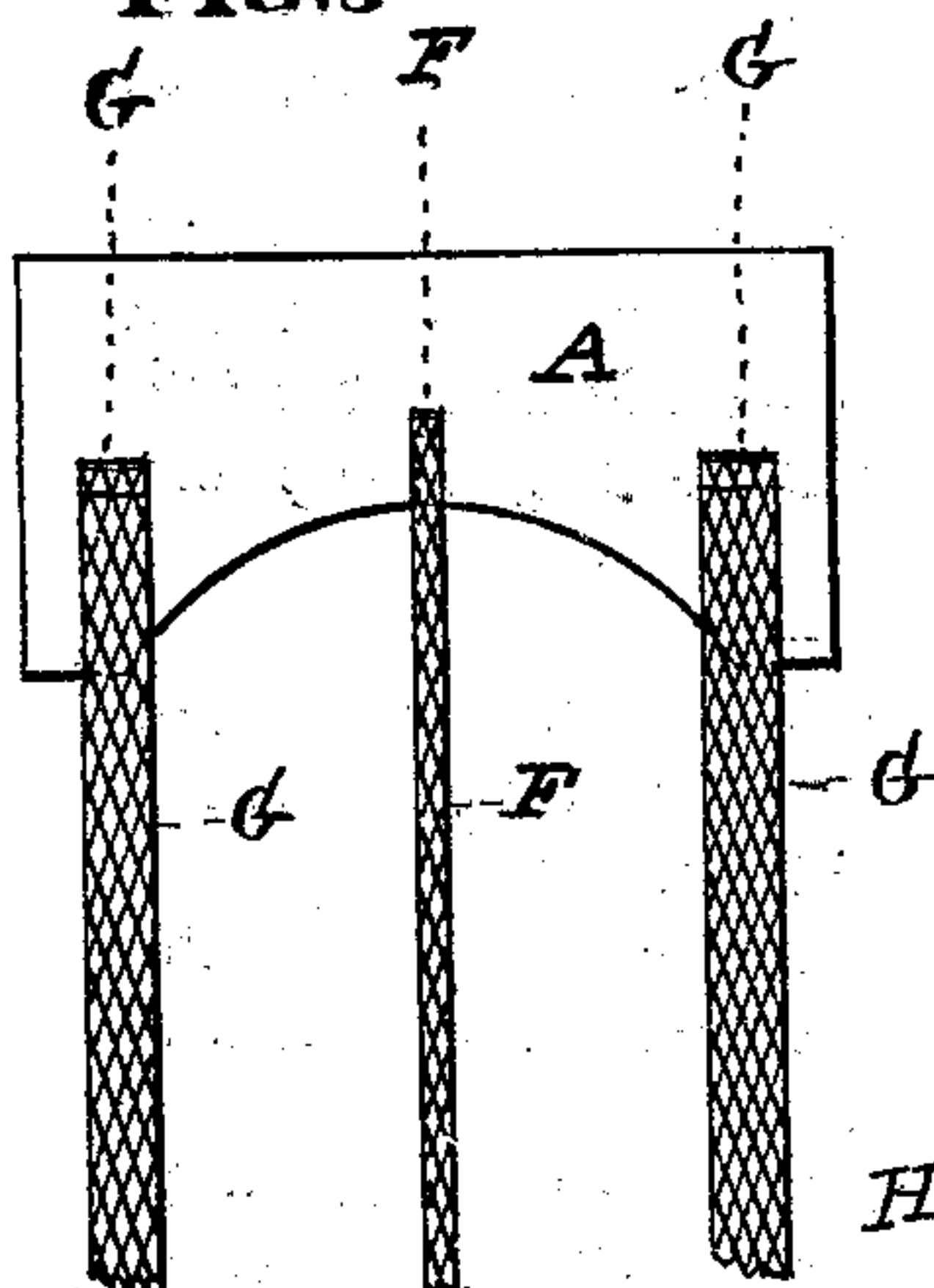


FIG. 4

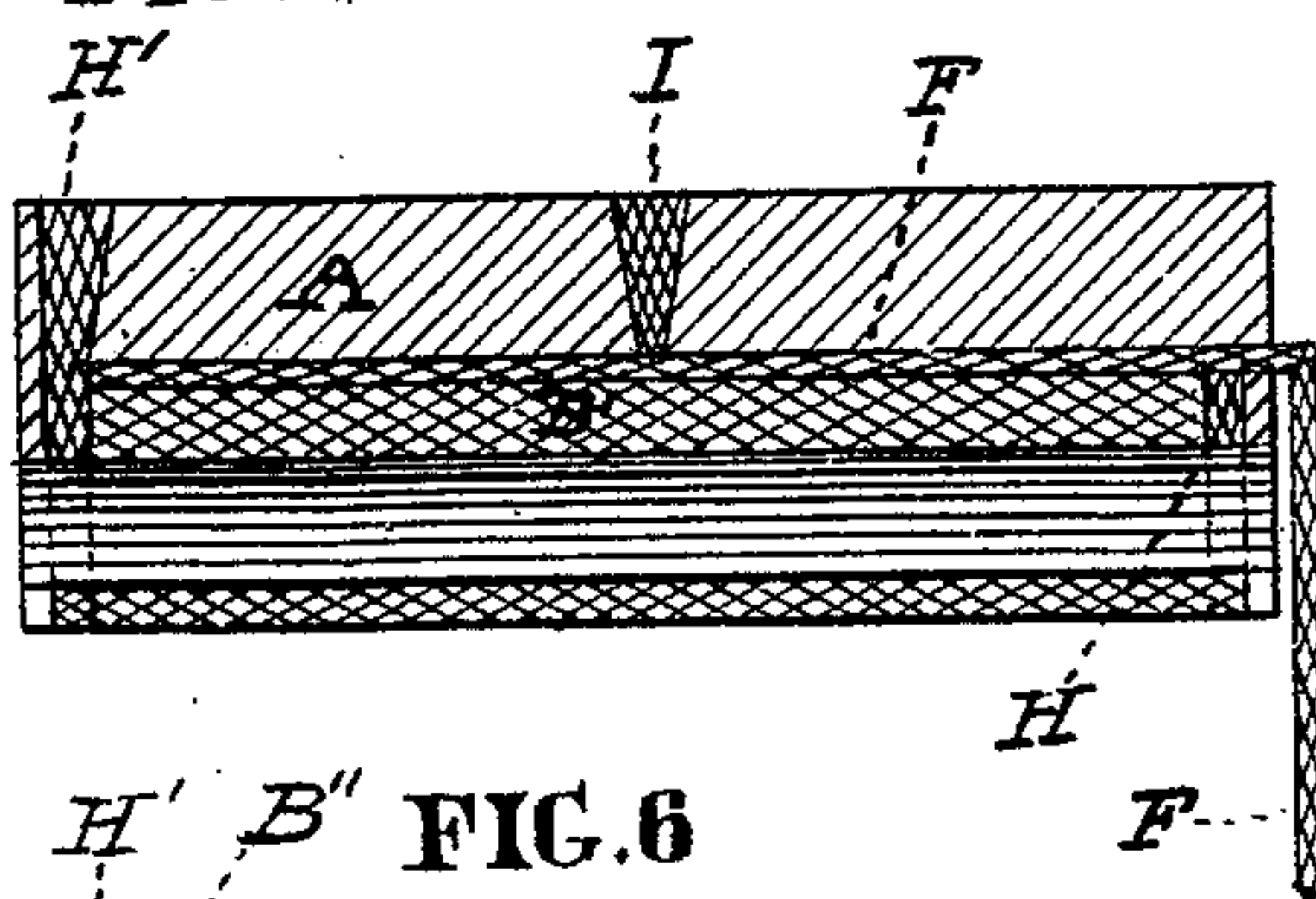


