

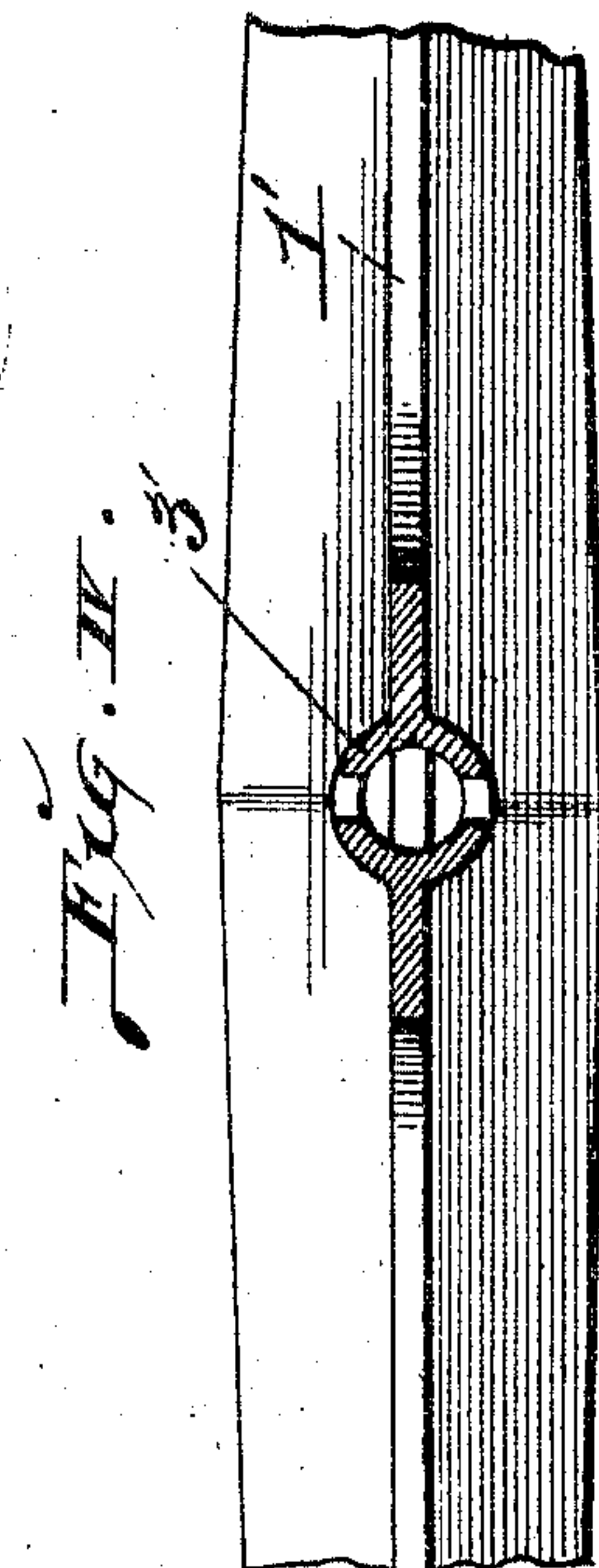
