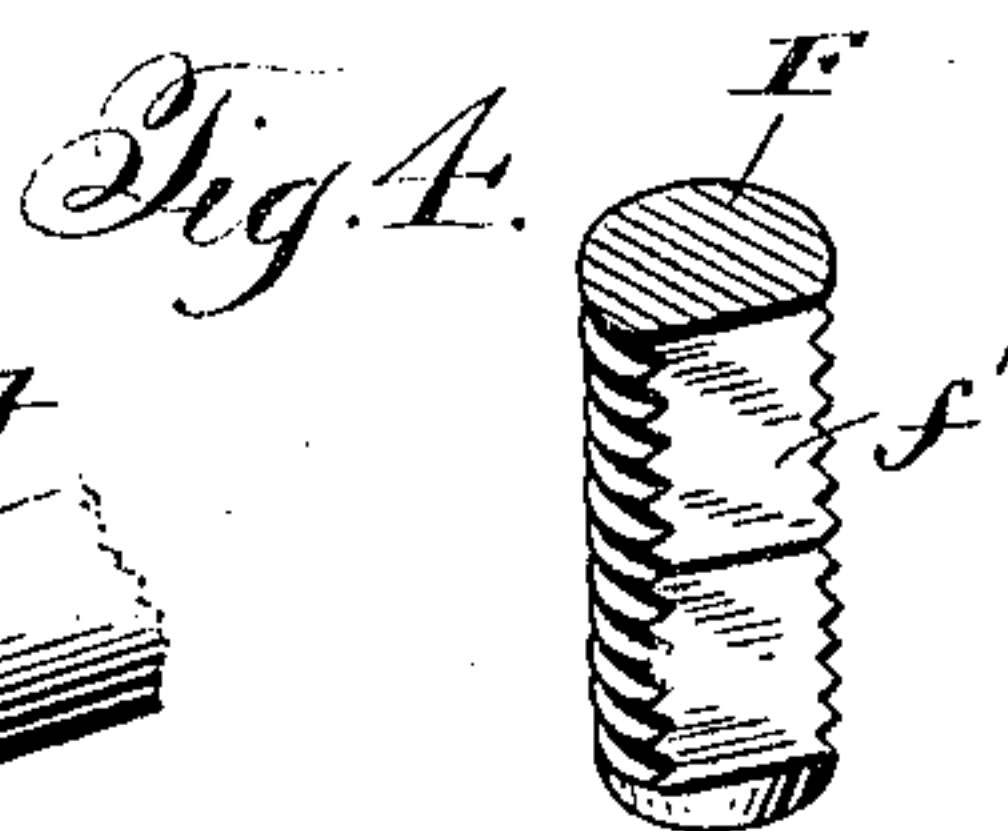
