

No. 895,769.

PATENTED AUG. 11, 1908.

O. KOHNSTAMM.

BOLT ANCHOR.

APPLICATION FILED SEPT. 6, 1907.

Fig:1.

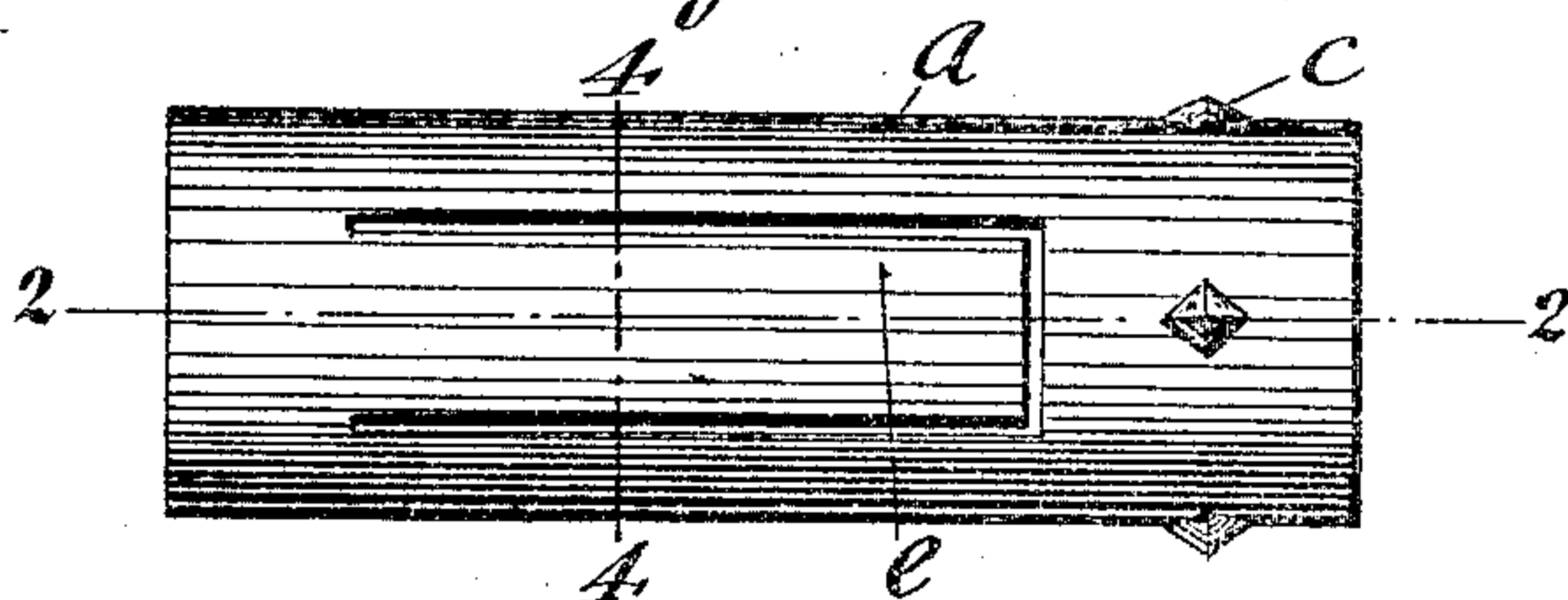


Fig:2.

