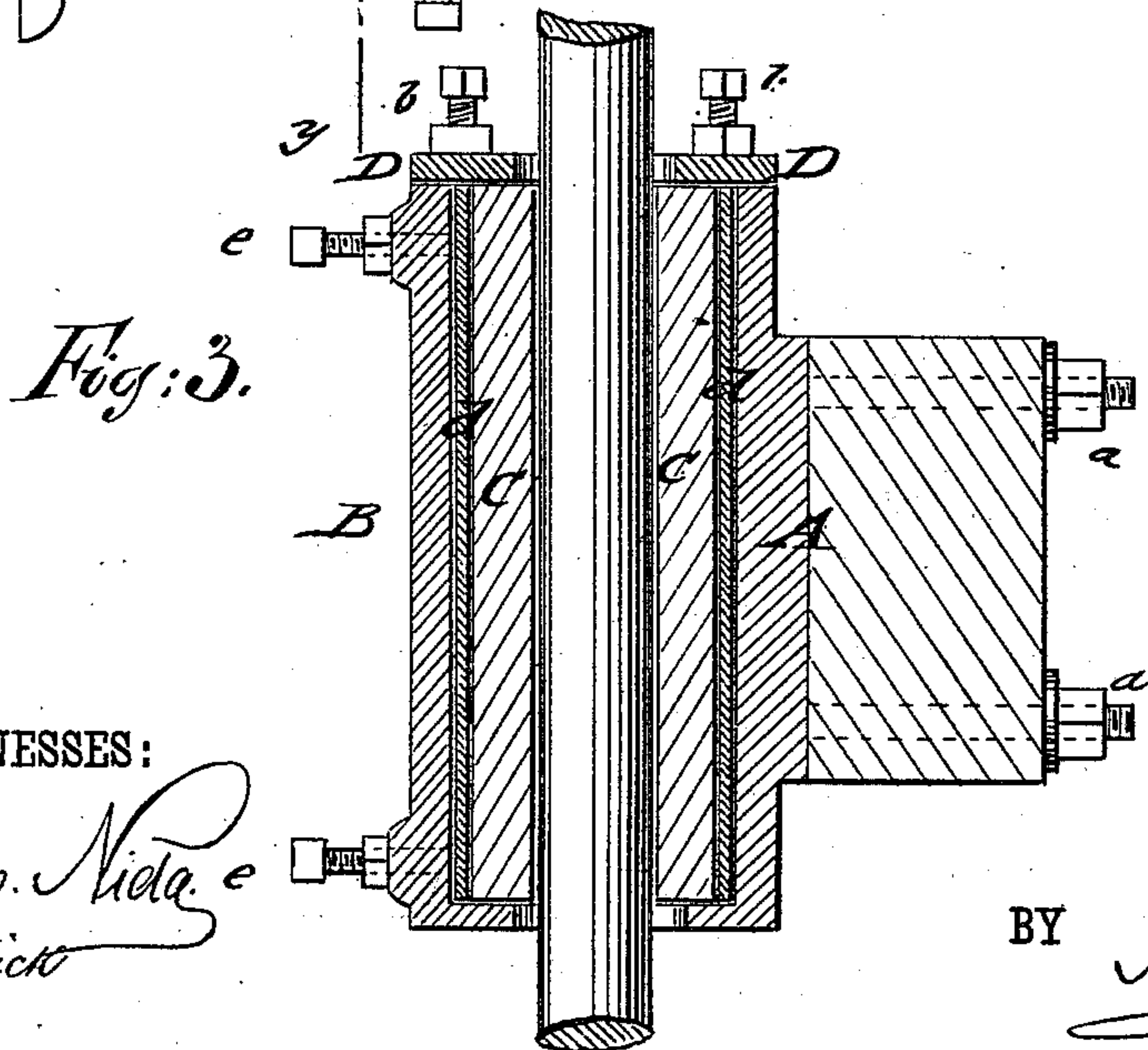
