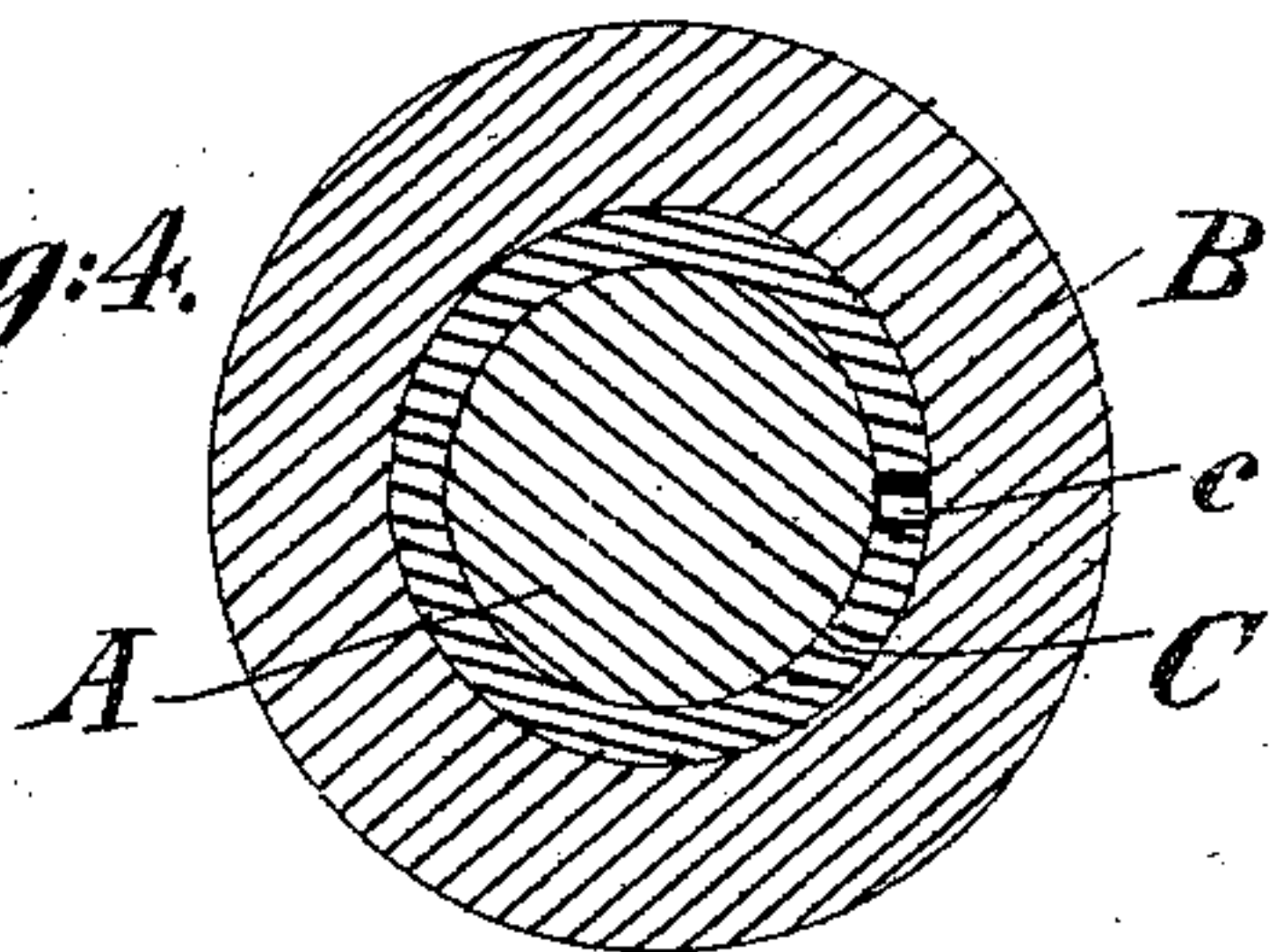
