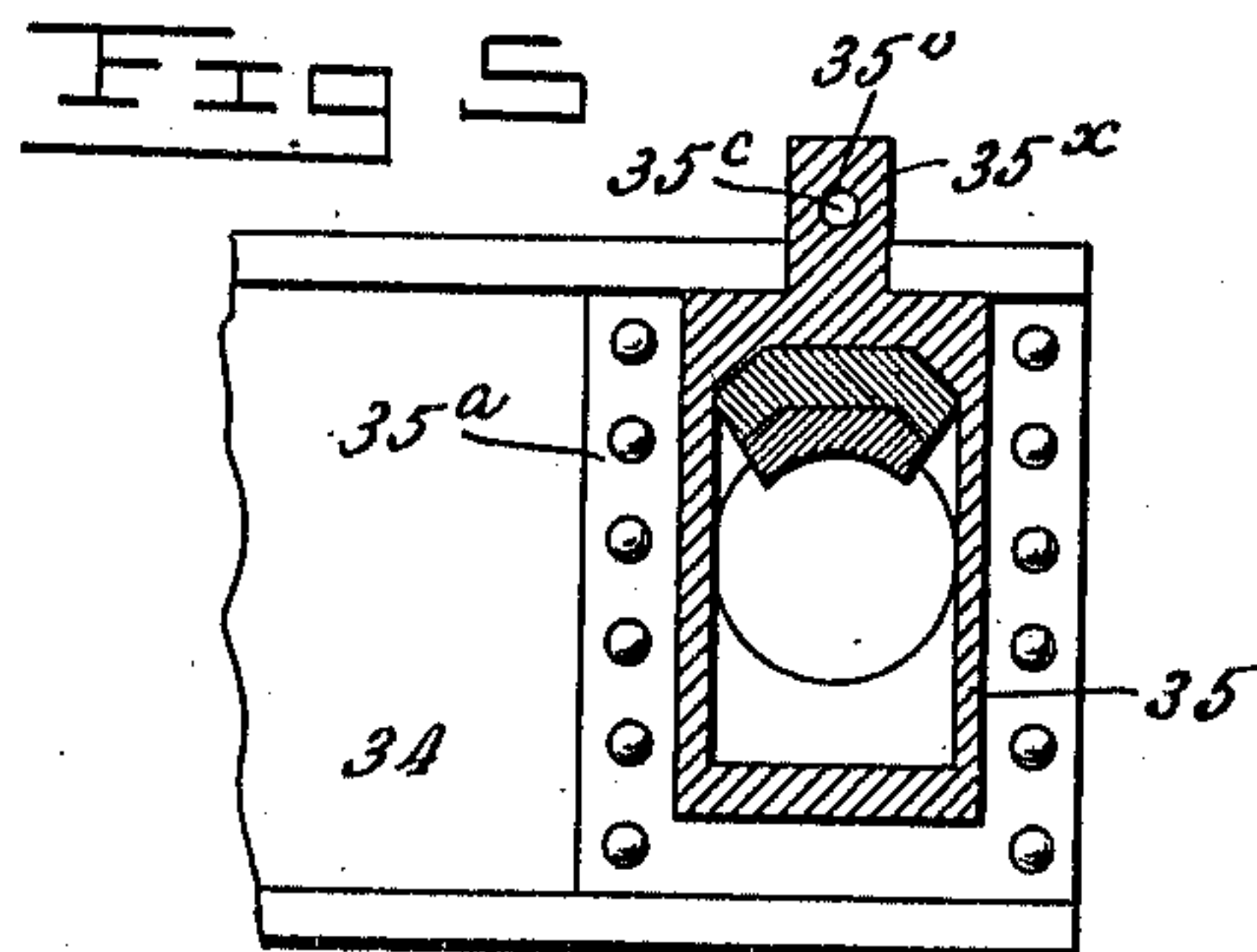
