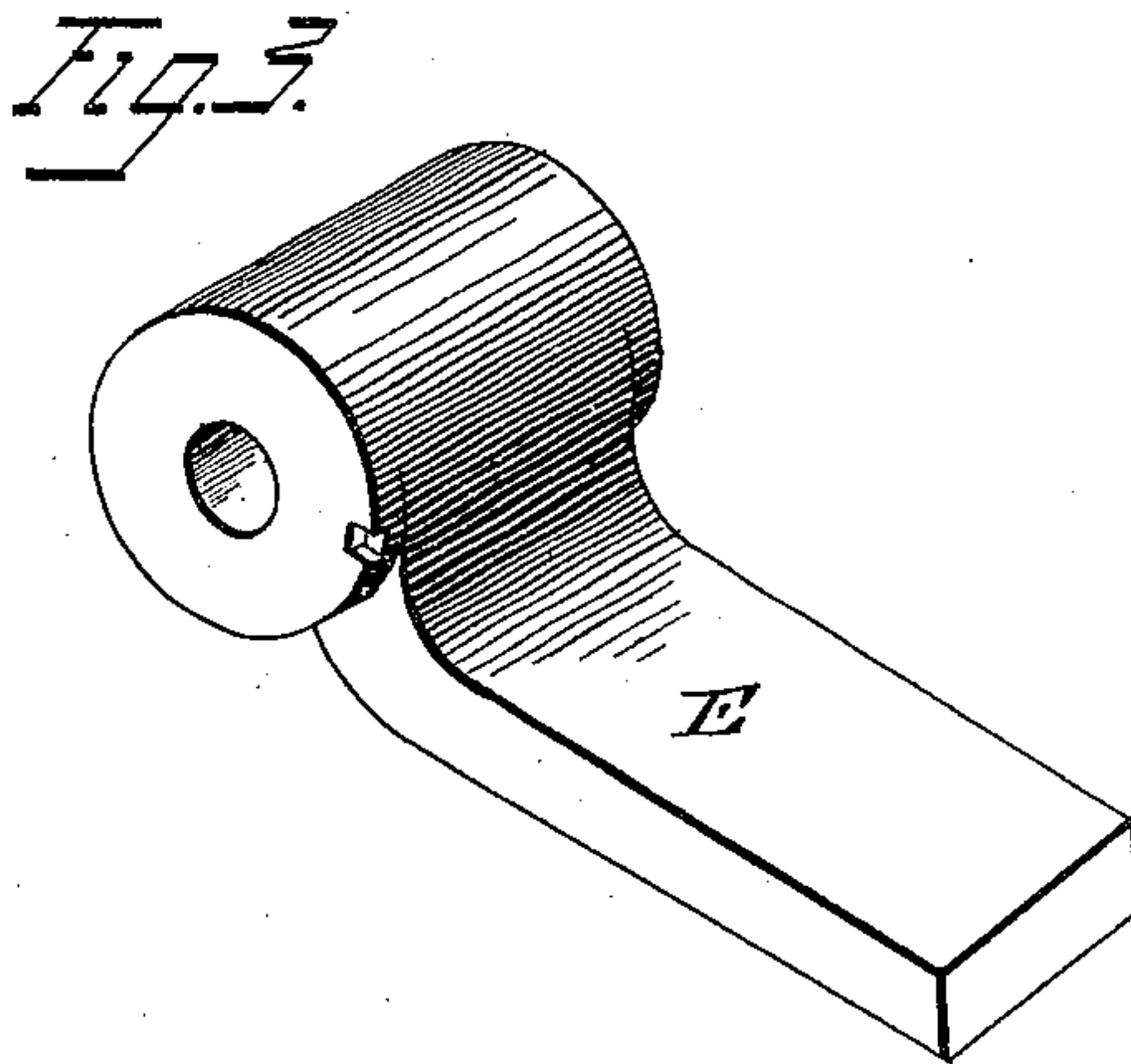