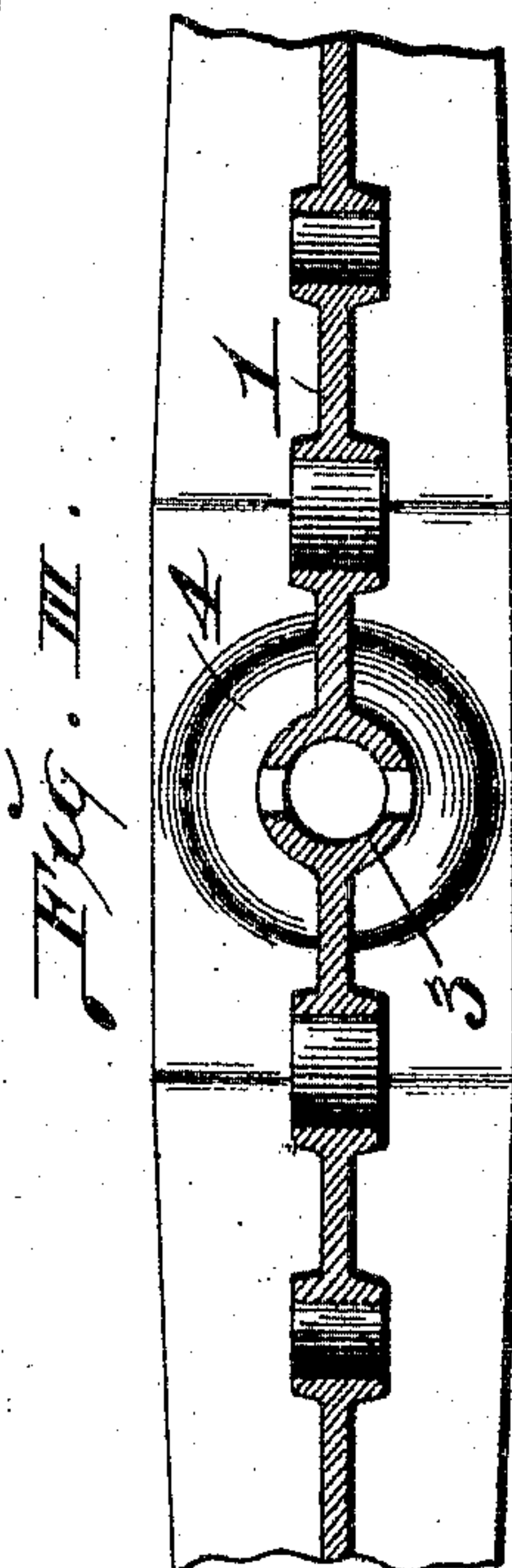
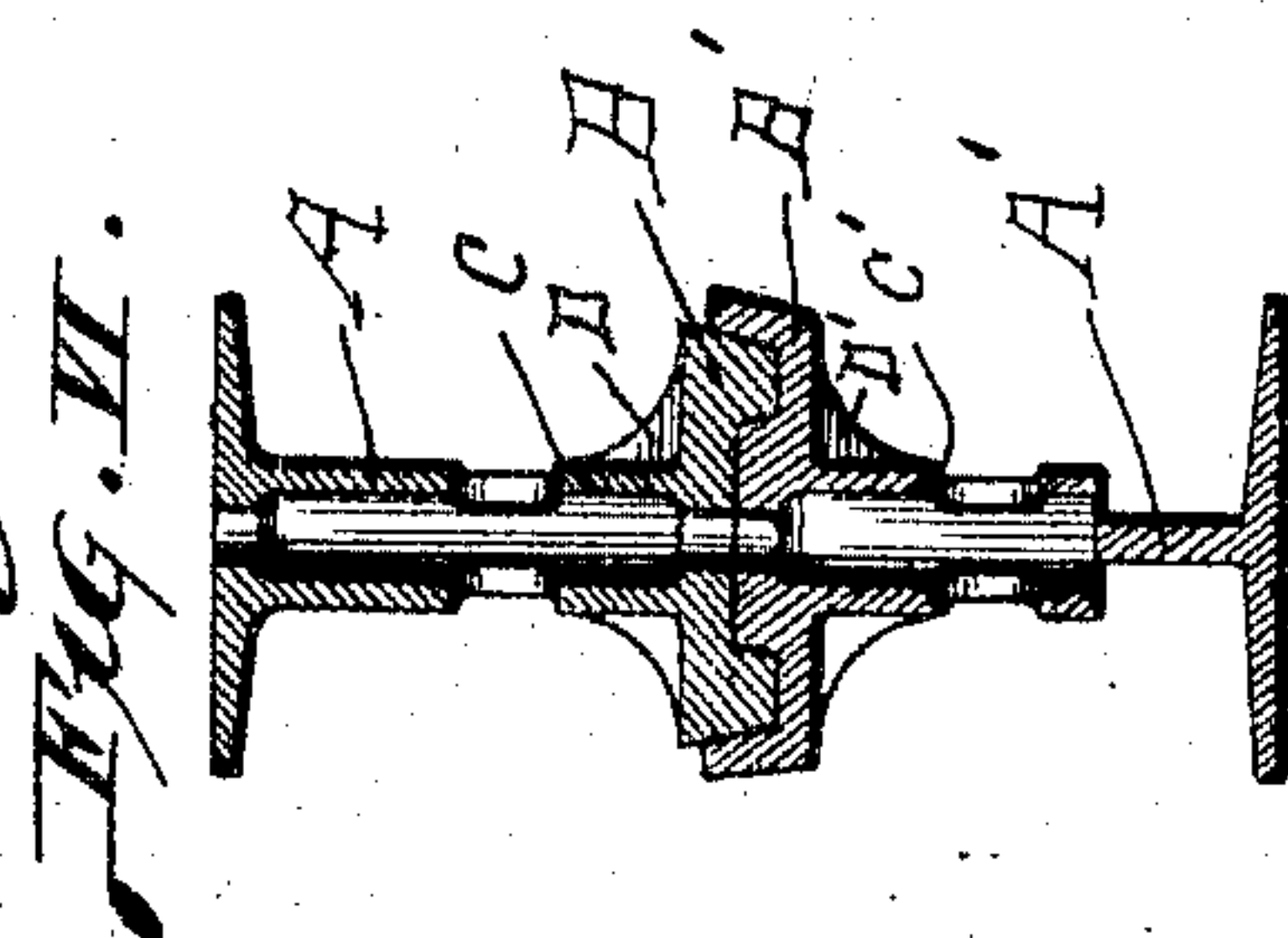