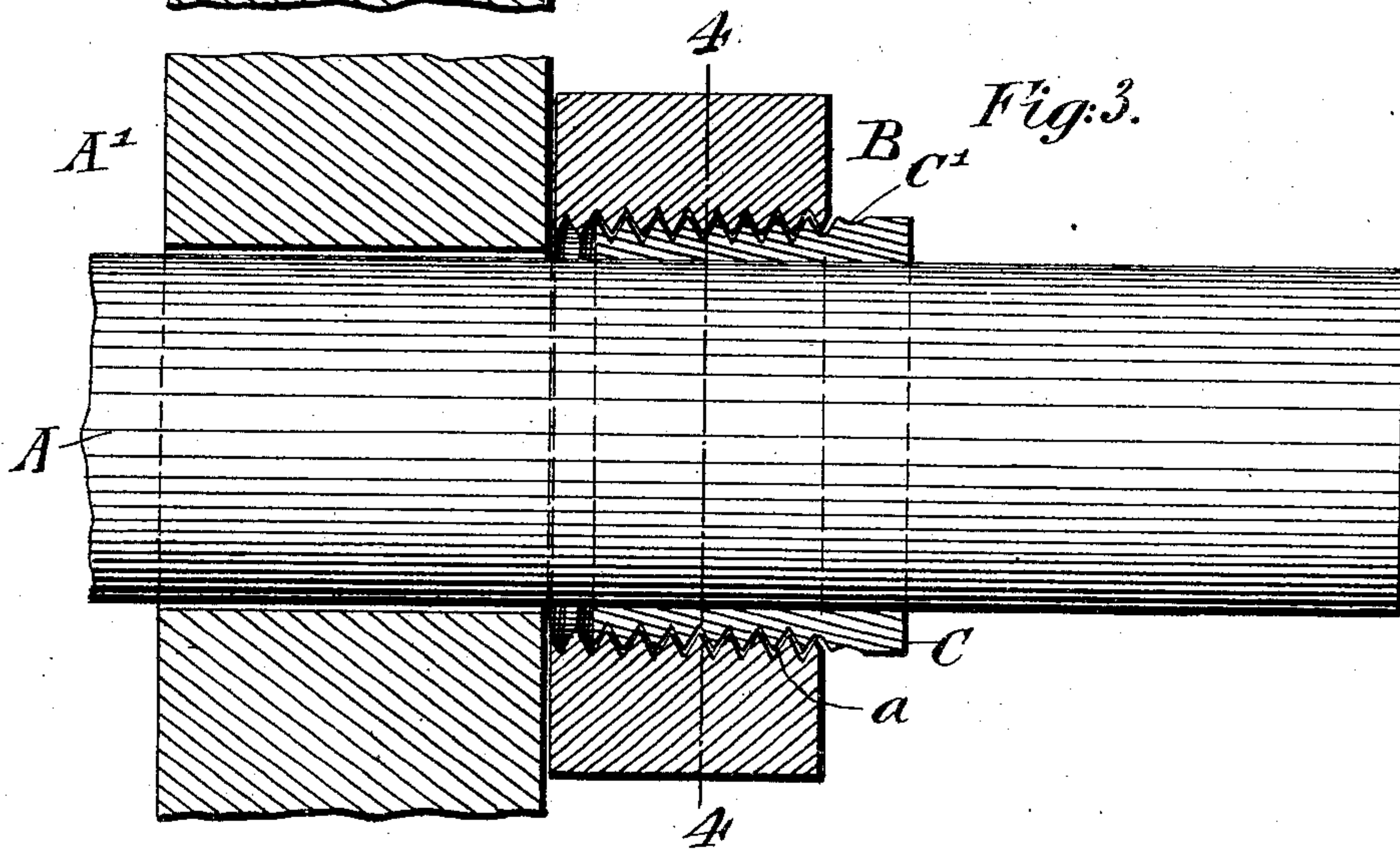