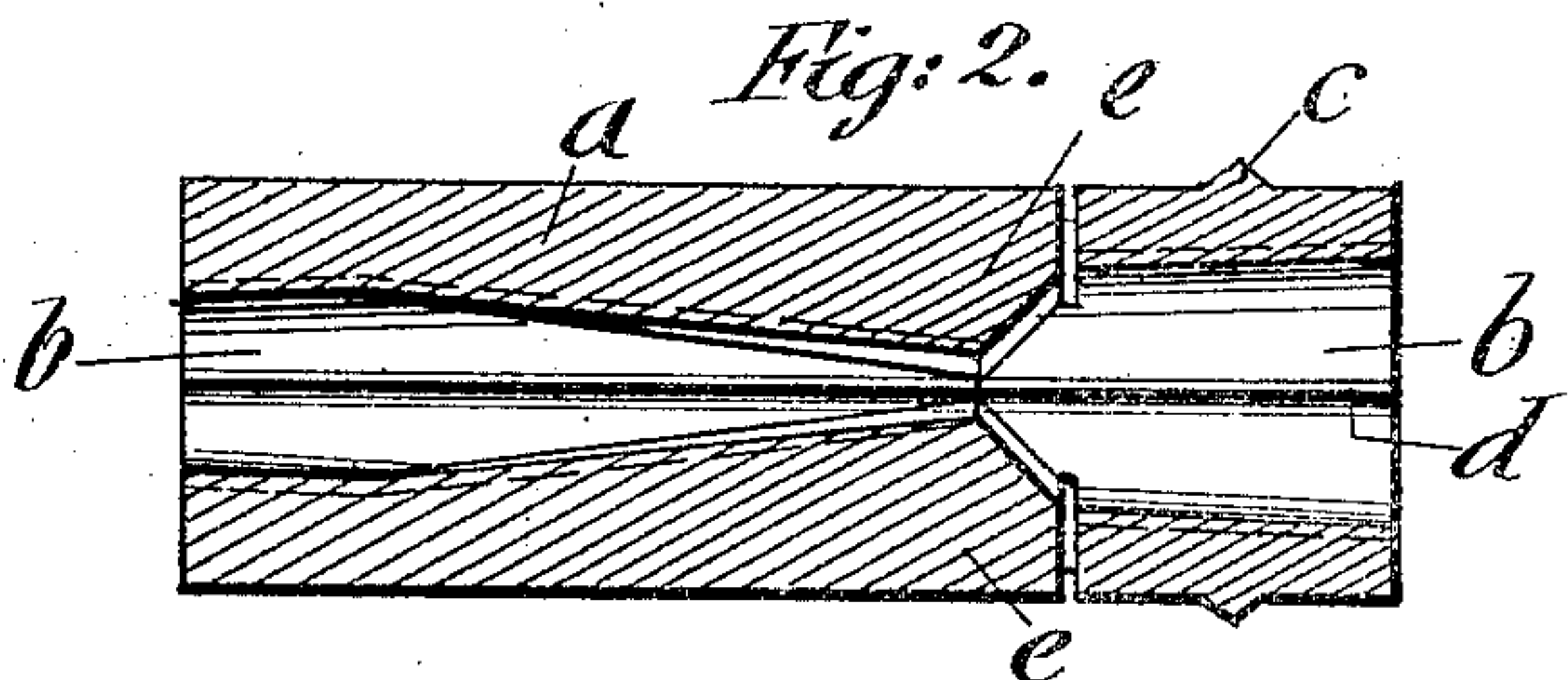


Fig:3.