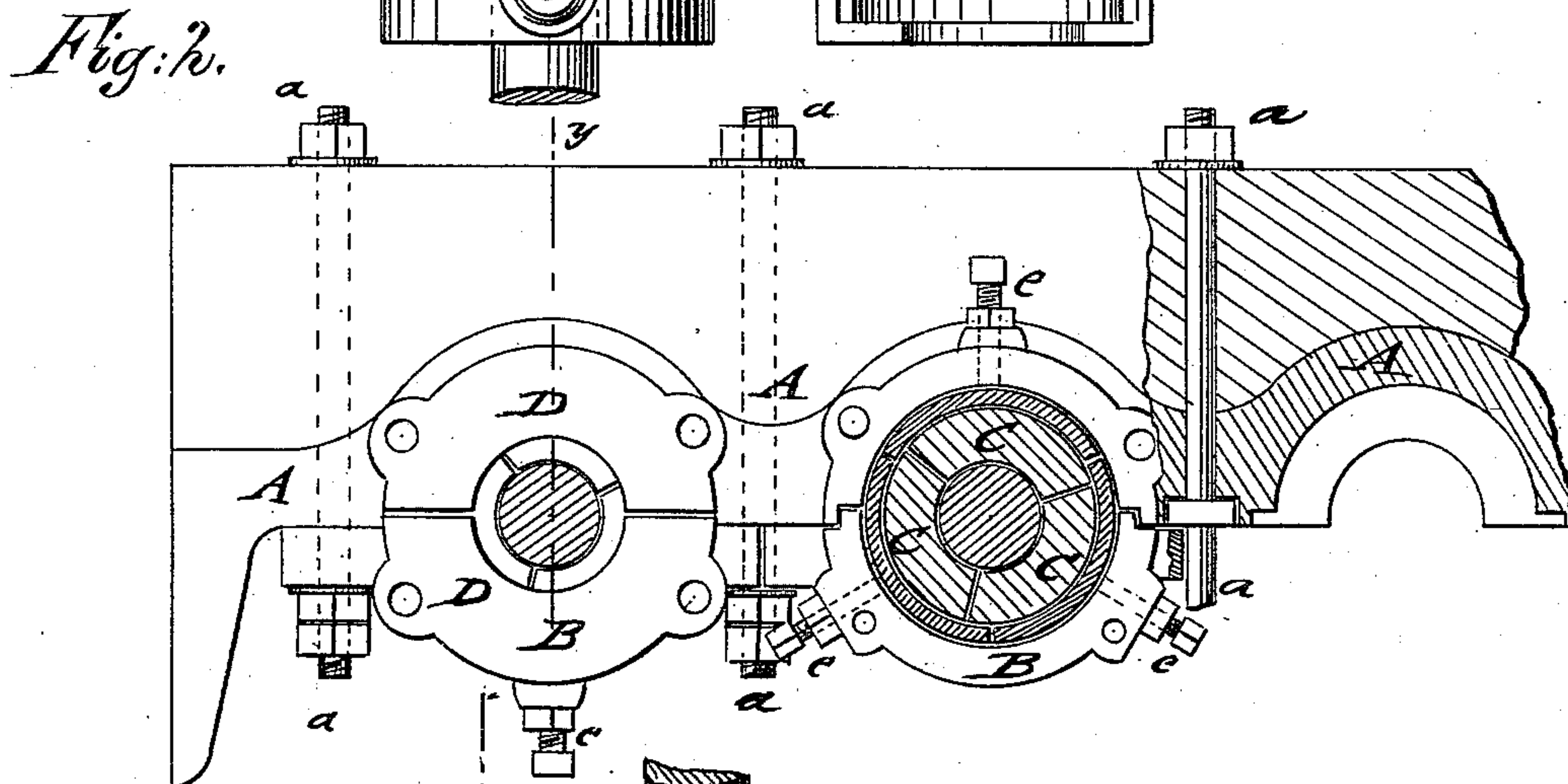
