

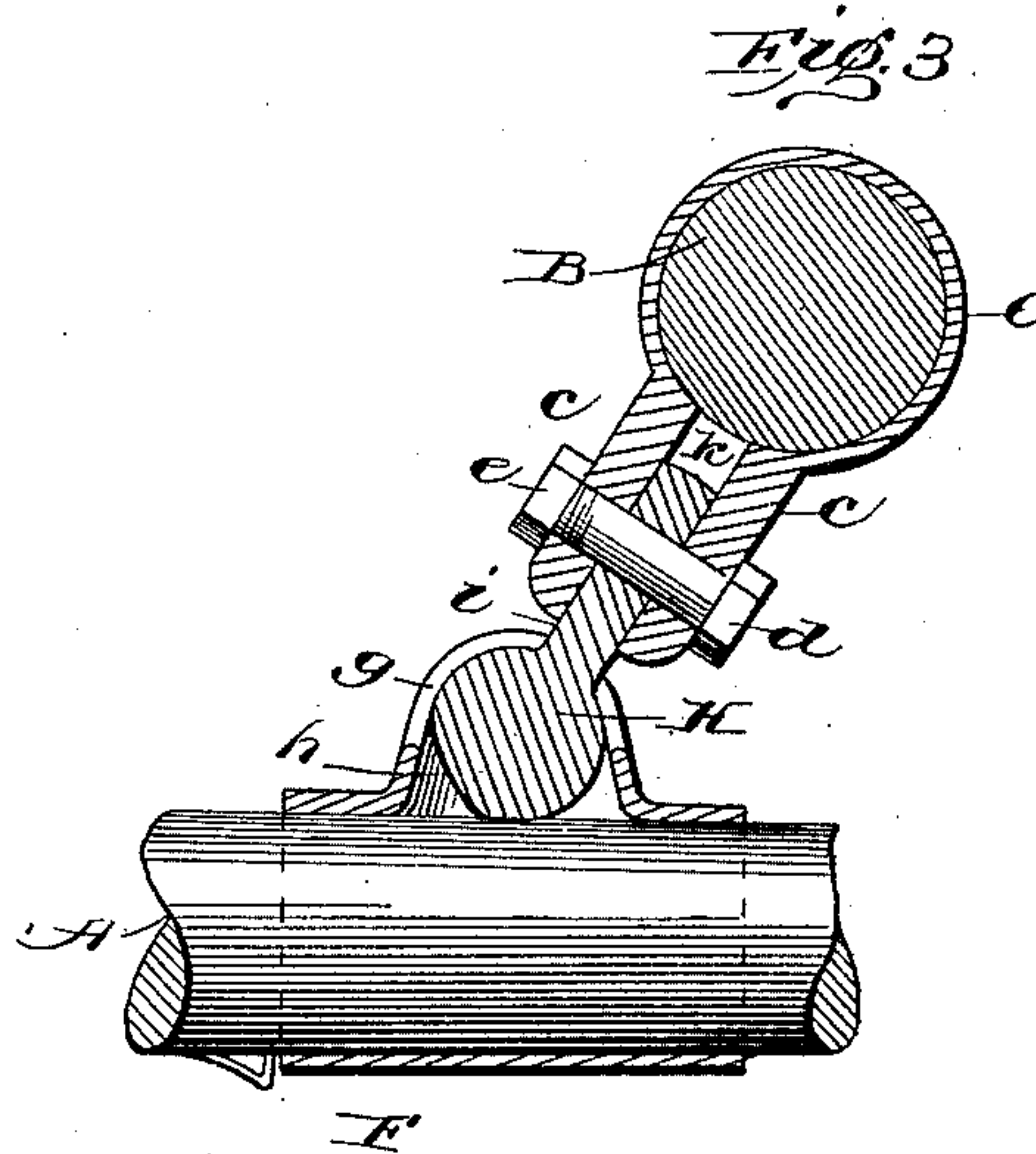