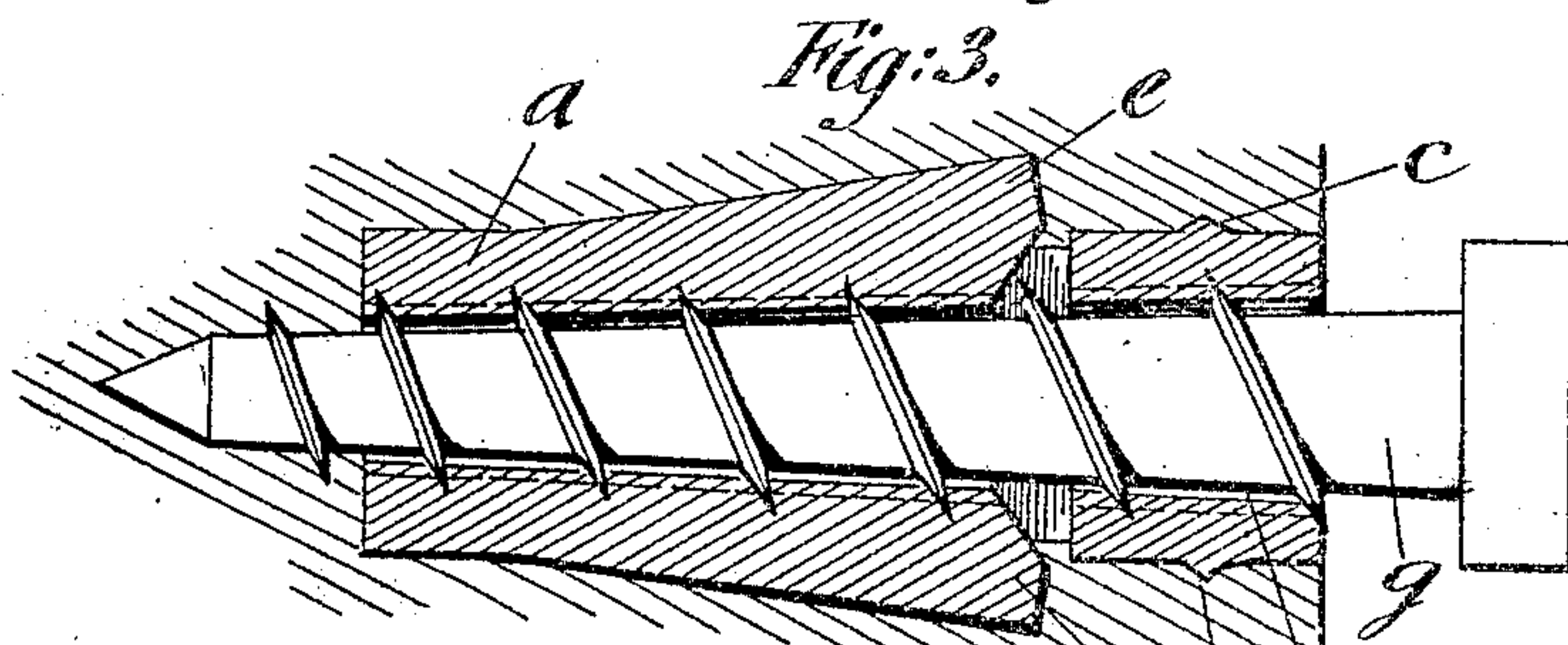


Fig:4.