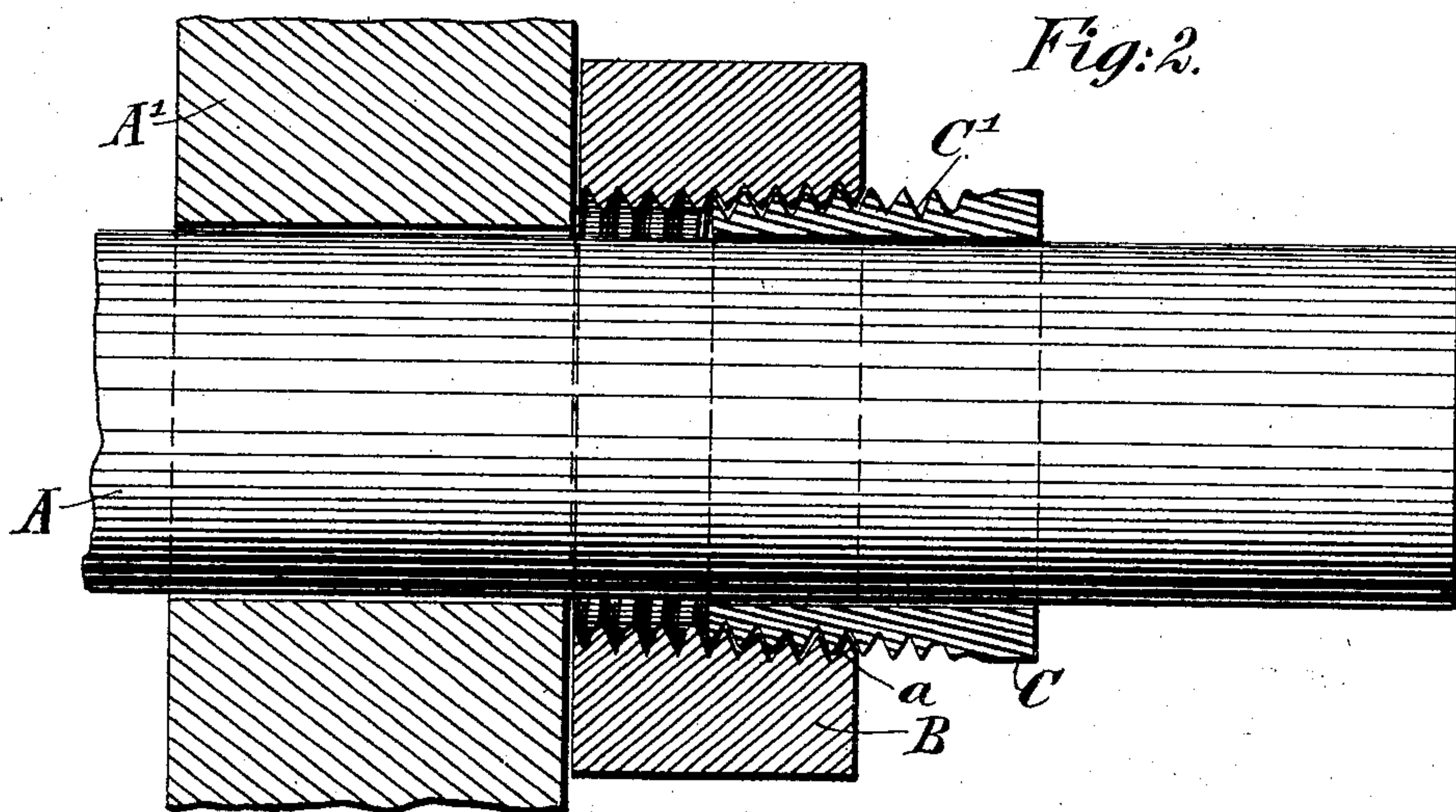