FIG. 5

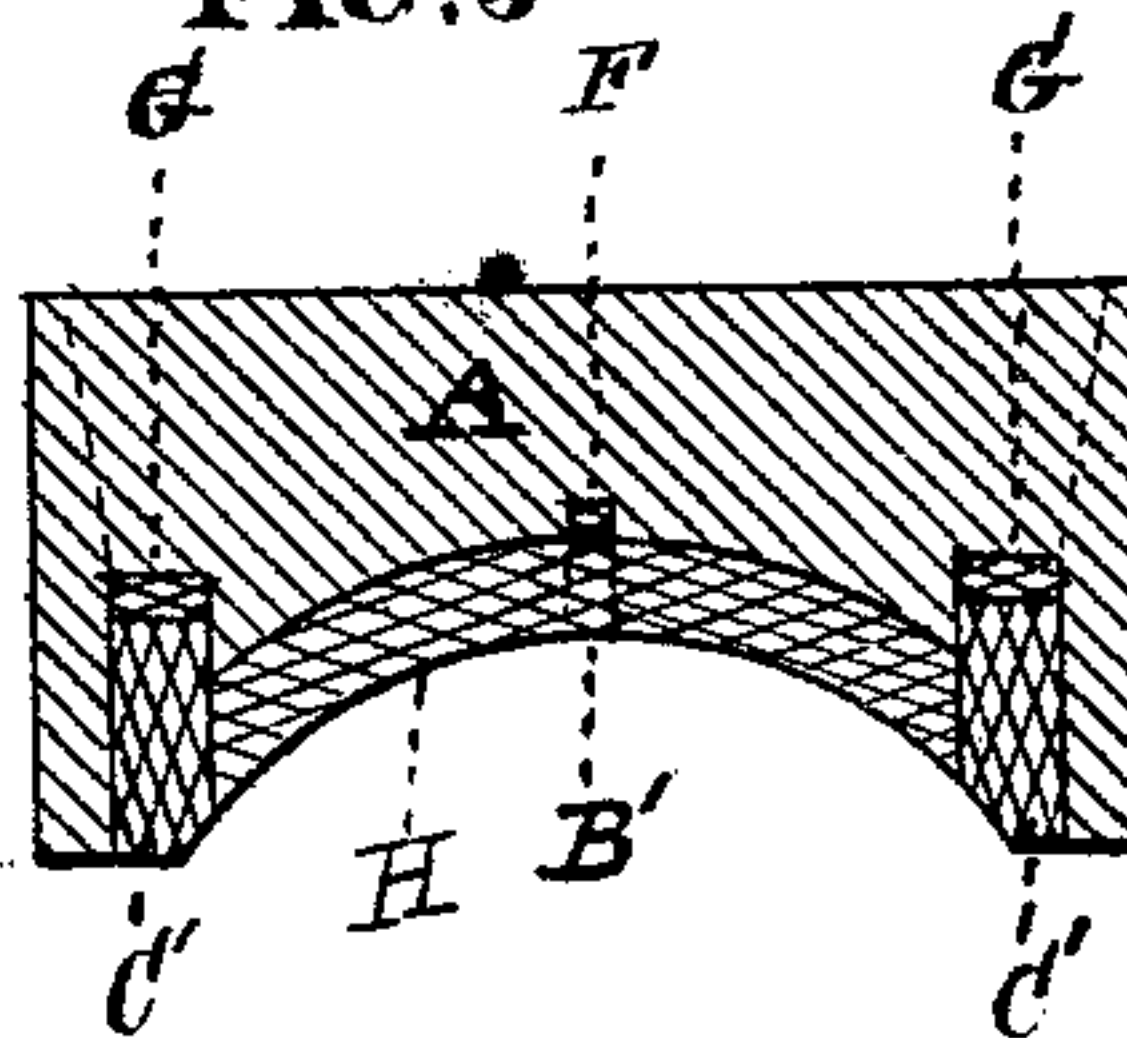