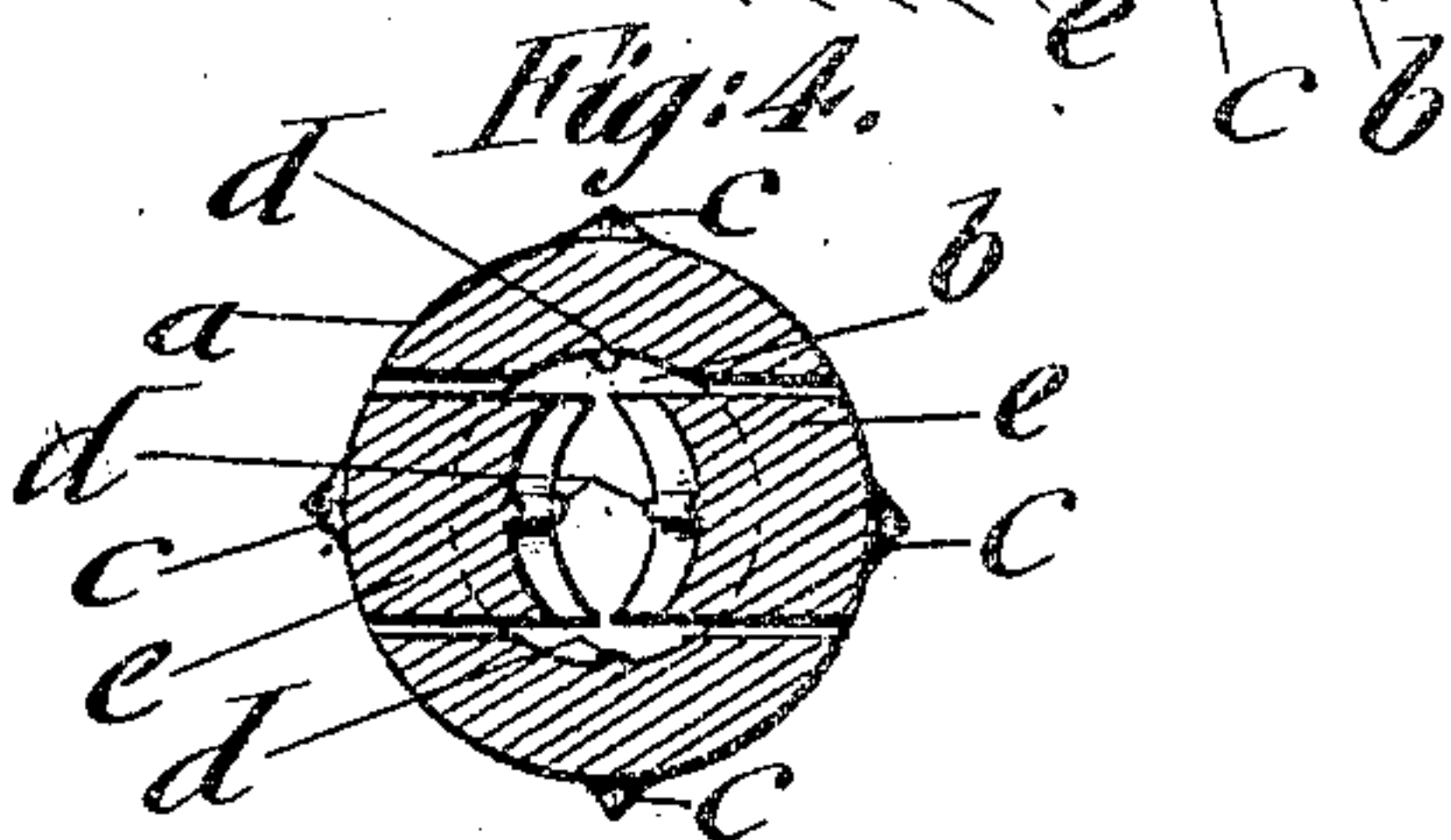
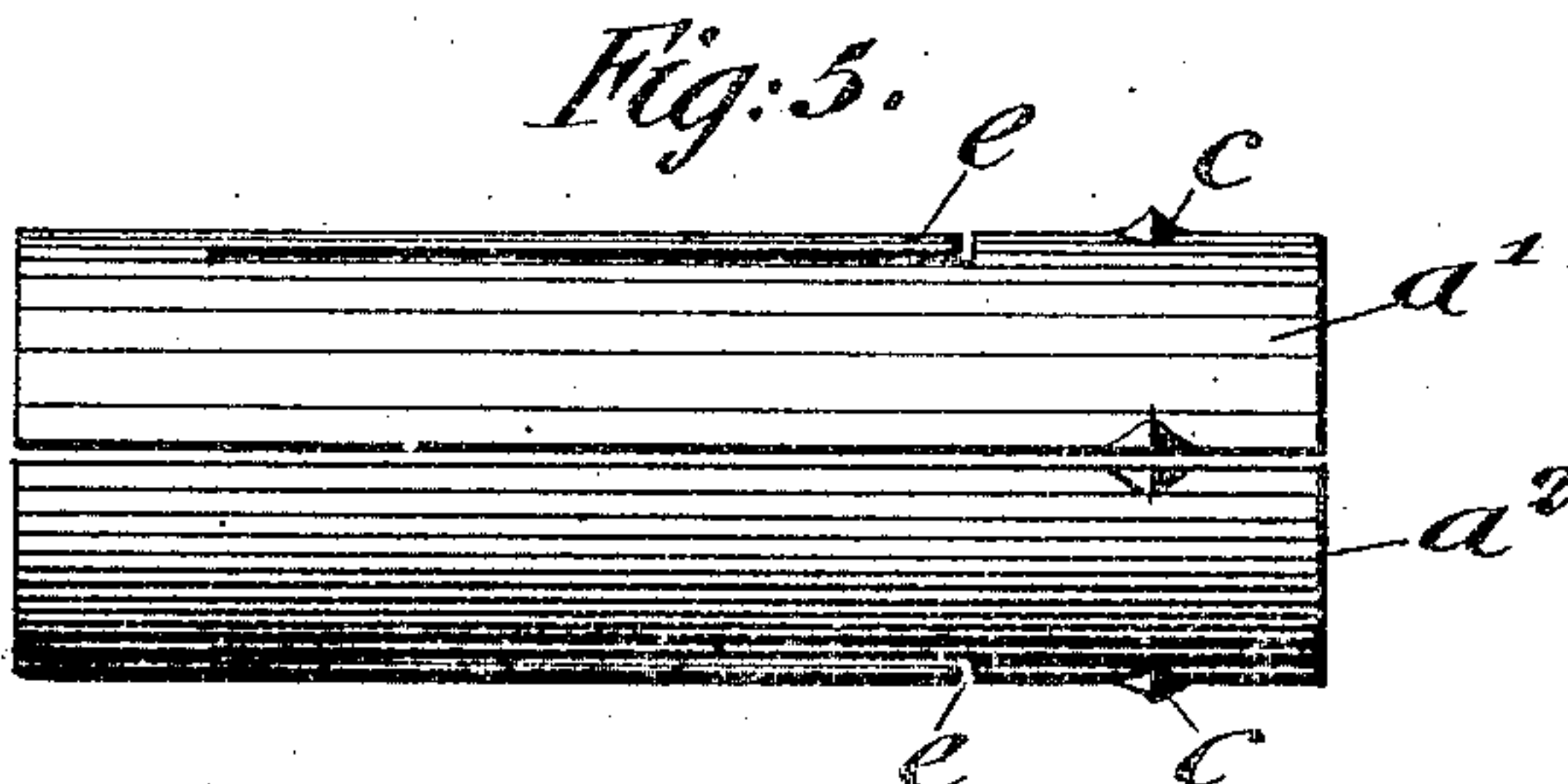


Fig:5.



