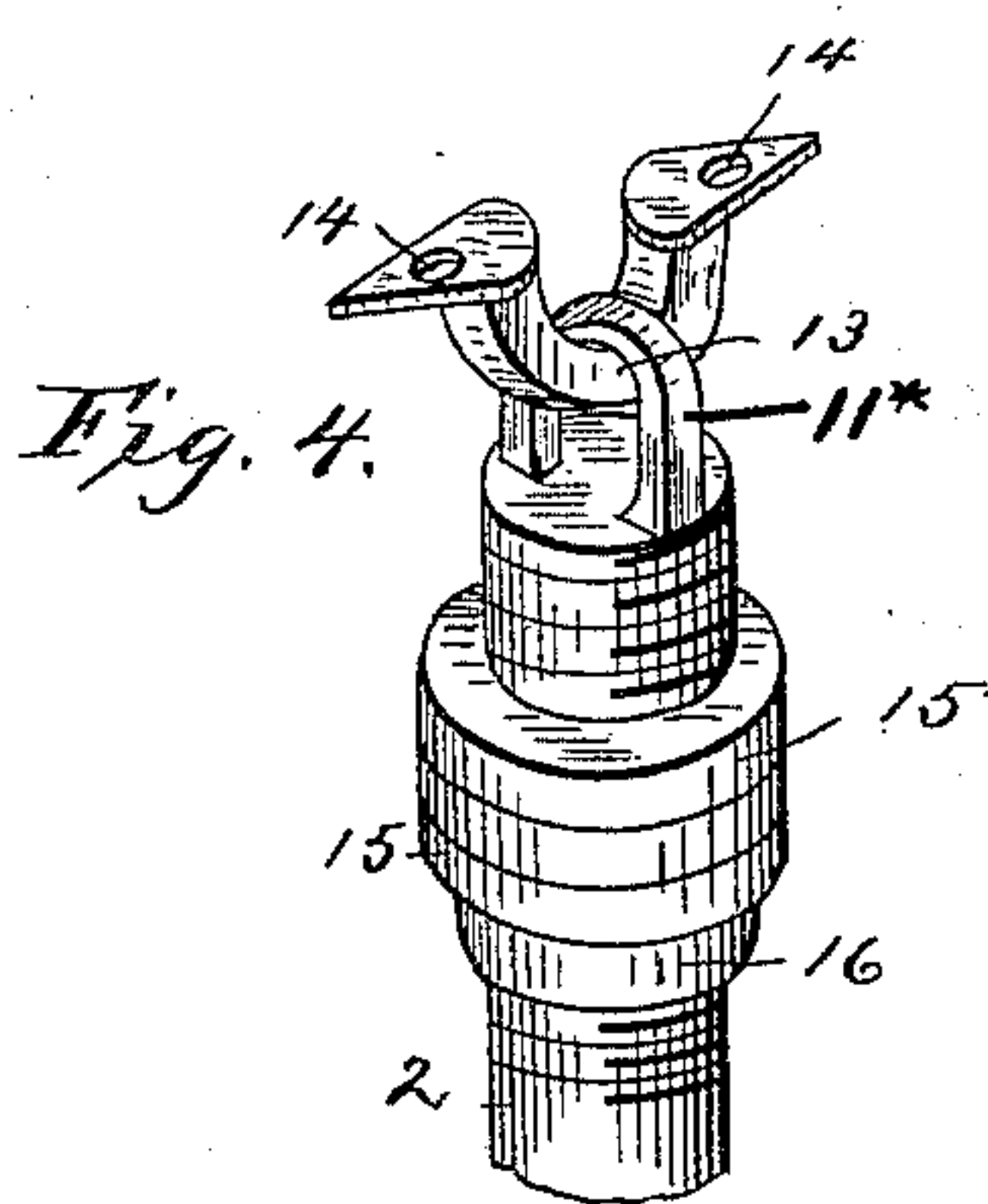