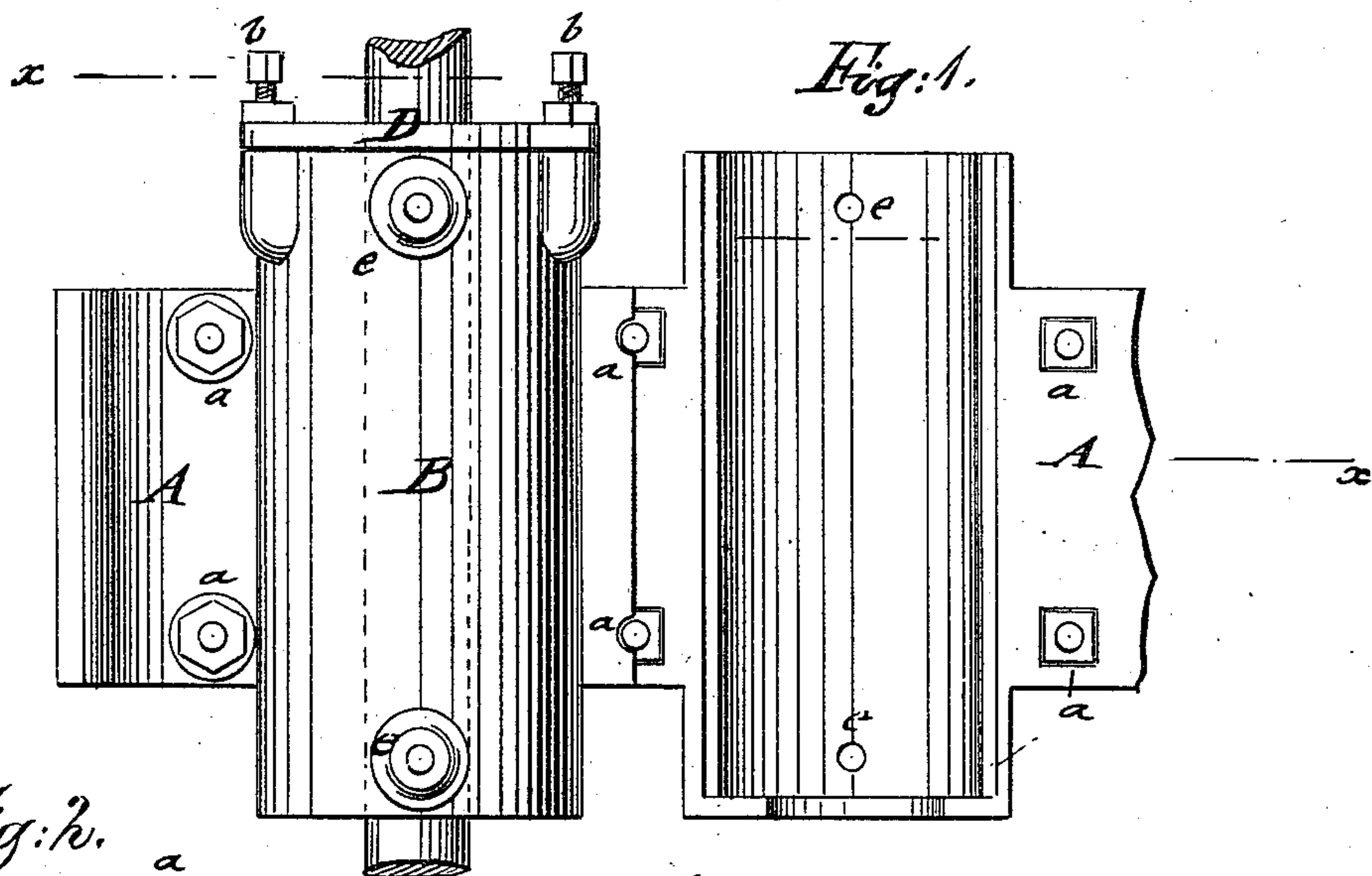