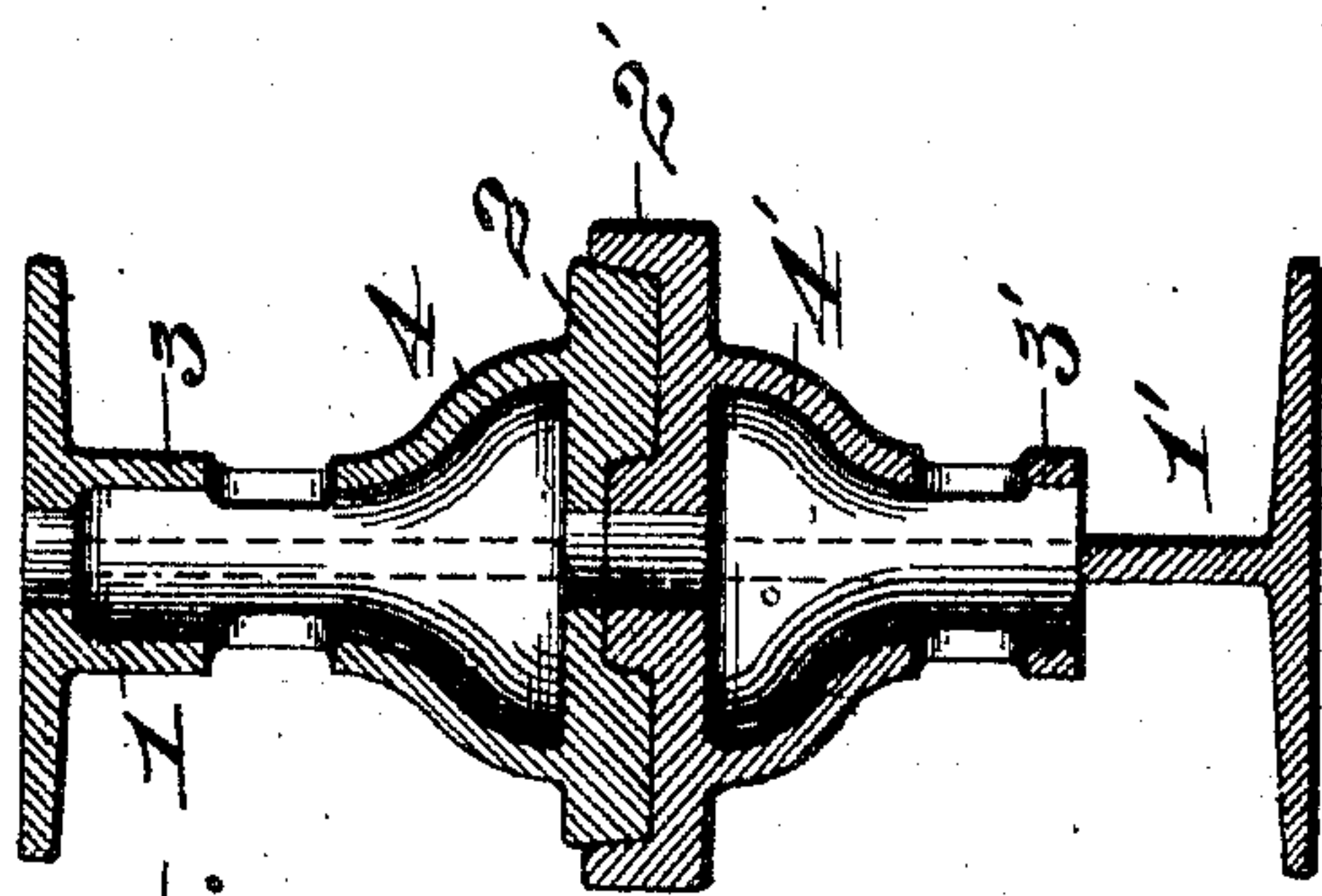
