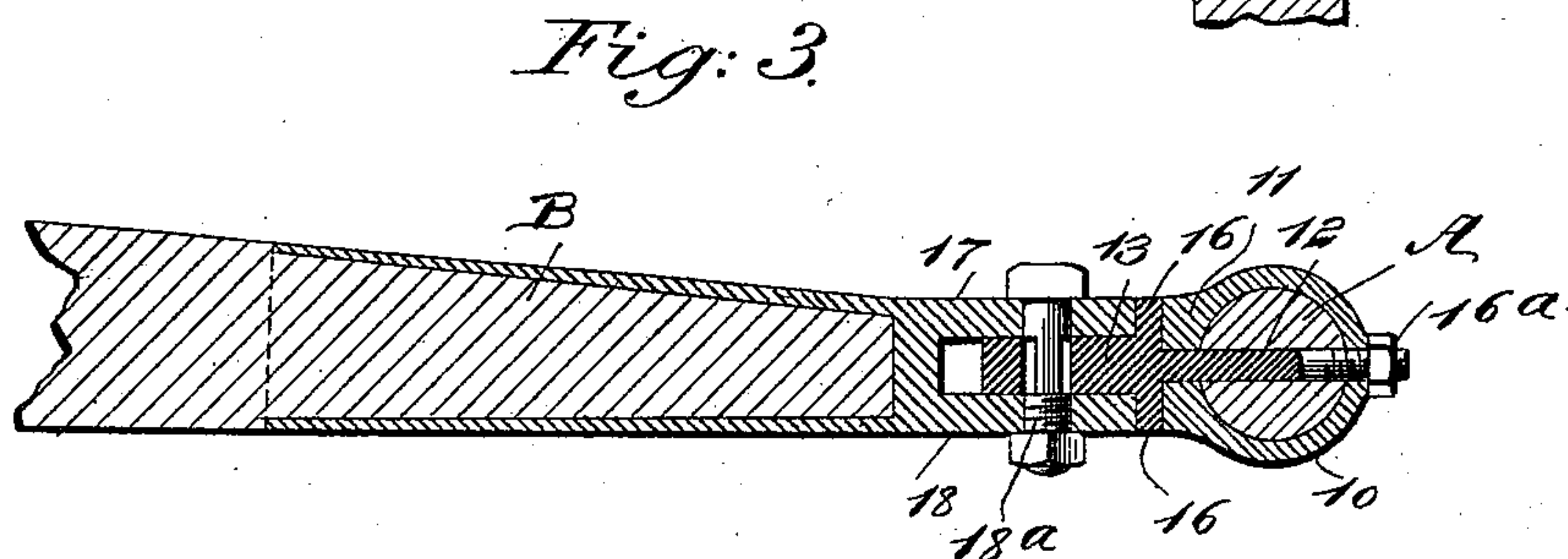
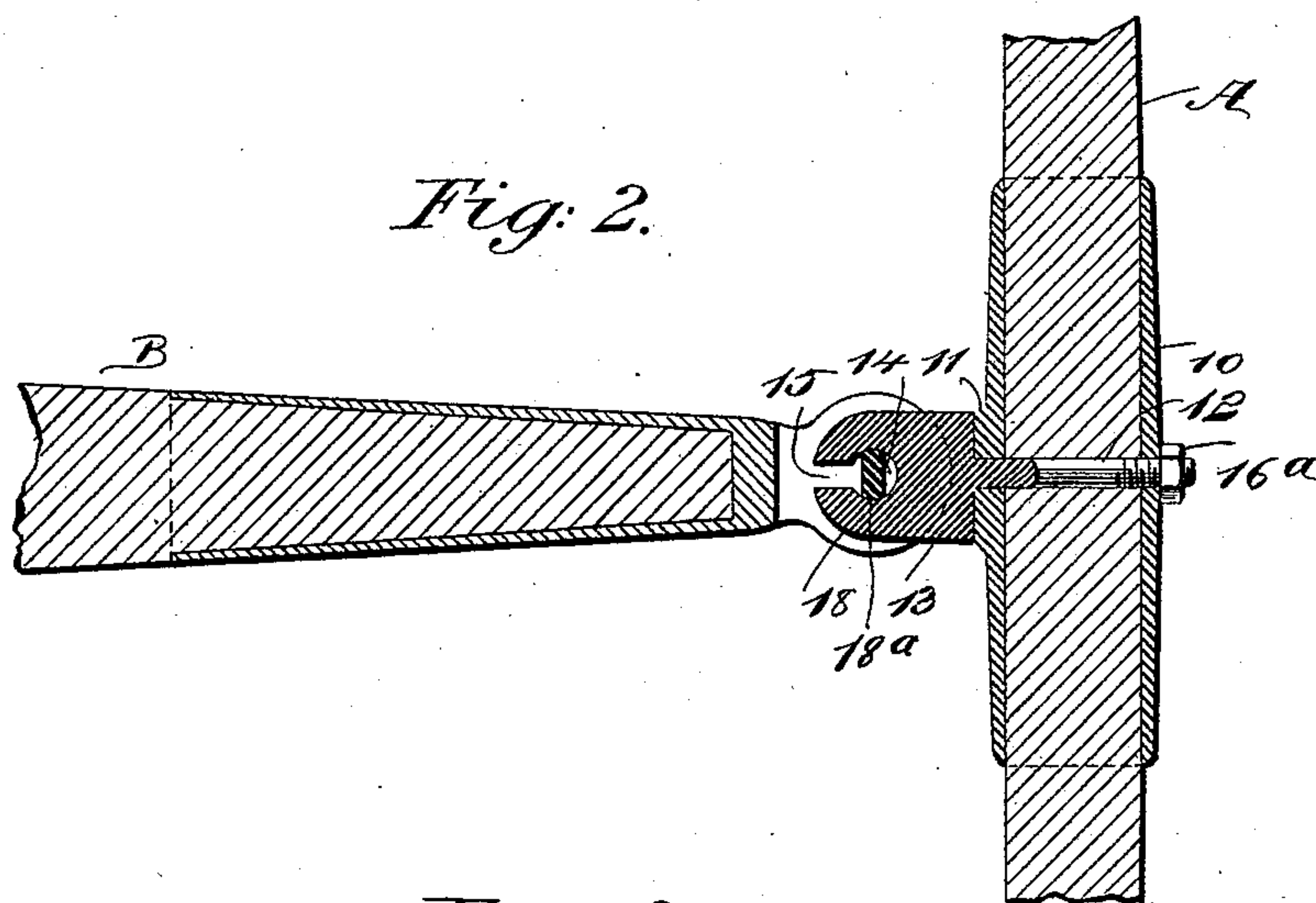
