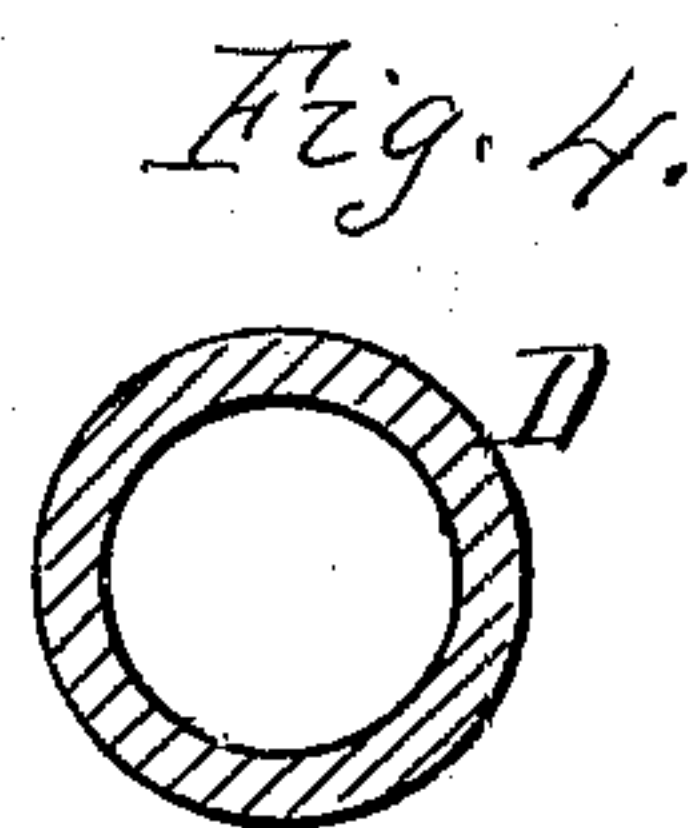