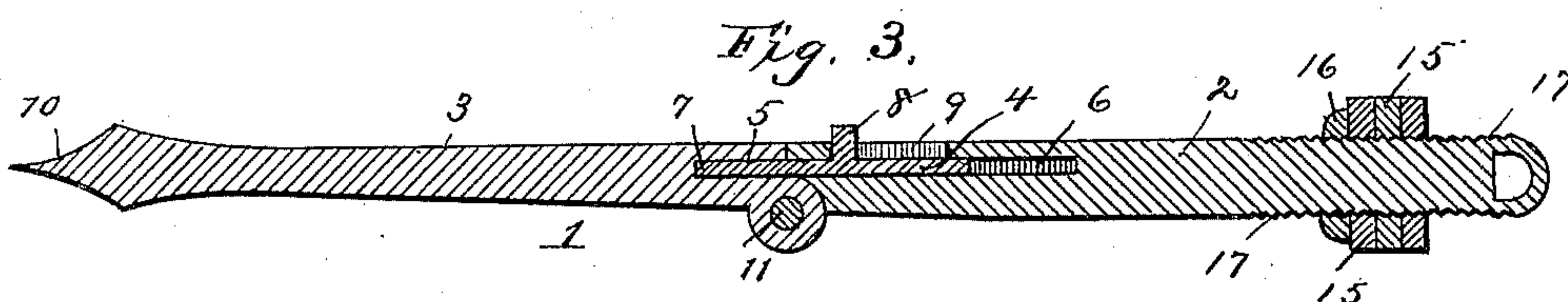
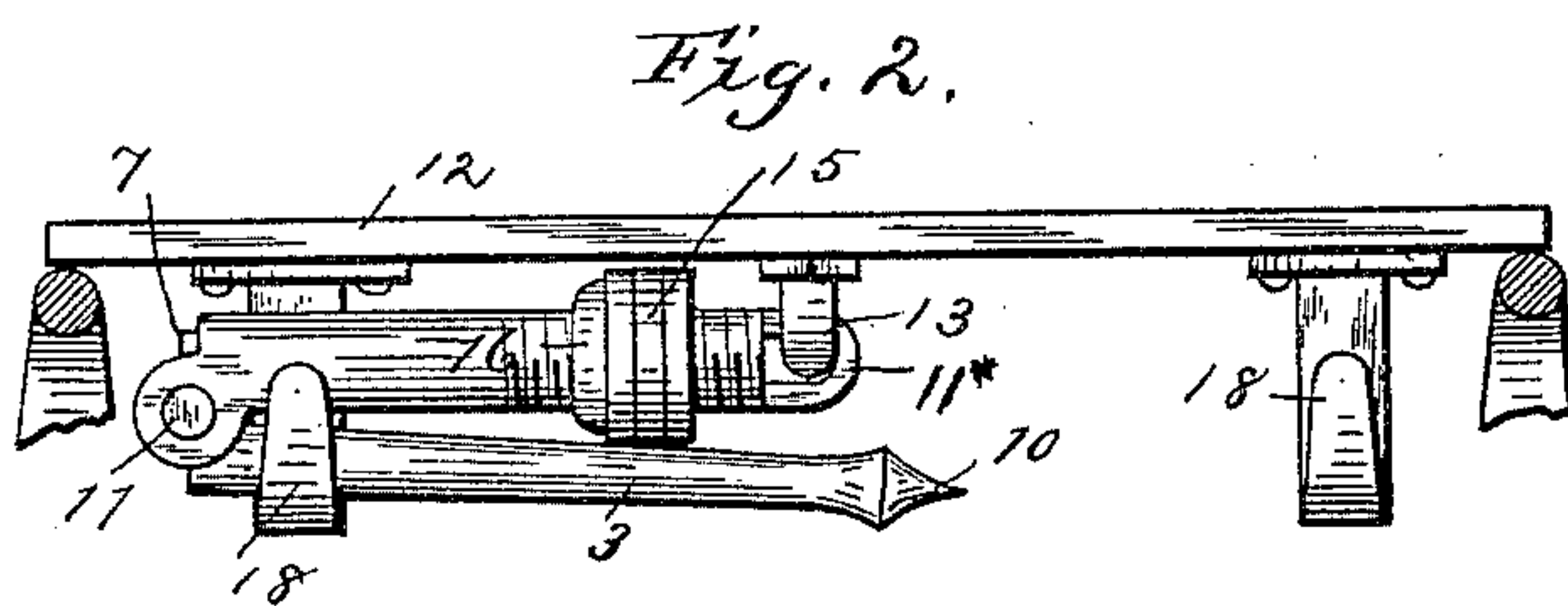