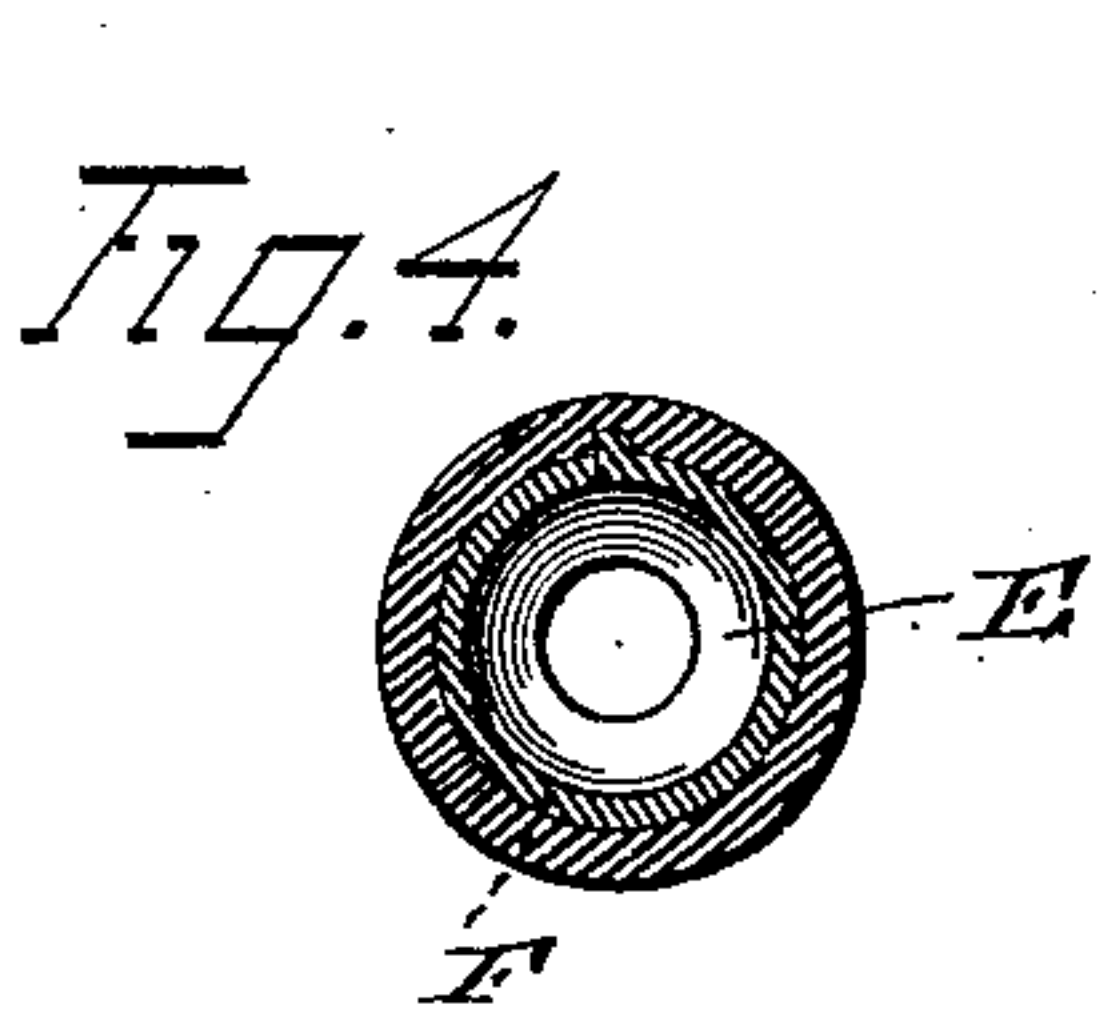
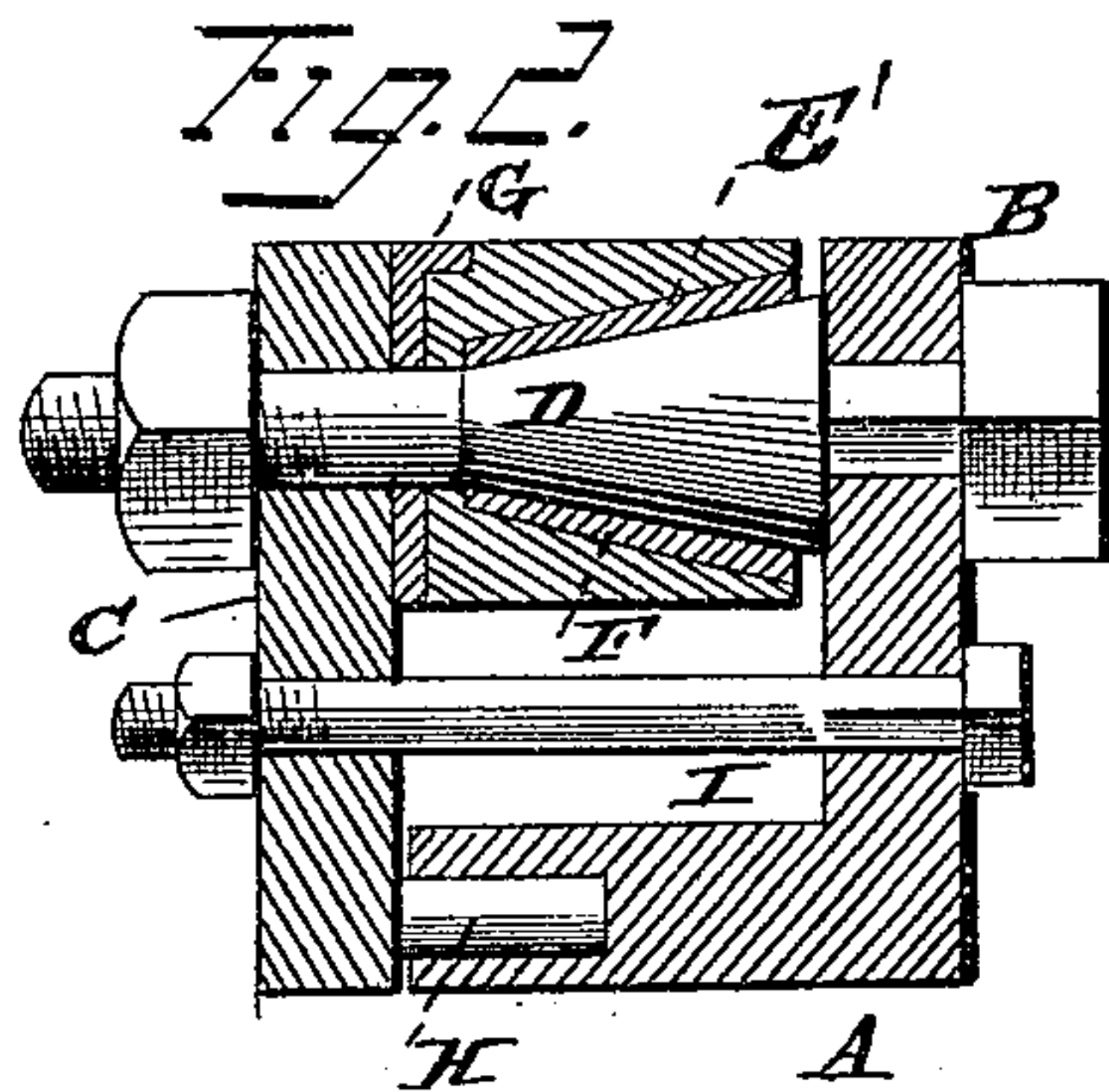