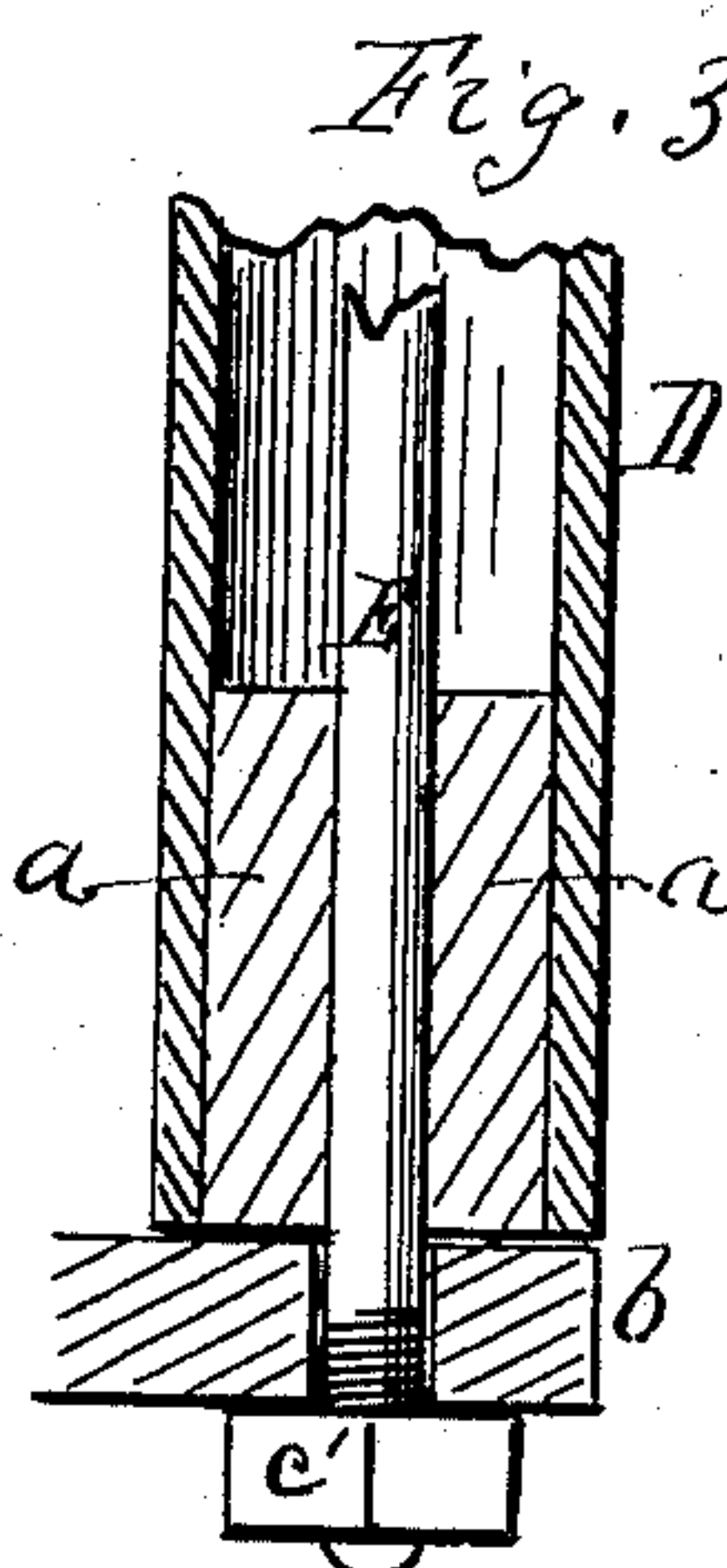
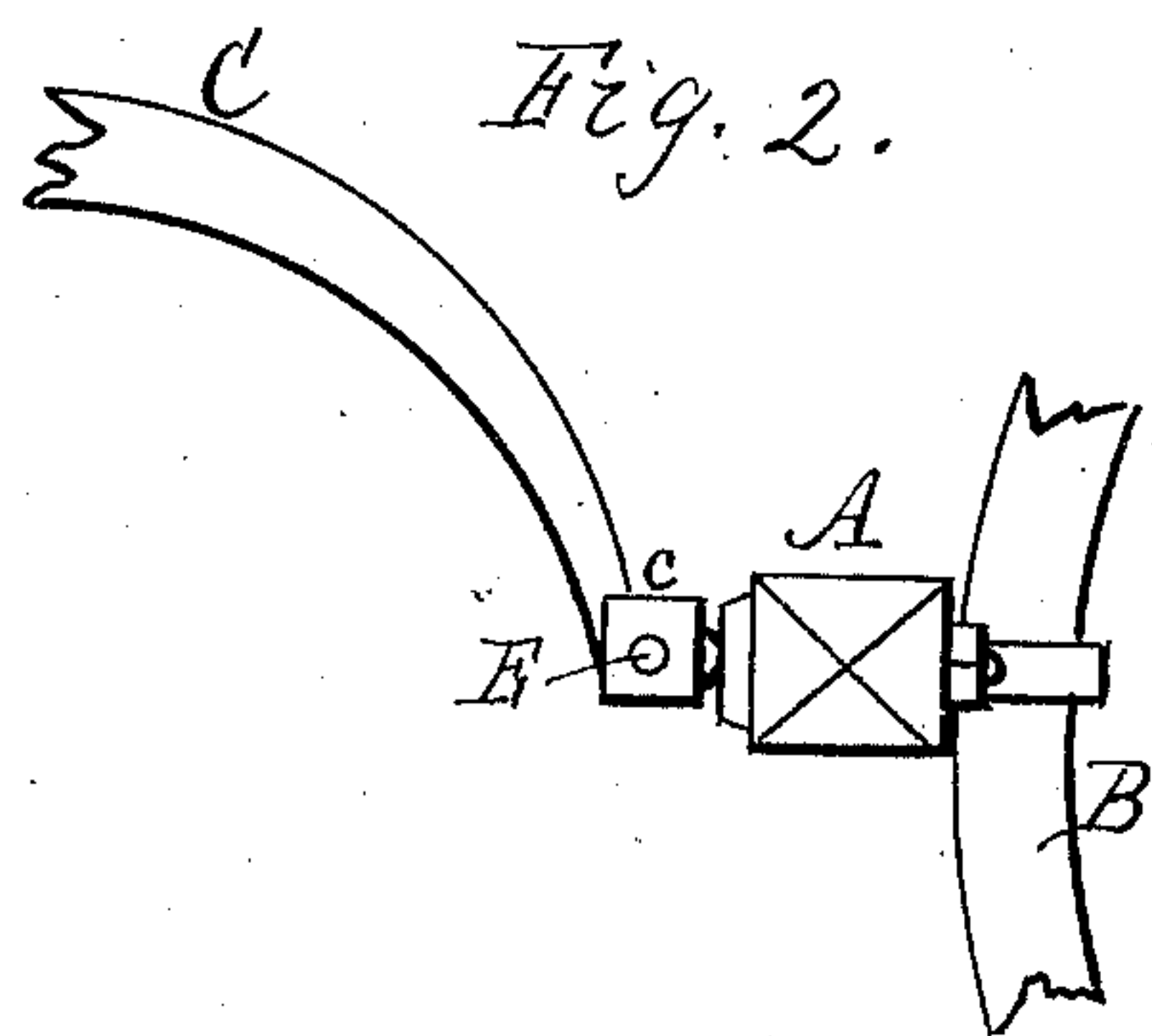