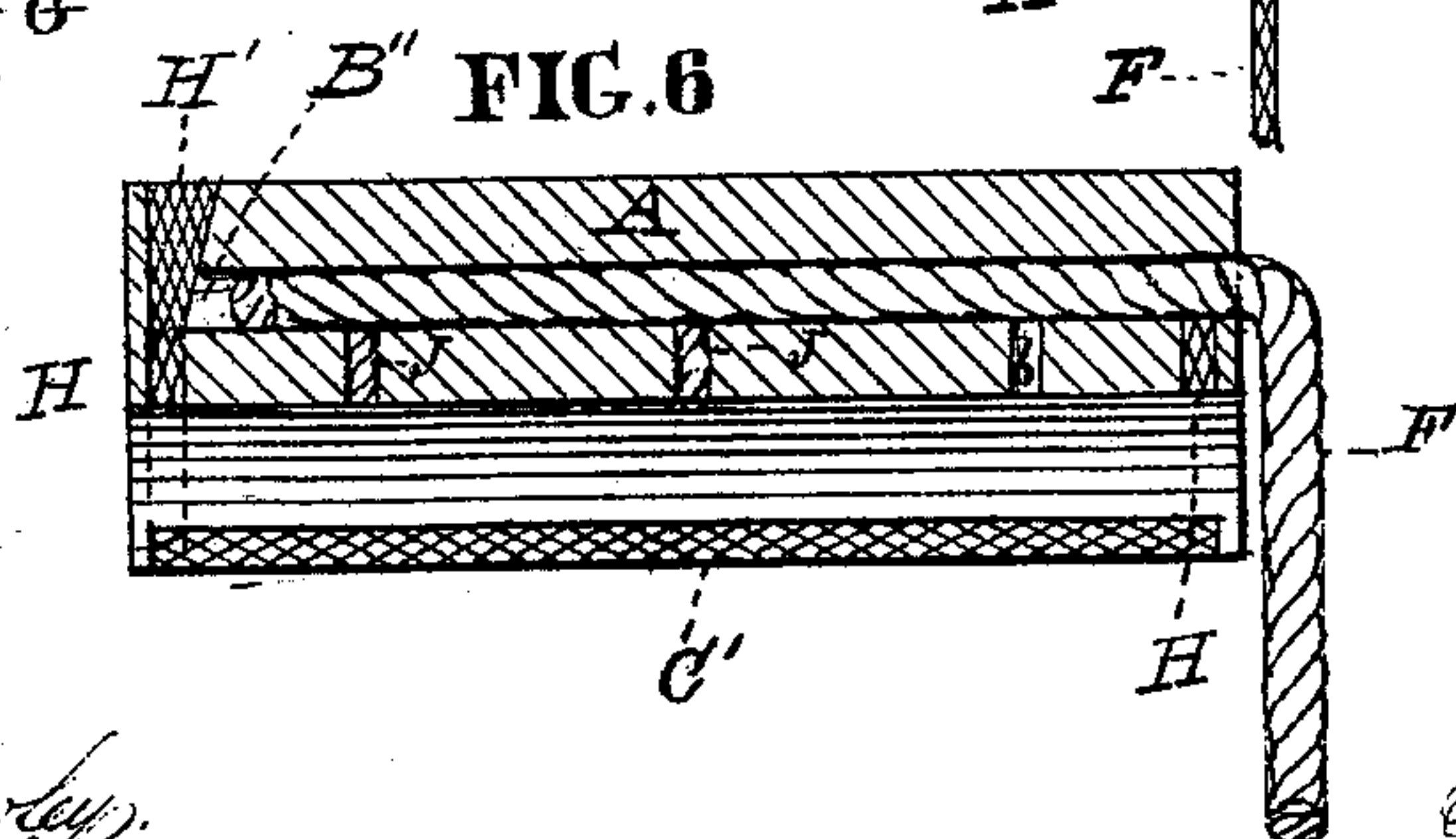


FIG. 6



WITNESSES

Thomas J. Dewey.
Isaac Rindge

INVENTOR

Stephen Ustick

UNITED STATES PATENT OFFICE.