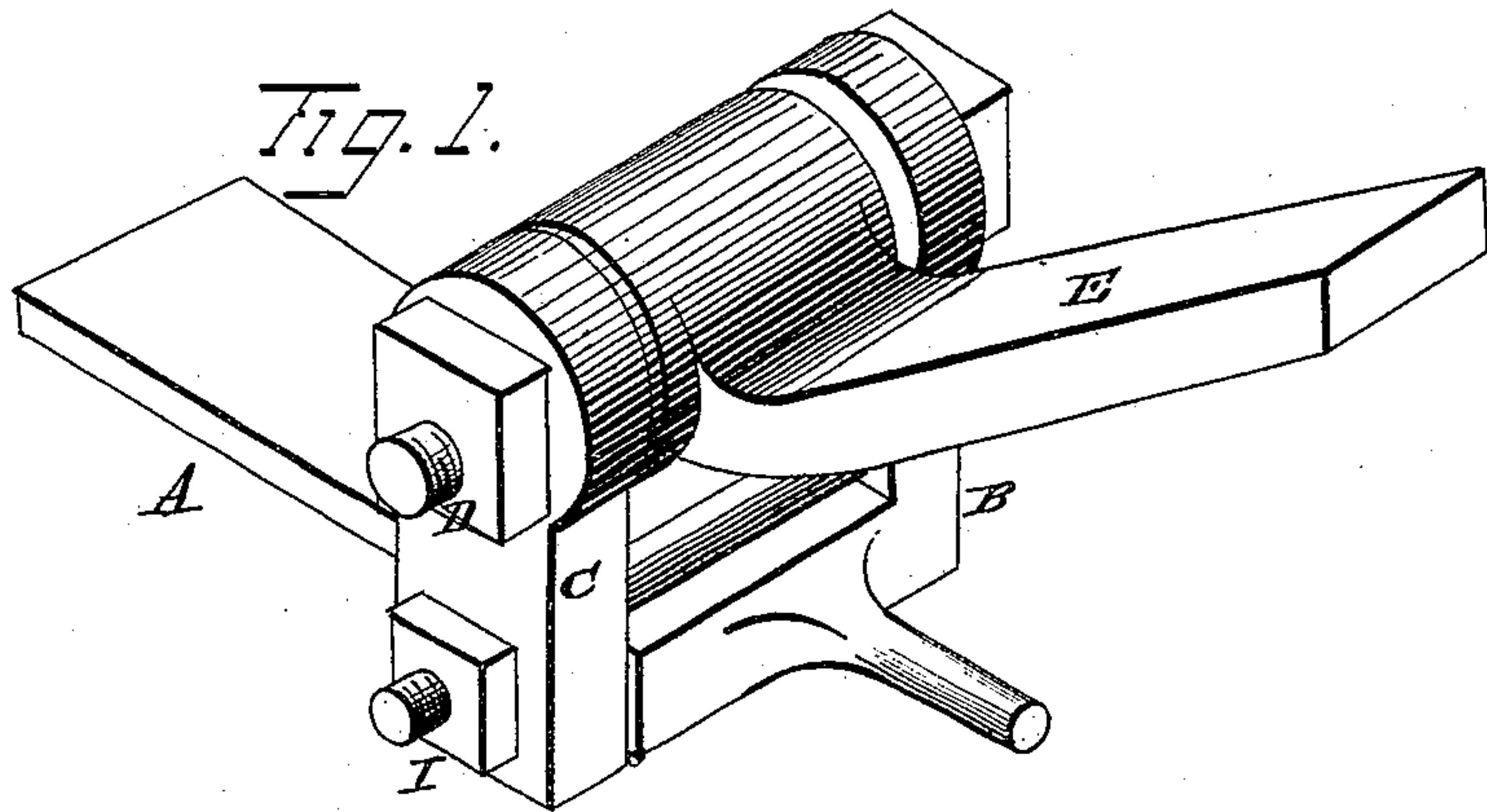