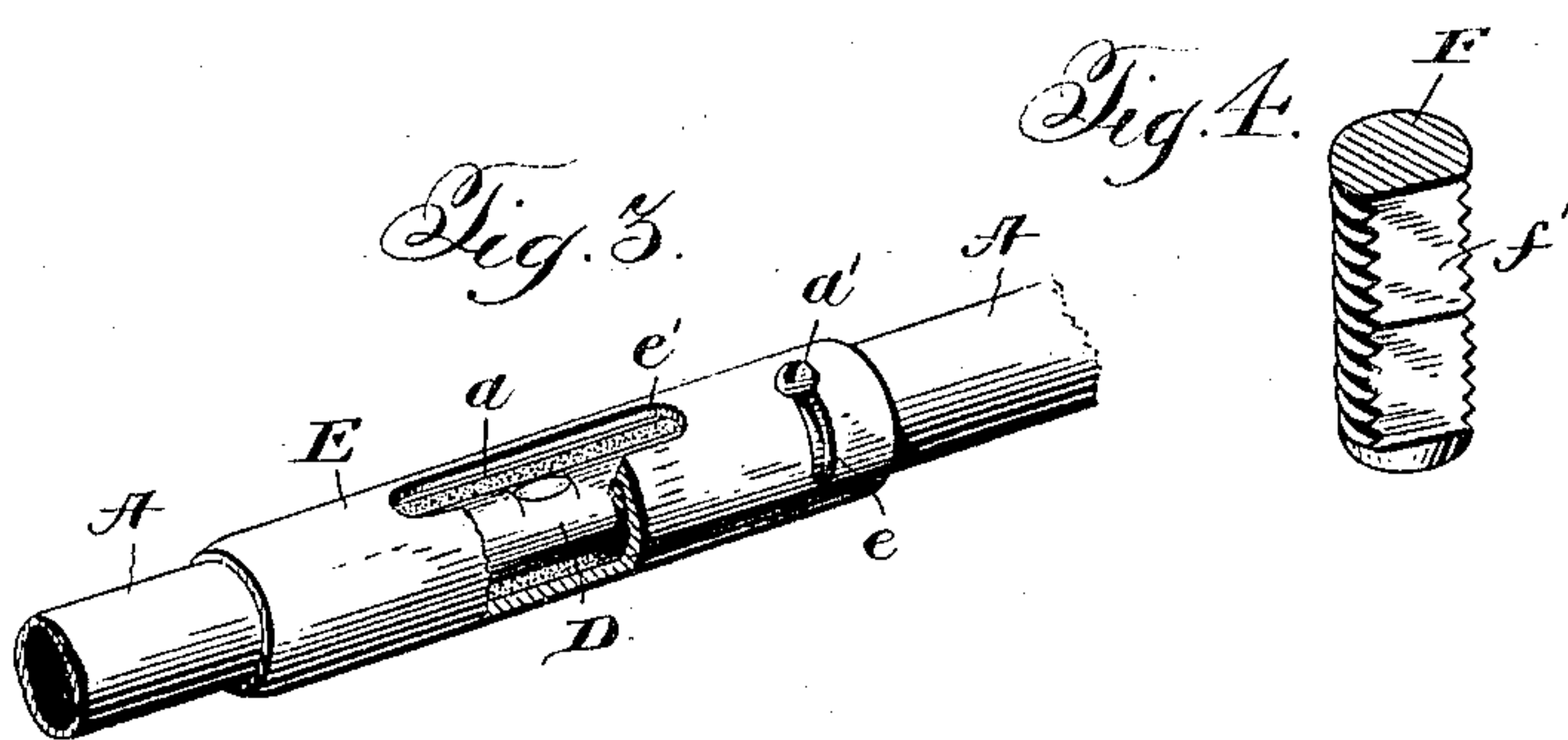
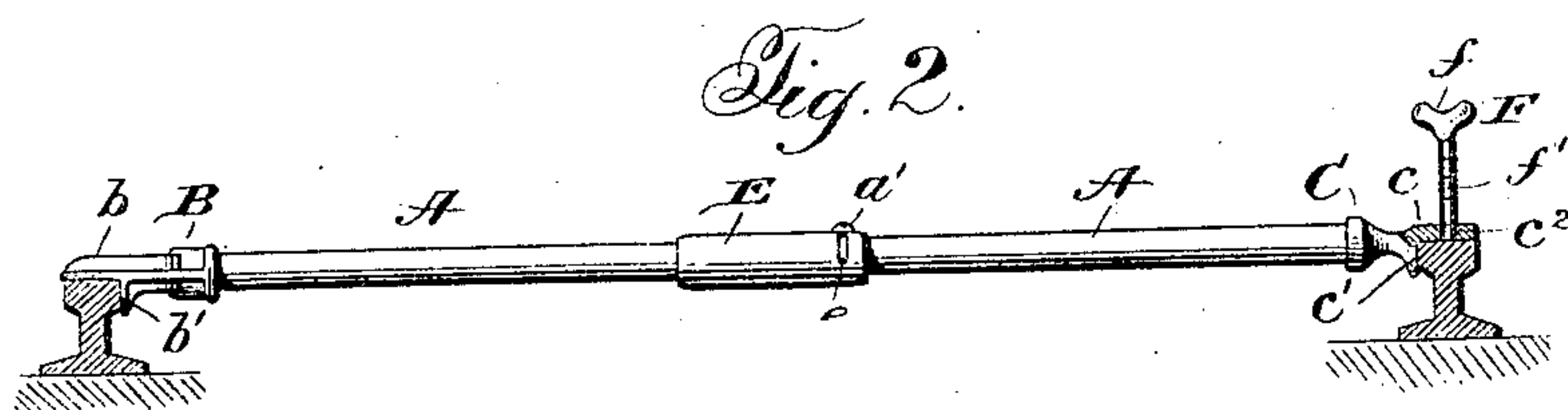