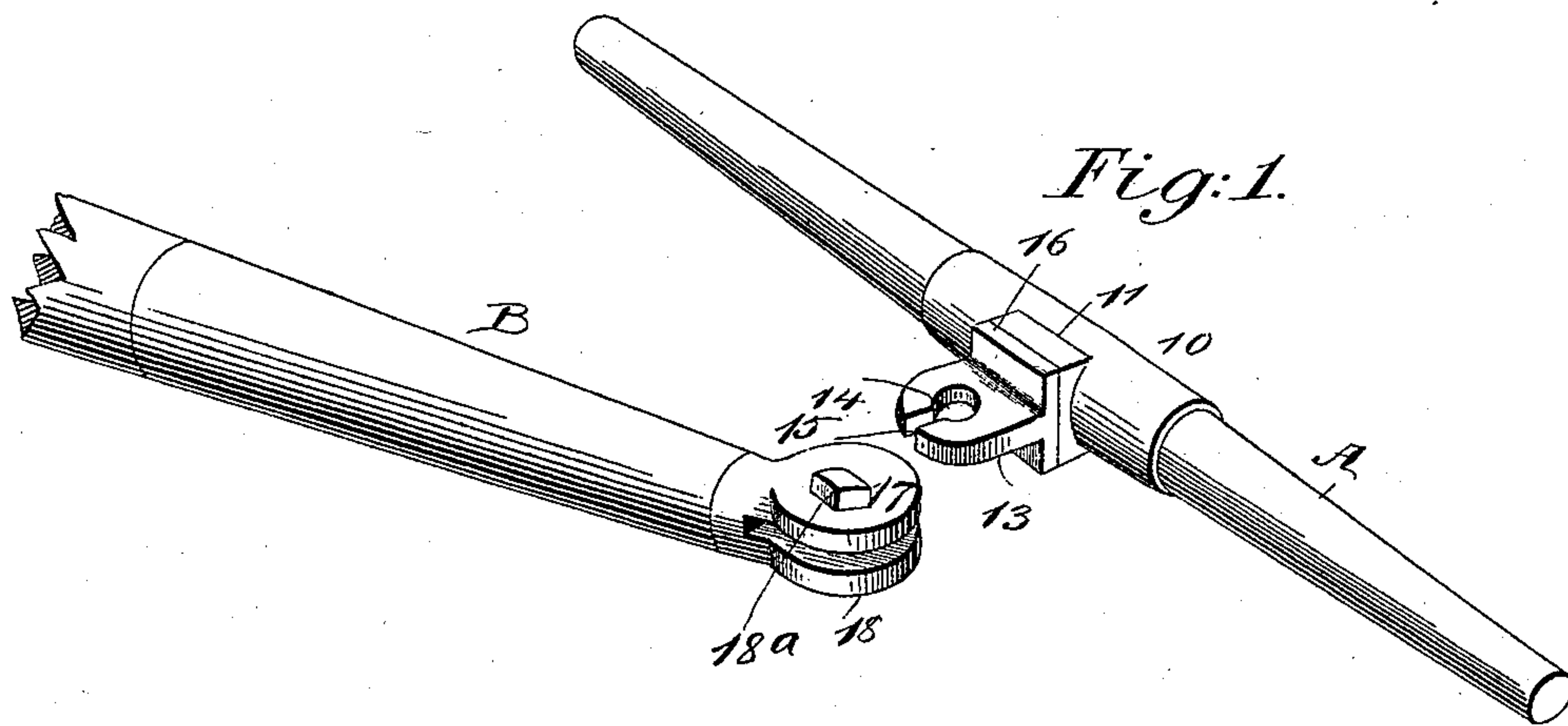