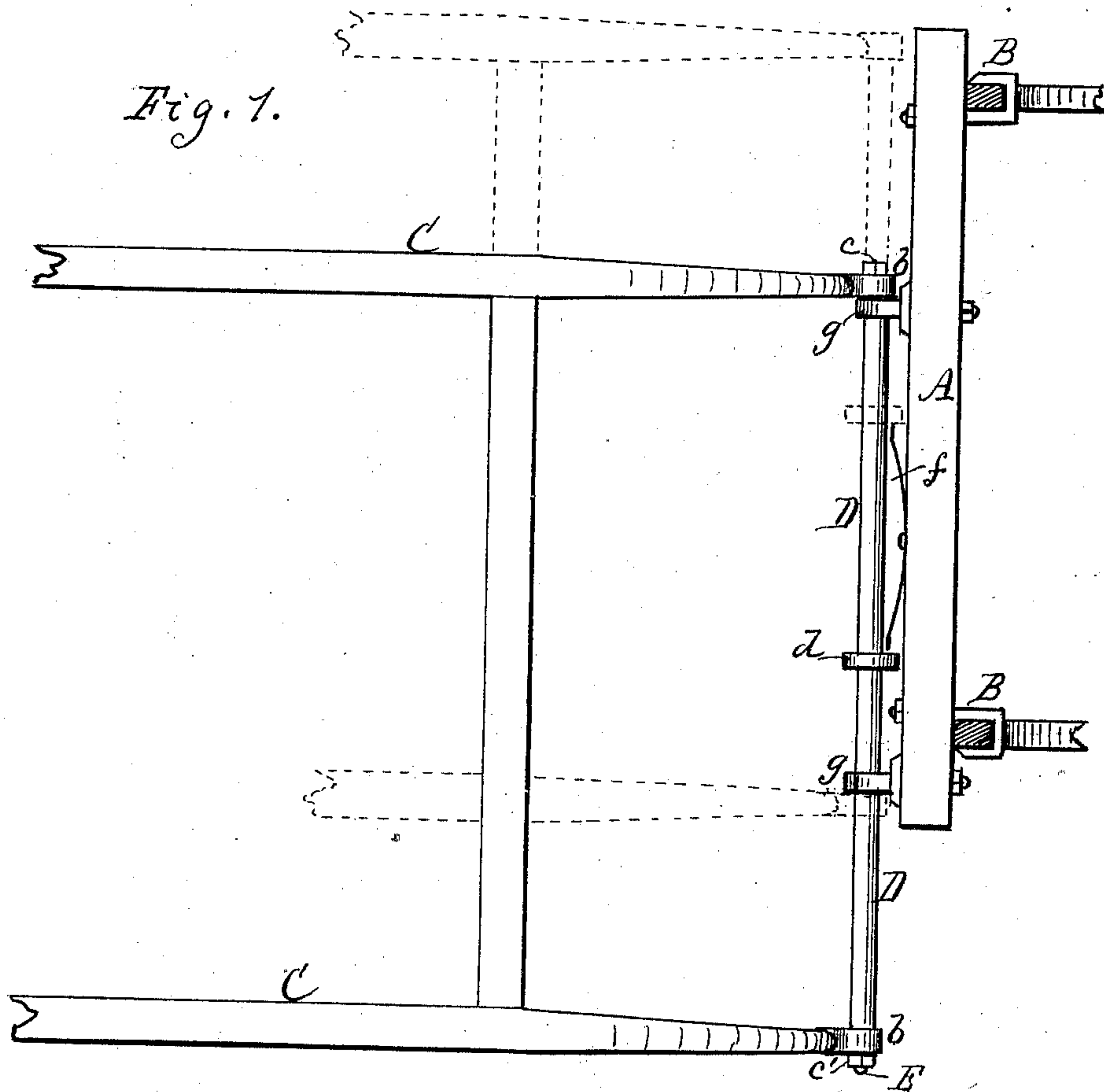