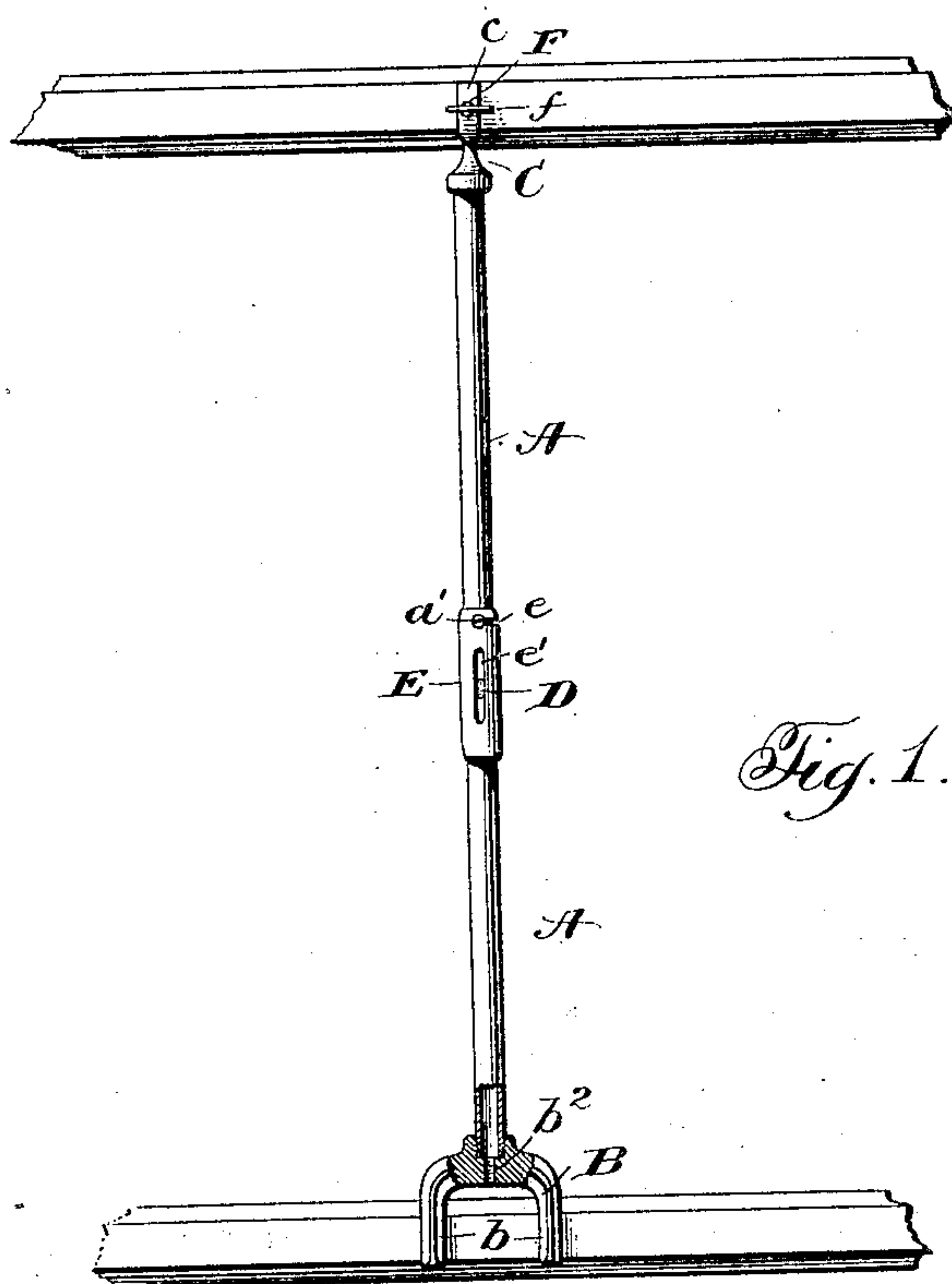