STEPHEN USTICK, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CAR-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. 126,352, dated April 30, 1872.

Specification describing certain Improvements in Lubricators for Car-Journals, invented by STEPHEN USTICK, of the city of Philadelphia and State of Pennsylvania.

My invention relates to the combination of wicks and distributing-pads with longitudinal grooves in the under side of the journal-bearing, and cross grooves or recesses and pads in connection therewith, and also supplemental pads for receiving excess of oil from the journal and redistributing it thereon, as hereinafter fully described.

Figure 1 is a plan view of the improved bearing A. Fig. 2 is a reverse plan of the same. Fig. 3 is an end elevation of the same. Fig. 4 is a longitudinal section at the line *a b* of Fig. 1. Fig. 5 is a cross-section at the line *c d* of Fig. 1. Fig. 6 is a longitudinal section of the bearing, showing a modification in the arrangement of the wick B'.

Like letters in all the figures indicate the same parts.

A is the improved journal-bearing, which is shown in plan views in Figs. 1 and 2, without the wicks and distributing-pads, hereinafter described; B is a central longitudinal groove for containing a wick and oil-distributing pad; and C C, like grooves at the edges of the bearing for containing wicks and distributing-pads. There are openings *a a a* from the grooves B C C, through the front end of the bearing, for the passage of the wicks F G G. D D' are cross-recesses at the ends of the bearing for containing pads, which connect with the longitudinal grooves B C C, whereby the free flowing of the oil from one pad to another is secured, for the more perfect lubrication of the journal. I make one or more vertical openings, E, from the groove B to the upper side of the bearing, to contain a pad or wad to take up any excess of oil from the wick which may accumulate at any time, to be redistributed through the same to the journal when a deficiency may occur.

In Figs. 3, 4, and 5 the wicks and pads are shown in combination with the grooves and recesses. The horizontal part of the wick F occupies the upper part of the longitudinal groove B. The same part of the wicks G G are situated in like manner in the grooves C C. The lower ends of the wicks hang down

and lie in oil in the bottom of the journal-box or other oil-reservoir. The lower parts of the said grooves B C C contain pads B' C' C', which absorb the oil which passes through the wicks by capillary attraction, and distribute it upon the face of the journal as the latter revolves. There are pads H and H' in the cross-recesses D and D', which connect with the pads B' C' C', to provide for the oil flowing from either pad, which may contain a superabundance of oil, to a pad having a deficiency of it.

I prefer extending the rear recess D' to the upper face of the journal so as to hold an increased amount of oil, to compensate for the tendency of a greater supply to the front part of the journal.

I is a wad in the opening E, which absorbs excess of oil from the wick B' and holds it in store until a deficiency of oil occurs in the wick, there being any desirable number of the wads so connected with the wick. If desired, the wick F may be combined with a longitudinal channel, B'', in the body of the journal, as seen in Fig. 6, there being vertical openings *b* leading therefrom to the face of the bearing, which may contain wicks J for the passage of the oil.

The grooves C C and distributing-pads C' C' are shown and claimed in my application dated December 17, 1871, and allowed March 26, 1872. I therefore do not claim the said grooves and pads in this application.

I claim as my invention—

1. The combination of the wicks G G with the distributing-pads C' C', substantially in the manner and for the purpose set forth.
2. The combination of the wick F and the groove B with the pad B', substantially as and for the purpose described.
3. The combination of the pads H H' with the recesses D D' and pads C' C', substantially in the manner and for the purpose set forth.
4. The combination of the wad I with the opening E and wick F, as and for the purpose specified.

STEPHEN USTICK.

Witnesses:

THOMAS J. BEWLEY,
J. W. HAMPTON, Jr.