(No Model.)

G. H. LUSK.
SLEIGH THILL.

No. 277,843.

Patented May 15, 1883.



Attest.
P. Menstich
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Inventor.
Geo H. Lusk,
per R. F. Osgood,
att'y.

UNITED STATES PATENT OFFICE.

GEORGE H. LUSK, OF PITTSFORD, NEW YORK.

SLEIGH-THILL.

SPECIFICATION forming part of Letters Patent No. 277,843, dated May 15, 1883.

Application filed March 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. LUSK, of Pittsford, Monroe county, New York, have invented a certain new and useful Improvement in Devices for Shifting Thills; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a plan of the device attached to the draw-bar of a sleigh or cutter. Fig. 2 is a side elevation of the same. Fig. 3 is a longitudinal section of one end of the tubular rod to which the thills are attached, shown on an enlarged scale. Fig. 4 is a cross-section of the tubular rod.

My improvement relates to devices for shifting thills from a position straight forward of the sleigh or cutter to one on one side of the same.

My invention consists in combining with the thills a tubular rod at their rear ends, said rod having wood fillings at its ends, a rod passing through the tube, projecting beyond the ends to receive the eyes of the thills, nuts being screwed upon the extremities, whereby the tube forms a brace to the thills, and the tube is made fast to the thills, as will be more fully set forth.

In the drawings, A shows the stiff draft-bar, which is clipped firmly to the upturned front ends of the runners B B.

C C are the thills, which are of usual construction.

D is a piece of iron tube, which connects the rear end of the thills in place of the wooden cross-bar ordinarily used. In the ends of this tube are wood fillings *a a*, fitted tightly in place and extending inward two or three inches, more or less.

E is an iron rod extending through the tube and the wood fillings, and projecting beyond the ends, and forming the bearing for the eyes *b b* of the thills, which rest and clamp thereon.

One end of the rod has a head, *c*, and the other has a screw-thread, on which screws a nut, *c'*, by which means the eyes of the thills are clamped up tightly against the ends of the tube, so that as the thills turn the tube

will also turn, being made a fixture to the thills. The tube serves as a brace to keep the ends of the thills apart and to properly stiffen them.

d is a collar midway of the length of the tube, shrunk on the outside.

f is a double-acting spring, attached to the draw-bar A in front, and between it and the tube D. The tube D rests loosely in eyes *g g*, attached to the draw-bar. The thills are shifted by pressing back the spring, thereby releasing the collar, then sliding the tube forward or back through the eyes till the opposite end of the spring catches the collar. This can be done in a moment's time and without removing the horse from the thills.

I am aware that a spring of similar form has before been used, but in connection with thills having a wooden rear bar and a rod resting between this bar and the draft-bar, said rod sliding in eyes of the draft-bar. In such case the space between the bars is considerable, and the device is cumbersome and unsightly. By the use of a round tube, D, at the rear of the thills, the same is made to answer as the axis on which the thills turn, and this axis is brought up in close contact with the draw-bar A, so that there is no lost space. The rear connecting-bar of the thills forms the axis, thereby lessening the space between the parts, simplifying the construction, reducing the cost, and presenting a much better appearance to the eye.

By the peculiar construction of the tube and its connections it is made to serve as a brace to the thills and as an axis upon which the thills turn. The wood fillings *a a* form bearings to and center the interior rod, E. The latter, by projecting at the ends, form bearings for the eyes of the thills, and when the nut on the end of the rod is turned up the eyes are clamped to the ends of the tube, so that the tube is a fixture and turns with the thills. The bar A may be also made of a tube, if desired.

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

In a sleigh or cutter, the combination, with

the thills C C, of the tube D, the wood fillings
a a at the ends of the tube, the interior rod,
E, extending through the tube, and the fill-
ings, projecting at the ends and forming the
5 bearings for the eyes of the thills, the head *c*
and nut *c'* on the ends of the rod clamping
the eyes against the ends of the tube, as herein
shown and described.

In witness whereof I have hereunto signed
my name in the presence of two subscribing to
witnesses.

GEORGE H. LUSK.

Witnesses:

R. F. OSGOOD,

WM. J. MCPHERSON.