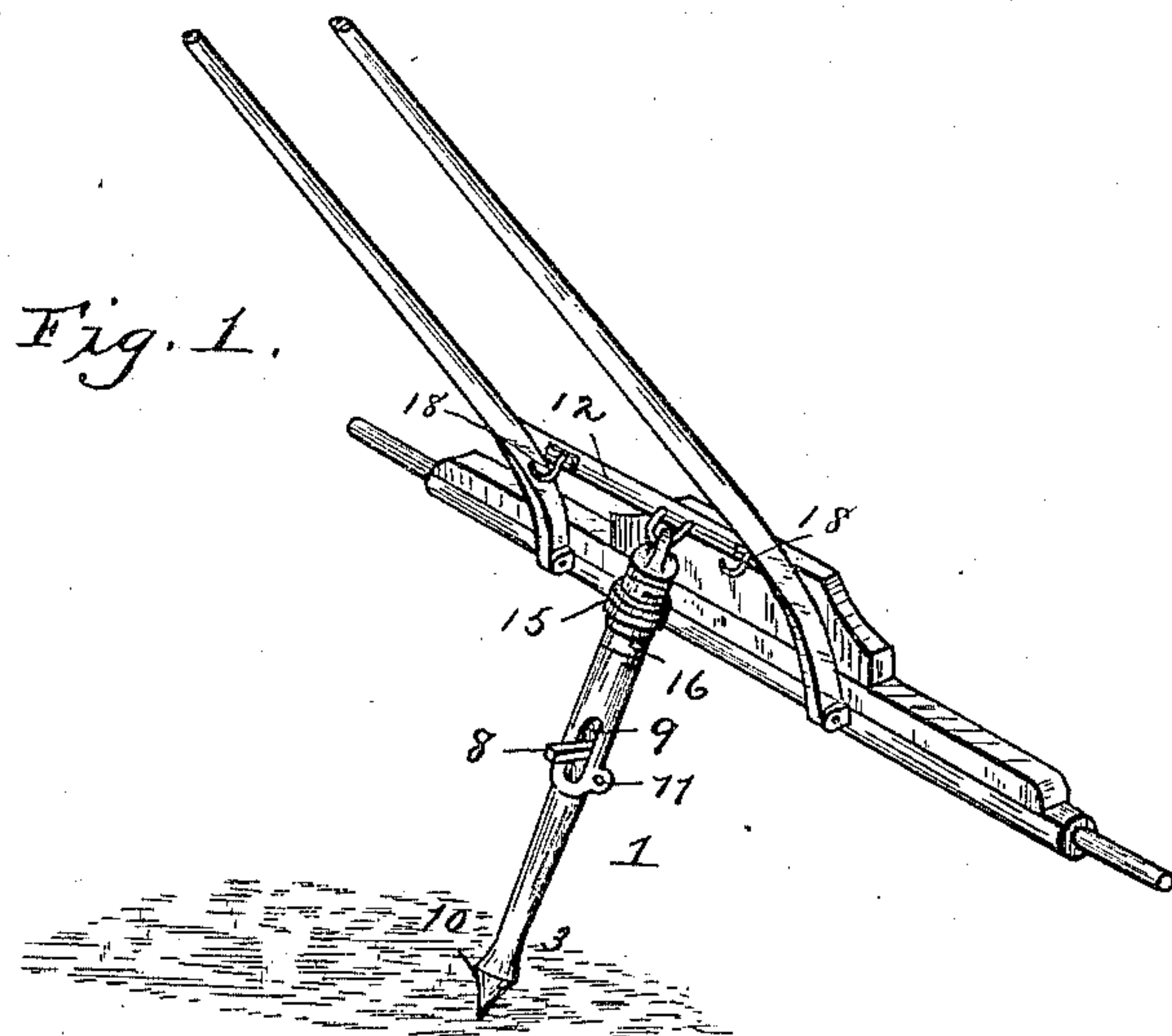