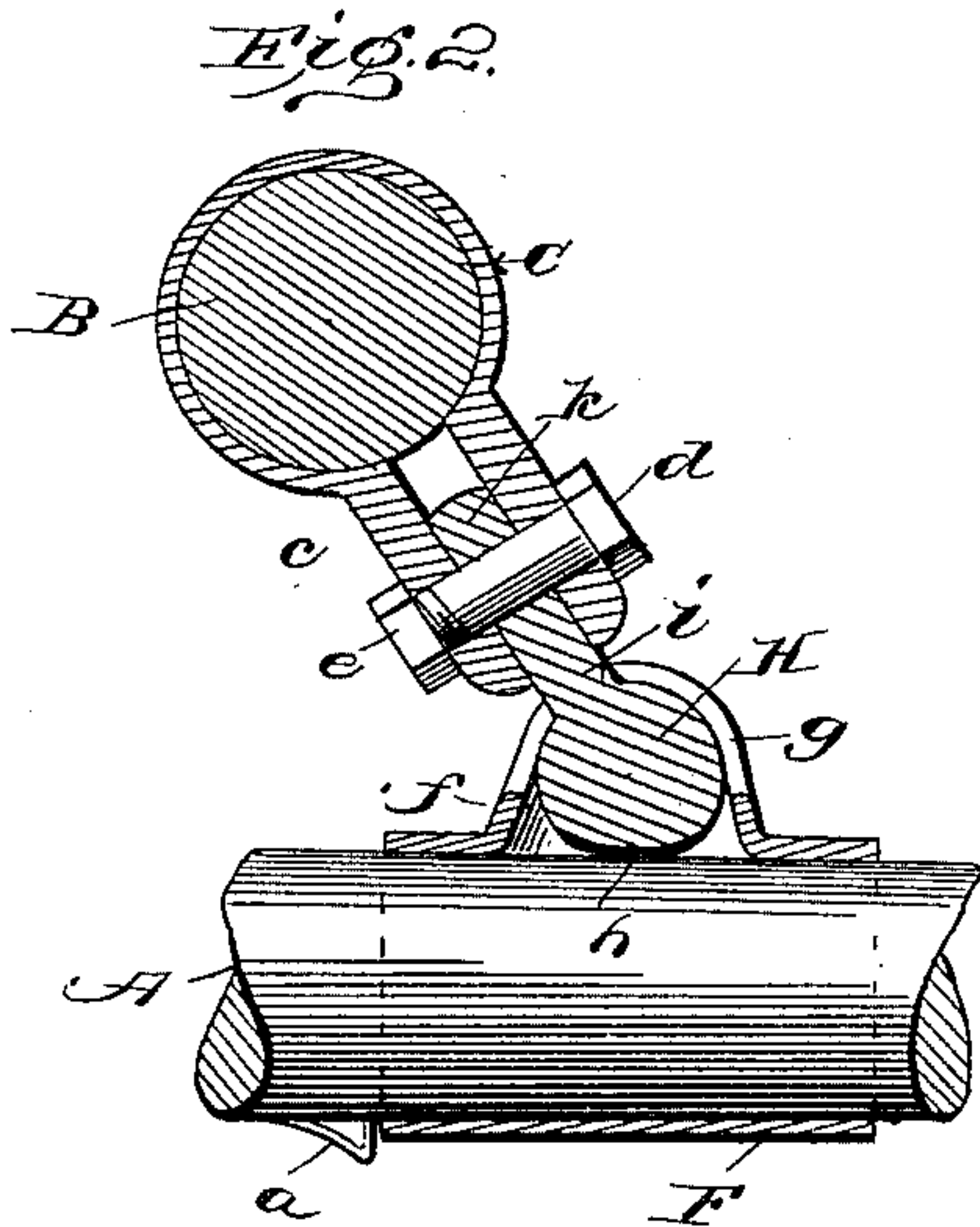