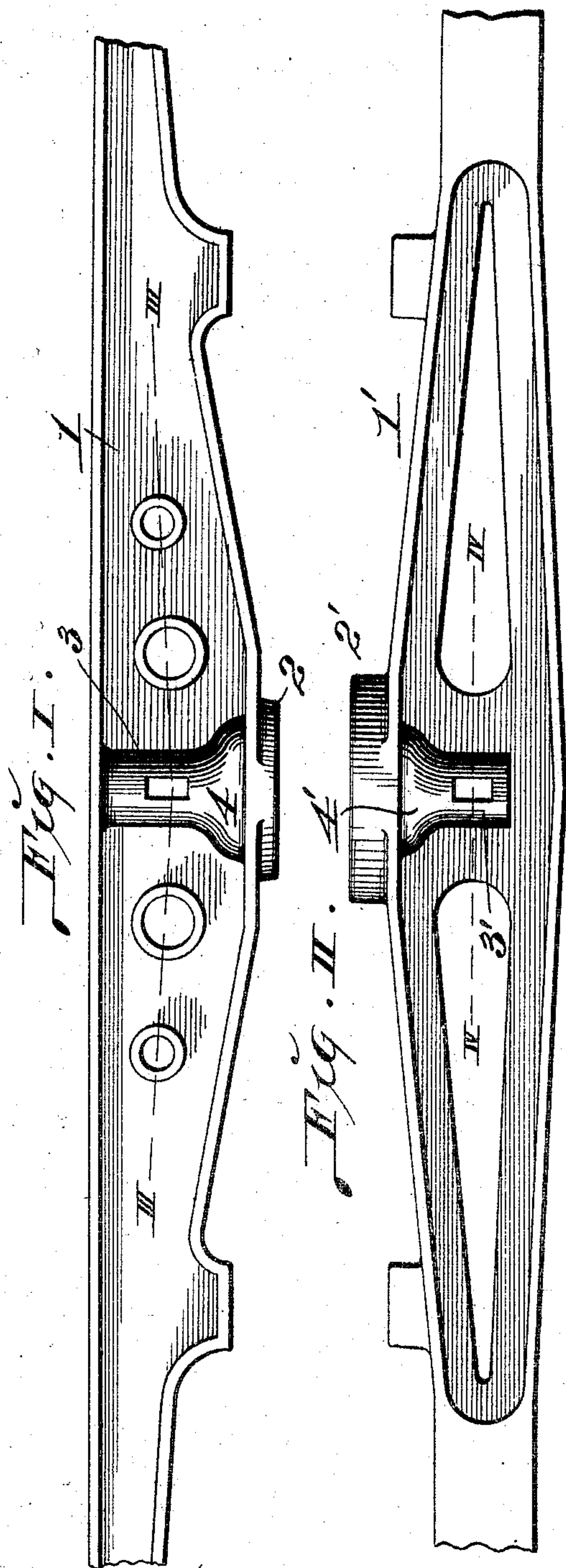
No. 776,234.