(No Model.)

A. LOTSTROM & C. M. BIORSETH.
SHAFT SUPPORT.

No. 427,586.

Patented May 13, 1890.



Witnesses

Harry L. Amer.

J. F. Riley

By their Attorneys,

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Carl M. Biorseth.

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UNITED STATES PATENT OFFICE.

ARICK LOTSTROM AND CARL M. BIORSETH, OF SUPERIOR, WISCONSIN.

SHAFT-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 427,586, dated May 13, 1890.

Application filed February 19, 1890. Serial No. 341,077. (No model.)

To all whom it may concern:

Be it known that we, ARICK LOTSTROM and CARL M. BIORSETH, citizens of the United States, residing at Superior, in the county of Douglas and State of Wisconsin, have invented a new and useful Shaft-Support, of which the following is a specification.

The invention relates to improvements in shaft-supports.

The object of the present invention is to provide a simple and inexpensive shaft-support adapted to be readily secured in place, and capable of being folded and retained in a small space and out of the way when not in use.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a shaft-support constructed in accordance with the invention and shown applied in operative position. Fig. 2 is a side elevation of the cross-bar of a pair of shafts or thills, the support being shown in its folded position. Fig. 3 is a longitudinal sectional view of the support. Fig. 4 is a detail view of the upper end of the support.

Referring to the accompanying drawings, 1 designates a shaft or thill support, which is constructed of metal and composed of sections 2 and 3, that are hinged together and are adapted to be locked in their open or operative position by a gravity-latch 4, which consists of a bolt 5, that is housed in a groove 6 and is adapted to engage a similar groove 7, and a headed pin 8, that operates in a longitudinal slot 9, communicating with a groove 6 when the sections align and are in operative position. The grooves 6 and 7 register and the bolt is adapted to be inserted in the groove 7 and securely lock the sections of the support or brace in their operative position. The lower end 10 of the section 3 is pointed and adapted to engage the ground or floor of the stable and prevent the support or brace slipping. The upper end of the section 3 is provided with an integral eye 11*, and is designed to be secured to the lower face of the cross-bar 12 of a pair of shafts or thills at a point

about midway the length of the cross-bar by means of a loop 13, that is inserted through the eye 11*, and has its ends 14 perforated and adapted to receive screws. By this construction the support is adapted to be moved freely on the loop 13, and in order to prevent the support-brace slipping when in operative position the upper end is provided with a series of rubber rings or washers 15, that are adapted to be moved on the end of the section and be brought into engagement with the cross-bar. The rubber rings or washers 15 are controlled by a threaded collar 16, that engages a threaded portion 17 of the section 2, and is adapted to compress the rubber rings or washers 15 against the cross-bar 12 and prevent the support or brace slipping or moving on the loop 13, and thereby form practically a rigid connection between the cross-bar and the supports. The rubber rings or washers 15, besides serving to prevent movement of the brace or support, act as anti-rattlers, and when the sections are folded prevent them knocking together and against the cross-bar. The cross-bar is provided near each end with a depending hook 18, that is adapted to receive the hinged ends of the sections and support the same and hold them beneath the cross-bar and parallel therewith, and the brace or support is adapted to be folded beneath the cross-bar on either side of its point of attachment therewith.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will be readily understood.

What we claim is—

1. A shaft-support comprising the sections hinged together, the latch engaging the sections and adapted to hold them in operative position, one of the sections being provided with an eye adapted to be secured to the cross-bar of a pair of shafts and the other section having its lower end pointed, substantially as described.

2. A shaft-support comprising the sections hinged together, provided with suitable means for locking them in operative position and adapted to be secured to the cross-bar of a pair of shafts, the rubber rings or washers arranged at the upper end of the brace or

support, and a threaded collar adapted to compress the rubber rings or washers, substantially as described.

5 3. A shaft-support comprising the section 3, having its lower end pointed, the section 2, hinged to the section 3 and having a sliding bolt adapted to engage said section and hold the same in alignment with it and having its upper end provided with an eye, the rubber
10 rings or washers arranged upon the upper end of the section 2, and the threaded collar engaging the threaded portion of the section 2 and adapted to compress the rubber rings or washers, substantially as and for the pur-
15 pose described.

4. The combination, with a cross-bar provided with a loop 13, secured to it intermediate of its ends, and the depending hooks arranged at each side of the loop, of the section
20 2, provided with an eye adapted to engage the loop 13, the section 3, hinged to the section 2

and having its lower end pointed, and means for locking the sections in operative position, said sections being adapted to fold together and be arranged in the depending hooks and
25 be supported thereby, substantially as described.

5. A shaft-support comprising the sections hinged together, the latch engaging the sections and adapted to hold them in operative
30 position, one of the sections being adapted to be secured to the cross-bar of a pair of shafts, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures
35 in presence of two witnesses.

ARICK LOTSTROM.
CARL M. BIORSETH.

Witnesses:

E. MCMAHON,
J. F. BISHOFF, Jr.