(No Model.)

J. S. BROWN.  
NECK YOKE.

No. 527,660.

Patented Oct. 16, 1894.



WITNESSES:

*John A. Bennie*  
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INVENTOR

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ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JAMES SHERMAN BROWN, OF EUREKA, CALIFORNIA.

## NECK-YOKE.

SPECIFICATION forming part of Letters Patent No. 527,660, dated October 16, 1894.

Application filed April 5, 1894. Serial No. 506,450. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES SHERMAN BROWN, of Eureka, in the county of Humboldt and State of California, have invented a new and useful Improvement in Neck-Yokes, of which the following is a full, clear, and exact description.

My invention relates to an improvement in neck yokes, and it has for its object to improve upon the construction of the neck yoke for which Letters Patent were granted to myself November 29, 1892, No. 487,112, the improvements being such as to admit of a vertical as well as a lateral movement of the neck yoke upon the pole, whereby the neck yoke may be used in connection with vehicles adapted for freighting, or for traveling over mountainous or rough roads, under which conditions a vertical movement of the neck yoke is especially desirable.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the neck yoke, and the end of the pole to which the neck yoke is applied, the two parts being separated. Fig. 2 is a horizontal section through the end of the pole and the neck yoke, illustrating them in pivotal connection; and Fig. 3 is a section through the pole and neck yoke taken at a right angle to the section shown in Fig. 2.

In carrying out the invention, the neck yoke A may be constructed of any approved material, and it is provided at or near its center with a sleeve, strap or shield 10, encircling it and securely fastened thereto, which sleeve, strap or shield is provided at its inner face with a central lug 11 the inner face whereof is flat, as is best shown in Fig. 1.

In connection with the neck yoke a bolt 12, is employed, provided at one end with a head or cheek 13, preferably of substantially circular or disk-like construction and having

an aperture 14 produced in it and a slot 15, leading into the aperture cut through the inner edge of the head; and the bolt is also provided with flanges 16, located at the outer end of the cheek or head, one at the top and the other at the bottom. The bolt is passed through a suitable aperture made in the central portion of the lug 11, and likewise in the sleeve 10 and in the neck yoke, and the outer face of the flanges 16 is made to contact firmly with the inner face of the lug 11, the head or cheek 13, being held thereby in a horizontal position. The bolt is firmly secured to the neck yoke by means of a nut 16<sup>a</sup> or its equivalent secured upon its forwardly-projecting end.

The pole B, is provided at its outer end with two horizontally located clevis cheeks 17 and 18, adapted to receive between them in a substantially snug manner the head or cheek of the neck yoke. The two are pivotally connected through the medium of a bolt 18<sup>a</sup>, which at its center is flattened upon opposite sides, as shown in Fig. 3. The narrow edge of the bolt is turned to the front, and the head or cheek 13 of the neck yoke is slipped between the clevis cheeks of the pole, the slot 15 receiving the bolt; and when the bolt has entered into the opening 14 in the neck yoke head, the bolt is turned, as shown in Figs. 2 and 3, and the two parts will be pivotally united. Under this arrangement the head of the neck yoke has free lateral movement in the clevis of the pole, and the neck yoke has free vertical movement upon the bolt 12, said bolt serving in the capacity of a pivot.

A neck yoke constructed as above set forth, as heretofore stated, is especially adapted for pulling heavy loads in mountainous and rocky countries, since under such conditions it is absolutely necessary for the comfort and proper working of the team that the neck yoke should have play vertically as well as laterally.

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

A neck yoke and pole connection comprising the pole ferrule B provided with a hori-

zontal slot across its front end, a vertical bolt having a flattened portion within the slot, a neck yoke ferrule 10 having apertures in its middle and a flattened raised bearing 11 on its inner face concentric with one of said apertures, and a bolt extending through said apertures for the neck yoke ferrule to pivot on and provided with a flattened slotted head 13 detachably engaging the flattened portion of the vertical bolt and having an integral washer or collar 16 engaging on the bearing 11, substantially as set forth.

JAMES SHERMAN BROWN.

Witnesses:

GEORGE D. MURRAY,  
JOHN S. MURRAY.