No. 804,258.

PATENTED NOV. 14, 1905.

C. NELSON.  
TRACK GAGE.

APPLICATION FILED JUNE 9, 1905.



Witnesses:

Jas. E. Hutchinson.  
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By J. P. Hunter Attorney



# UNITED STATES PATENT OFFICE.

CHRISTIAN NELSON, OF HAY SPRINGS, NEBRASKA.

## TRACK-GAGE.

No. 804,258.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed June 9, 1905. Serial No. 264,444.

*To all whom it may concern:*

Be it known that I, CHRISTIAN NELSON, a citizen of the United States, residing at Hay Springs, in the county of Sheridan and State of Nebraska, have invented certain new and useful Improvements in Track-Gages, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an improvement in track-gages, and more particularly to track-gages designed for the purpose of leveling up the tracks of railways and also for gaging the space between the rails; and the object of the invention is the provision of a simple and effective instrument for this purpose.

A further object of the invention is the provision of means whereby the spirit-level and leveling-screw of the gage will be protected from damage when the same is not in use.

In the drawings, wherein a preferable embodiment of my invention is shown, Figure 1 is a side elevation, partly in section, showing the implement in position on the rails of the track. Fig. 2 is a plan view of the implement, and Fig. 3 is a detail view showing the protective sleeve for the spirit-level. Fig. 4 is a fragmentary perspective view of the graduated elevating-screw.

Referring now more particularly to the drawings, A designates the body of the track-gage, which is preferably formed of a tubular cylindrical rod, to the ends of which are rigidly secured in any suitable manner the heads B and C. The head B is bifurcated to form the arms *b*, which are flattened on their under sides and are adapted to rest upon the top surface or tread of the rail. Each of the arms *b* is provided on its under side at a suitable distance from its free end with a substantially perpendicular shoulder *b'*, which is adapted to rest against the inner side of the head of the rail when the implement is in position on the track. The head C comprises a single arm *c*, which is flattened on its under side and adapted to rest upon the tread of the opposite rail of the track and which is provided on its under side with a substantially perpendicular shoulder *b'*, adapted to bear against the inner side of the rail. The body portion A of the gage is provided at its central portion with a longitudinally-disposed slot *a*, and secured within said body portion A adjacent the slot *a* and so as to be visible therethrough is a spirit-level D. The spirit-level D is preferably secured within the tubular body portion A by embedding the same in plaster-of-paris,

although any other suitable securing means may be employed.

E designates a sleeve secured upon the body portion A of the gage over the opening *a* therein. The sleeve E is provided adjacent one of its ends with a horizontal slot *e*, which coöperates with a screw *a'*, secured in the body portion A of the gage, so as to permit a limited movement of the sleeve thereon. The sleeve E is also provided with a longitudinally-disposed slot *e'*, which is similar in size and shape to the slot *a* in the body portion A of the gage and which is positioned so as to register therewith when said sleeve is turned as far as possible to the right, the body portion of said sleeve serving to cover the opening *a* in the body portion A of the brace when the sleeve is turned in the opposite direction. The sleeve can be locked in either of its positions by tightening the screw *a'* to clamp said sleeve between the head thereof and the body portion A of the gage.