(No Model.)

P. KLIPPLE.
Thill Coupling.

No. 234,483.

Patented Nov. 16, 1880.



Witnesses:
W. C. McArthur
Wm. D. Upperman

Inventor
Phillip Klipple
per *E. W. Watson & Co.* Attorneys.

UNITED STATES PATENT OFFICE.

PHILLIP KLIPPLE, OF SALT LAKE CITY, UTAH TERRITORY.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 234,483, dated November 16, 1880.

Application filed April 7, 1880. (No model.)

To all whom it may concern:

Be it known that I, PHILLIP KLIPPLE, of Salt Lake City, in the county of Salt Lake and Territory of Utah, have invented certain new and useful Improvements in Thill-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in thill-couplings; and it consists in the construction and arrangement of parts, as will be hereinafter more fully set forth.

In the annexed drawings, Figure 1 is a perspective view. Fig. 2 is a section, and Figs. 3 and 4 are details.

In the drawings, A indicates the bed; B, the solid ear, forming part of bed; C, adjustable ear; D, tapering shaft-bolt; E, shaft; E', tapering eye in shaft; F, bushing in tapering eye in shaft; G, washer, provided with lug to fit in recess in one side of shaft; H, projection fitting in opening in bed; I, bolt to hold the adjustable ear more firmly in position.

The bed A may be of any ordinary or desired construction, and is provided on one side with a stationary right-angled ear, B, having suitable openings to receive the bolts D I. The adjustable ear is held in position and adjusted by means of these bolts D I, which pass through

openings in said ear, and are provided with nuts. The base of this adjustable ear is provided with a pin or projection, H, which fits into an opening in the side of the bed and prevents any swinging motion.

The interior of the eye E' is provided with a bushing of any suitable material and of corresponding shape, which is held firmly in position by means of a lug upon it, which fits into a recess in the eye. By this arrangement the bushing takes the wear, and the movable ear can be adjusted to compensate for it, thereby producing a coupling of great durability, simple in construction, and not liable to get out of repair.

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

The thill-coupling composed of the thill-iron E, having the transversely-tapering eye E', correspondingly-shaped bushing F, coupling-pin D, having a tapering shoulder, washer G, and a stud fitting in a recess in the thill-eye, right-angled ear B, vertical ear C, having a projection or stud, H, entering a recess or socket in the horizontal end of the ear B, and bolt I, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

PHILLIP KLIPPLE.

Witnesses:

E. P. JOHNSON,
JOHN SHOLDEBRAND.