PATENTED NOV. 29, 1904.

J. GREEN.
CAR BOLSTER.

APPLICATION FILED MAR. 24, 1904.

NO MODEL.



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UNITED STATES PATENT OFFICE.

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CAR-BOLSTER.

SPECIFICATION forming part of Letters Patent No. 776,234, dated November 29, 1904.

Application filed March 24, 1904. Serial No. 199,765. (No model.)

To all whom it may concern:

Be it known that I, JOHN GREEN, a citizen of the United States, residing in the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Car-Bolsters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an improvement in car-bolsters that is applicable to either a truck-bolster or a body-bolster, the object of the invention being to furnish means for efficiently reinforcing the center-bearings of bolsters of either of the kinds named.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a side elevation of a body-bolster having my reinforcing construction embodied therein. Fig. II is a side elevation of a truck-bolster having my reinforcing construction embodied therein. Fig. III is a longitudinal section taken on line III III, Fig. I. Fig. IV is a longitudinal section taken on line IV IV, Fig. II. Fig. V is a transverse vertical section taken through the central portions of a body-bolster and a truck-bolster assembled and each having my improvement embodied therein. Fig. VI is a view similar to Fig. V, showing the reinforcing construction heretofore in use and which my improvement is designed to supplant.

In car-bolsters as heretofore constructed, both of the body and truck type, the center-bearings of the bolsters project beyond the king-pin posts to an extent that renders such center-bearings liable to damage, owing to severe strain, unless some means is utilized to sustain them. It has been the practice heretofore to reinforce said center-bearings by casting brackets extending from positions immediately above or below the center-bearings, according to the type of bolster, to the king-pin posts, as I have illustrated in Fig. VI. These brackets have usually been placed at right angles to the longitudinal center line of the bolsters. As a result of placing the reinforcing-brackets in the position stated a

surplus of metal at the junctions of the reinforcing-brackets with the adjacent other members of the bolster is produced, and this surplus of metal by reason of its being of a greater body cools more gradually after a casting is made, resulting in the metal checking or cracking at or near the junction of the brackets and the adjacent posts or members. Furthermore, on account of the checking and cracking action due to the surplus metal at the points named the brackets are necessarily made of slight thickness, and therefore have not protected the projecting portions of the center-bearings to any material extent, and it has been found necessary in some cases to provide two or more brackets at each side of the bolster in an effort to more completely reinforce the exposed portions of the center-bearings; but wherever these brackets are used, no matter what number of them there may be, there has always been a tendency to check and crack, as stated, thereby destroying their efficiency.

My improvement consists in enlarging the king-posts of the bolsters adjacent to the center-bearings, so as to form swells at such location, which may be either cylindrical, rectangular, or any other desirable cross-section, according to different designs or styles of bolsters.

Referring now more particularly to the constructions illustrated in my drawings, 1 designates a body-bolster, and 2 its center-bearing.

3 is the king-pin post of the bolster extending in a line common to the central portion of the center-bearing, but of smaller diameter than said bearing, as is usual in cast-metal bolsters. At the base of the king-pin post 3 at each side of the bolster is a swell 4, that is of shell form, as seen in Fig. V, and bulges outwardly from the central portion of the king-pin post to the center-bearing to reinforce said bearing and receive the direct force of any strain to which the bearing may be subjected.

In the truck-bolster 1' (illustrated in Figs. II, IV, and V) the center-bearing 2' is situated above the bolster-body, as usual, and the king-pin post 3' extends upwardly toward said

center-bearing and is formed with a swell 4' of similar shape to that, 4, of the body-bolster which leads from the central portion of the king-pin post to a point beneath the overhang-
5 ing center-bearing, where it serves to reinforce and sustain said bearing against the downward straining thrust to which it is subjected.

It will be observed that by enlarging the
10 king-pin post into swell form adjacent to the center-bearings of the bolster there is provided a uniform support for the projecting portions of said bearings throughout said portions, and by having the bodies of the king-pin posts of
15 the proper size to receive the king-pin ample support for the center-bearing is efficiently secured, and there being only a single thickness of all the members of the bolster surplus of metal at all points is obviated, thereby completely overcoming the liability of the metal
20 checking or cracking, to the detriment of the center-bearing-reinforcing members.

In Fig. VI, wherein the old type of rein-

forcement of the bolster center-bearings hereinbefore referred to is illustrated, A and A' 25 designate, respectively, body and truck bolsters having center-bearings B and B' and king-pin posts C and C' of uniform diameter throughout their lengths. D and D' are the reinforcing-brackets of web form, to which al- 30 lusion has been made.

I claim as my invention—

1. A car-bolster having a center-bearing jutting from the body thereof, a king-pin post, and reinforcing-swells projecting outwardly 35 from the body of said king-pin post to said center-bearing, substantially as set forth.

2. A car-bolster having a center-bearing jutting from the body thereof, a king-pin post, and swells of shell form projecting outwardly 40 from the body of said king-pin post to said center-bearing, substantially as set forth.

JOHN GREEN.

In presence of—

E. S. KNIGHT,
BLANCHE HOGAN.