C. CRANE & W. RAUP.  
Guide for the Stems of Stamping-Mills.

No. 213,177

Patented Mar. 11, 1879.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES CRANE AND WILLIAM RAUP, OF PARK CITY, UTAH TERRITORY.

## IMPROVEMENT IN GUIDES FOR THE STEMS OF STAMPING-MILLS.

Specification forming part of Letters Patent No. **213,177**, dated March 11, 1879; application filed September 21, 1878.

*To all whom it may concern:*

Be it known that we, CHARLES CRANE and WILLIAM RAUP, of Park City, in the county of Summit and Territory of Utah, have invented a new Improvement in Guides for the Stems of Stamping-Mills, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a front elevation of our improved battery-guide for stamping-mills. Fig. 2 is a top view of the same, partly in horizontal section on line *x x*, Fig. 1; and Fig. 3 is a vertical transverse section on line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

This invention is intended to furnish an improved battery-guide for stamping-mills of all kinds, by which a strong and solid guide-box for the stems of the stamps is obtained, and the wooden gibs are readily removed from the boxes and replaced. Any guide-box may be repaired while the others are in motion, so as to assure economy in time and labor in repairing, and also in material, as the gibs will last longer and require a considerably smaller quantity of wood.

The invention consists of a casting that is attached to the guide-rail and battery-posts, and provided with as many semicircular box-sections as there are stamps in the battery. The stems or rods of the stamps are guided by the fixed semi-boxes, and by detachable box-sections, and by interior wooden gibs cut with the grain running parallel to the stems. The guide-boxes have removable top caps and bottom flanges for removing the worn-out gibs and admitting, by metallic washer-sections and set-screws, the adjustment of the gibs to the stems of the stamps.

Referring to the drawings, A represents a casting that runs along the face of the guide-rail of the battery, and has end flanges that are fitted to the battery-posts. The casting A is formed with as many semicircular box-sections as there are stamps, and is attached, together with the detachable front shells or box-sections, B, rigidly, by fastening-bolts *a*, to the guide-rail of the battery.

The guide-boxes, which are formed by the casting A and shell-sections B, are open at the top, so as to admit the convenient inserting and removing of the wooden gibs C, but flanged at the bottom for supporting the gibs.

The gibs C are cut out of the wood in such a manner that the grain runs parallel with the stem of the stamp, so as to avoid their splitting or shaking to pieces, as in the ordinary guides. The gibs can be cut in more economical manner, as they require a considerably smaller quantity of wood.

The guides-boxes A B are closed at the top by removable caps D, of semicircular shape, which are screwed down on the boxes by set-screws *b*, for retaining the gibs. By removing the caps the gibs may be readily taken out at the top and the worn-out gibs replaced by new ones. This can be accomplished at either guide of the battery, and the guide thereby repaired while the remaining stamps are in motion, so as to continue thereby the running of the battery, and produce a considerable saving in time and labor.

The gibs C are moved up close to the stem by means of metallic shells or washers *d*, corresponding in shape to the same, and by set-screws *e*, so as to make up for the wear of the gibs and give any desired degree of play to the stems, but preventing their too great wobbling or vibration.

The gibs last for a considerable length of time, as they wear out but slowly, and hold the stamp as true as possible to the die.

The guides may be readily repaired, each independently of the other, and are superior to the old guides used in the batteries of stamping-mills.

What we claim as new and of our invention is—

1. As an improvement in battery-guides, the combination of a continuous casting running along the guide-rail, and having semicircular box-sections, with detachable box-sections, both sections having bottom flanges and removable top caps for the gibs, substantially as and for the purpose set forth.

2. In battery-guides, the combination of fixed and detachable box-sections, having bottom flanges and removable top caps, with interior gibs, adjusted by shell or washer sections and set-screws, substantially as and for the purpose set forth.

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Witnesses:

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