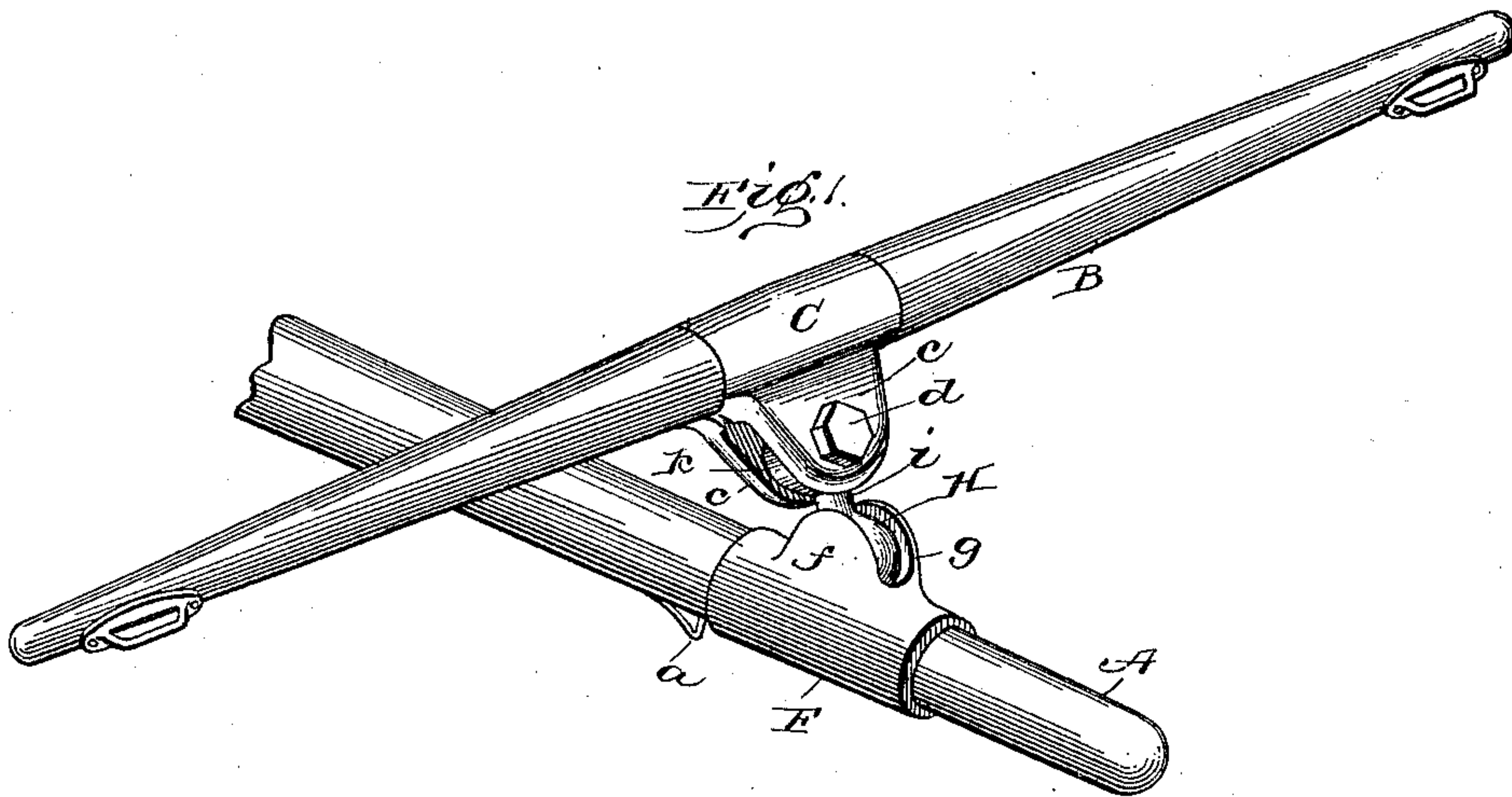
No. 688,249.