From the above description it will be obvious that when it is desired to use the gage the sleeve E will be turned to bring the opening *e'* therein into registration with the opening *a* in the body portion A of the gage, so as to permit the inspection of the spirit-level, and will be secured in this position. When the gage is not in use, however, the sleeve E will be turned so as to conceal the opening *a* in the body portion A of the gage to protect the level from injury.

The arm *c* of the head C is provided with a vertically-disposed screw-threaded aperture *c'*, extending therethrough. Threaded in said aperture is the elevating-screw F, which is provided at its upper end with a thumb-screw *f* for manipulating the same. The threaded portion of the elevating-screw F is provided with a flattened portion *f'*, on which is marked a suitable scale. It will be obvious that the elevating-screw can be manipulated to cause the lower end thereof to bear against the upper portion of the tread of the rail underlying the arm *c* of the head C to elevate the end of the gage until the spirit-level indicates that the same is perfectly level. The operator can then by inspecting the scale on the elevating-screw ascertain exactly how much the rail under the head C will have to be raised in order to make the track level. As the elevating-screw F is quite long, it is obvious that if it were allowed to remain in the head C when the implement was not in use it would be quite likely to become bent or broken during



the rough usage to which implements of this character are subjected. To prevent this, I have provided the head B with a screw-threaded aperture  $b^2$ , which is located between the arms  $b$  of the head and which extends into the hollow interior portion of the body portion A of the gage, so that when the gage is not in use the elevating-screw F is removed from the head C and is threaded into the opening  $b^2$  in the head B. The threaded portion of the elevating-screw F will then be inclosed within the interior of the body portion A of the gage and the only portion of the screw which will be exposed will be the thumb-screw  $f$ , and as this will be positioned between the arms  $b$  of the head B there is little likelihood of it being damaged during any rough usage which the gage may receive.

I do not desire to limit myself to the precise form and construction shown in the drawings, as it is obvious that many minor changes might be made thereto without departing from the spirit of the invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A railway-track gage comprising a body portion, a spirit-level secured in said body portion, and a sleeve journaled on the body portion and provided with an opening therein to permit the inspection of the spirit-level.

2. In a railway-track gage, a hollow cylindrical body portion having a longitudinal slot formed therein, a spirit-level secured within the interior of said body portion and adjacent the slot therein, a sleeve journaled on said body portion and having an opening adapted to register with the slot in said body portion during a portion of the movement of said sleeve.

3. In a railway-track gage, a hollow cylindrical body portion having a longitudinal slot formed therein, a spirit-level secured within

the interior of said body portion and adjacent the slot therein, a sleeve journaled on said body portion and having an opening adapted to register with the slot in said body portion during a portion of the movement of said sleeve, and means for locking the sleeve in various positions of adjustment on said body portion.

4. In a railway-track gage, a hollow cylindrical body portion having a longitudinally-disposed opening therein, a spirit-level secured within said body portion and adjacent the opening therein, a sleeve secured on said body portion and having an opening therein adapted to register with the opening in the body portion during a portion of the movement of said sleeve, and a pin-and-slot connection between the sleeve and said body portion.

5. A railway-track gage comprising a hollow body portion, heads secured to the opposite ends thereof, an elevating-screw threaded in one of said heads, and means for housing said elevating-screw within the body portion of the gage, when the same is not in use.

6. In a railway-track gage, a hollow body portion, heads secured to the opposite ends thereof and adapted to overlie the rails of a track, an elevating-screw threaded in the overlying portion of one of said heads, the other of said heads being provided with a threaded aperture extending into the hollow interior of the body portion of the gage and adapted to receive the elevating-screw, when the same is not in use.

In testimony whereof I affix my signature in presence of two witnesses.

CHRISTIAN NELSON.

Witnesses:

H. A. PETERS,  
W. B. McQUEEN.