Witnesses:
Fannie F.
Harris & Scherker.

Inventor
Otto Kohnstamm
By his Attorneys
Gruce Loebel

UNITED STATES PATENT OFFICE.

OTTO KOHNSTAMM, OF NEW YORK, N. Y.

BOLT-ANCHOR.

No. 895,769.

Specification of Letters Patent.

Patented Aug. 11, 1908.

Application filed September 6, 1907. Serial No. 391,846.

To all whom it may concern:

Be it known that I, OTTO KOHNSTAMM, a citizen of the United States, residing in New York, borough of Manhattan, and State of New York, have invented certain new and useful Improvements in Bolt-Anchors, of which the following is a specification.

This invention relates to bolt-anchors such as are embedded in cement or between bricks or masonry in order to firmly secure a bolt, screw or nail which may be used for various purposes.

The object of the invention is to provide a bolt anchor of simple construction having means whereby the same may be very securely anchored in the concrete or masonry, and in which this anchoring is effectively and reliably produced by the bolt itself in being driven into the anchor.

With this end in view the invention consists in a bolt-anchor which comprises the novel features of construction to be hereinafter described and claimed.

In the accompanying drawing, in which the same reference characters denote the same parts throughout the figures, Figure 1 is an elevation of a bolt-anchor constructed in accordance with the invention, Fig. 2 is a longitudinal section on line 2, 2, Fig. 1, Fig. 3 is a similar section, showing the anchor in use, Fig. 4 is a transverse section on line 4, 4, Fig. 1, and Fig. 5 is an elevation of a modified form of the anchor, showing the anchor consisting of two halves.

Referring to the drawing, the body *a* of the anchor is made of substantially tubular form and preferably of soft metal such as lead. Said body is formed with a longitudinal bore *b* which tapers from end to end, as best shown in Fig. 3, and this bore is largest at the outer end of the anchor into which the end of the bolt is introduced.

At the outer or driving end, the body *a* is provided exteriorly with a transverse row of projections *c* which serve as anchoring devices, as shown in Fig. 3. The bore *b* is ribbed, as shown in Fig. 2, the ribs *d* running longitudinally and serving to be engaged by the threads of the bolt or screw or to tightly hug a nail or similar device.

The body of the anchor is slitted longitudinally and transversely on opposite sides, as best shown in Fig. 1, in such a manner as to form anchoring flukes *e*. The longitudinal slits are located at the middle part of the body, while each transverse slit is cut in the body near the outer or driving end, so that the flukes are connected with the body only near the inner or forward end of the same. Each fluke *e* is enlarged inwardly at its free end so as to project considerably into the bore *b*, while the outer surface of the fluke is normally flush with that of the body *a*. In the forms of the device illustrated, two flukes are provided, and these are located diametrically, as shown.

In the modification illustrated in Fig. 5, the body instead of being made in one piece, is divided longitudinally into two sections *a*¹ and *a*², each of the sections being formed with a fluke or anchoring wing similar to those just described.

In operation the anchor is placed in position in a socket prepared for its reception in the cement or masonry. In this first position the flukes *e* are inoperative, but the projections *c* at the outer end of the anchor embed themselves in the concrete. The bolt *g* to be anchored in the concrete is then driven into the anchor, its end being inserted into the enlarged end of the tapering bore. As the bolt is screwed home its thread bites into the ribs or ridges *d* and further as the enlarged ends of the flukes project into the bore they are spread apart by engagement with the entering bolt, as shown in Fig. 3, in such a manner as to be moved outwardly at their free ends, the metal bending at the connected ends of the flukes which form, so to speak, pivots for the same. In this manner the free ends of the flukes are forced laterally out into the concrete or masonry so that it is impossible to withdraw the anchor. At the same time the bolt is firmly gripped by the anchor and held in position therein.

It is apparent that the device may also be used for securing screws, nails and similar devices; and also that changes in the details of the construction may be made without departing from the scope of the invention.

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

5 A bolt-anchor, comprising a body having a bore and flukes formed in the wall of the body, with one of their ends connected with the body, and each of their free ends provided with thickened portions projecting into the bore.

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

OTTO KOHNSTAMM.

Witnesses:

FANNIE FISK,
HENRY J. SUHRBIER.