Patented Dec. 3, 1901.

C. W. HOYT.
CENTER FOR NECK YOKES.

(Application filed Aug. 19, 1901.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES W. HOYT, OF MONTROSE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO CHARLES O. HOYT, OF MONTROSE, PENNSYLVANIA.

CENTER FOR NECK-YOKES.

SPECIFICATION forming part of Letters Patent No. 688,249, dated December 3, 1901.

Application filed August 19, 1901. Serial No. 72,518. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. HOYT, a citizen of the United States, residing at Montrose, in the county of Susquehanna and State of Pennsylvania, have invented certain new and useful Improvements in Centers for Neck-Yokes; 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 characters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in neck-yoke centers, its object being to provide a center having few parts, which are simple in construction and which operate to prevent the detachment of the neck-yoke from the pole in the event the tugs become detached or broken.

The invention will be fully described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a vehicle-pole with a neck-yoke connected to it by my improved center. Fig. 2 is a sectional view showing the parts in normal position, and Fig. 3 is a similar view showing the position the parts assume in the event the traces become detached or are broken.

The pole or tongue of the vehicle is indicated by A and the neck-yoke by B. Upon the yoke is secured a split collar C, having spaced ears *c* projecting from one side, and these ears are perforated to receive the clamping-bolt *d*, and preferably one of the perforations is threaded to receive the threaded end of the bolt, and the latter is long enough to project through one of the ears and receive the nut *e*, which locks the bolt against turning back.

F represents a sleeve adapted to fit snugly over the front end of the pole, and the latter is provided with one or more stops *a*, against which the rear end of the sleeve abuts. The sleeve is bulged outwardly on one side to form

a semispherical socket *f*, and the latter is slotted, as indicated at *g*.

H represents a ball having a portion cut away to form a bearing-surface *h*, and this ball fits snugly in the socket *f* and is provided with a stem *i*, which projects through the slot *g*. The outer end of the stem is enlarged and flattened, as indicated at *k*, and the enlarged portion fits between the ears *c* and is centrally perforated for the passage of the bolt *d*.

When the parts are assembled and in their normal position—that is, the positions they occupy when the horses are properly hitched to the vehicle—the bearing-surface *h* of the ball will be in contact with the pole and the stem *i* incline rearwardly, as indicated in Fig. 2, and there will be no clamping action between the ball and the pole. If, however, the traces or tugs should become broken or detached and the horses continue their forward movement, the yoke will move forward also, and thereby swing the stem to a vertical position and turn the ball H in the socket to the position indicated in Fig. 3, which will cause a clamping action between the ball and pole and so prevent the sleeve F from slipping off the pole. The bearing-surface *h* is flat transversely of the pole, but is slightly convex longitudinally thereof, and such surface is tangential to the axis of the stem *i*.

Without limiting myself to the precise details of construction shown, I claim—

1. In a neck-yoke center, the combination with a sleeve adapted to fit on the pole of the vehicle and bulged outwardly on one side to form a semispherical socket said socket being slotted, of a ball fitting within the socket and provided with a stem projecting through said slot, said ball being cut away on one side to form a bearing-surface tangential to the axis of the stem, and a collar pivotally connected to the outer end of the stem, and adapted to be secured to a neck-yoke, substantially as set forth.

2. The combination with a neck-yoke and a vehicle-pole, of a sleeve fitting on said pole and provided with a semispherical socket and

the latter being slotted, a split collar fitting
on the yoke and having spaced ears, a ball
fitting within the socket and having a stem
projecting through the slot, and the outer
5 end of said stem being flattened and fitting
between said spaced ears, a bolt extending
through said ears and stem, and the said ball
being cut away on one side to form a bear-
ing-surface tangential to the axis of the stem,
substantially as and for the purpose set forth. 10
In testimony whereof I affix my signature
in presence of two witnesses.
CHARLES W. HOYT.

Witnesses:

H. B. JONES,
GEO. B. LITTLE.