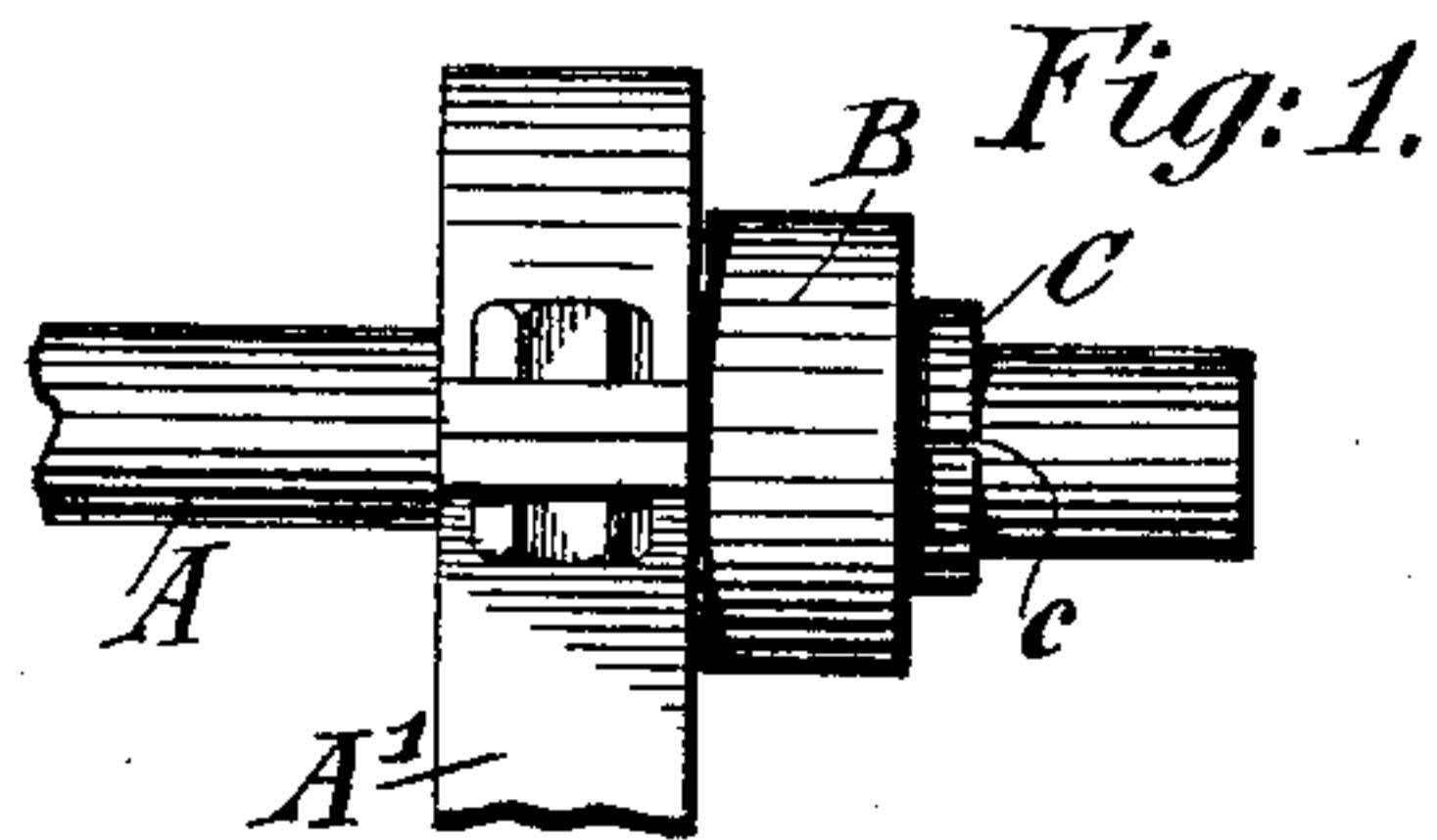


No. 736,095.

PATENTED AUG. 11, 1903.

B. HECHT.  
COLLAR FOR SHAFTS.  
APPLICATION FILED APR. 9, 1902.

NO MODEL.



WITNESSES:  
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ATTORNEYS.



# UNITED STATES PATENT OFFICE.

BERTHOLD HECHT, OF BROOKLYN, NEW YORK.

## COLLAR FOR SHAFTS.

SPECIFICATION forming part of Letters Patent No. 736,095, dated August 11, 1903.

Application filed April 9, 1902. Serial No. 102,116. (No model.)

*To all whom it may concern:*

Be it known that I, BERTHOLD HECHT, a citizen of the United States, residing in New York, borough of Brooklyn, and State of New York, have invented certain new and useful Improvements in Collars for Shafts, of which the following is a specification.

This invention relates to an improved collar for retaining machine-shafts in place in their supporting-bearings. The collars heretofore used for this purpose were provided with set-screws adapted to engage at their inner ends with the shaft, and thereby hold the collars in position. The heads of the set-screws projected from the collars, and as said projecting heads rotated they formed a constant source of danger and in many cases caused serious injury to persons working about the machinery.

The object of this invention is to provide a collar which will overcome this objection and in which the fastening set-screw is entirely dispensed with; and for this purpose the invention consists of a shaft-collar comprising a collar provided with an interior thread, a longitudinally-split spring clamping-sleeve, and an exterior thread on said sleeve provided with a shallow-cut portion adapted to cramp said sleeve before projection of the same beyond the inner or wearing face of the collar.

In the accompanying drawings, Figure 1 is a side elevation of my improved collar for shafts. Figs. 2 and 3 are vertical longitudinal sections of the same, showing the collar respectively in position before and after the same has been screwed home on the clamping-sleeve, by which it is held on the shaft; and Fig. 4 is a vertical transverse section on line 4 4, Fig. 3, drawn on a smaller scale.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a part of a shaft of a machine provided with my improved collar. The collar B, by which the shaft is held in position in the supporting frame A' of the machine, is provided with an interior screw-thread *a*, which engages the exteriorly-threaded end of a cylindrical clamping-sleeve C, which is provided with the longitudinal split *c* and slipped on the shaft after the collar B has been placed in position thereon, as shown in Fig. 2. The collar B is then screwed home on the sleeve, as shown in Fig. 3. In order to obtain the desired bind-

ing of the sleeve C on the shaft A, the exterior thread C' of the sleeve gradually diminishes in depth and finally runs out at its inner end onto the flat or non-threaded exterior portion of the sleeve, so that the collar will be caused to jam with the sleeve at the shallow-cut upper portion of the thread. The sleeve clamps the shaft securely when screwed home. Either the sleeve C or the collar B can be used for forming the stop by which the shaft is held in position in its bearings. When the collar is to be used for this purpose, the threaded portion of the sleeve has to be made sufficiently shorter than the thickness of the collar, so that the sleeve will not project beyond the inner or wearing face of the collar when screwed home, which is the construction shown in the drawings, while when the sleeve serves as a stop the unthreaded end butts upon the shaft-support A'.

As the projecting set-screw used heretofore for the collars is entirely dispensed with and the clamping-sleeve substituted in place of the same, no projecting part is used with the collar, so that the danger from these set-screws is entirely averted, and in place thereof a collar with an interiorly-threaded clamping-sleeve substituted, which can be readily applied to the shaft and which can be readily removed for repairs.

In operation the collar and sleeve are applied directly to the shaft. Then by the turning home of the collar the clamping and the locking of the sleeve by the shallow end of its thread take place, so as to hold the collar at its proper position on the shaft.

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

A shaft-collar, consisting of a movable collar provided with an interior thread, and a longitudinally-split spring clamping-sleeve, there being an exterior thread on said sleeve provided with a shallow-cut portion adapted to cramp said sleeve before projection of the same beyond the inner or wearing face of the collar, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

BERTHOLD HECHT.

Witnesses:

PAUL GOEPEL,  
C. BRADWAY.