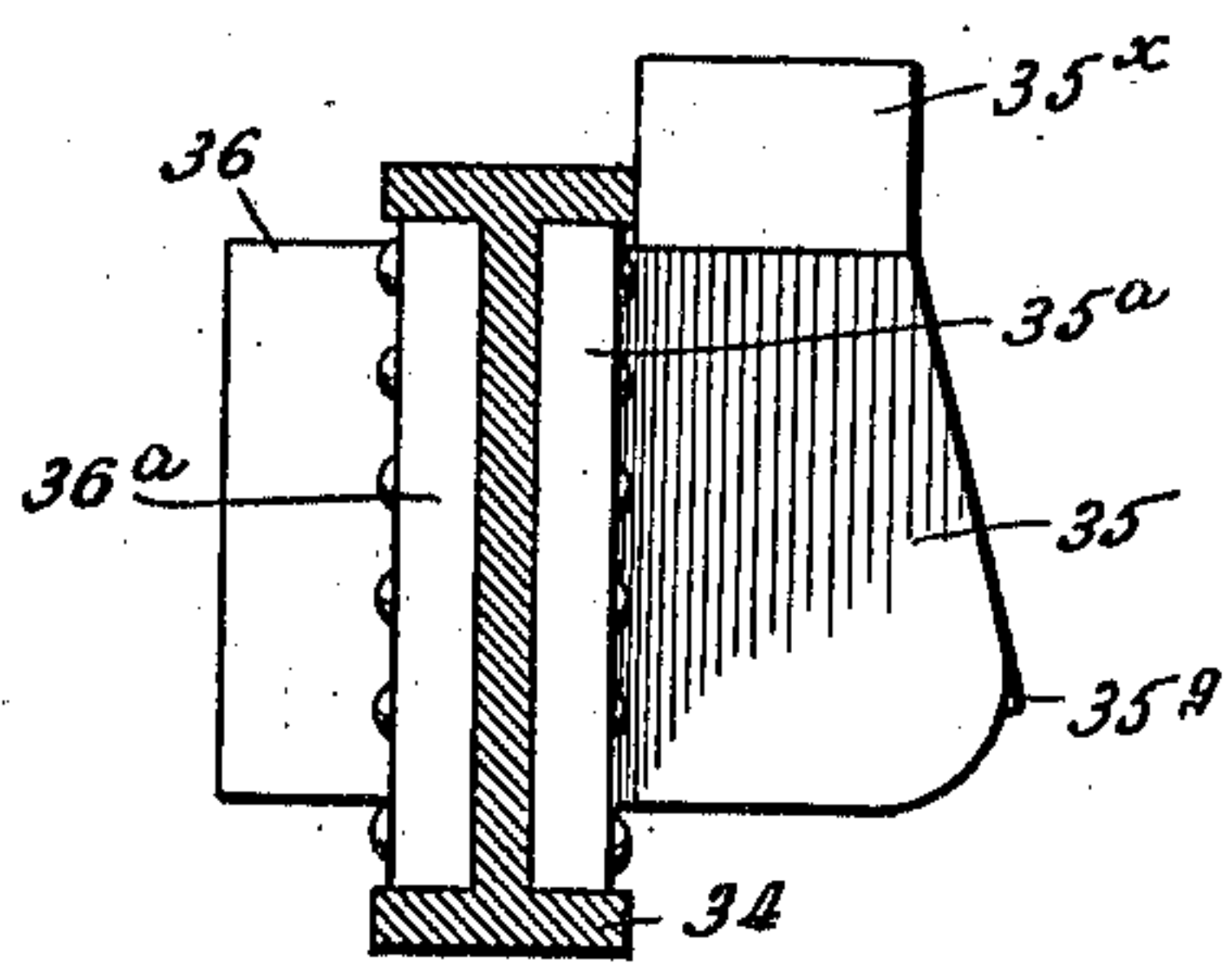
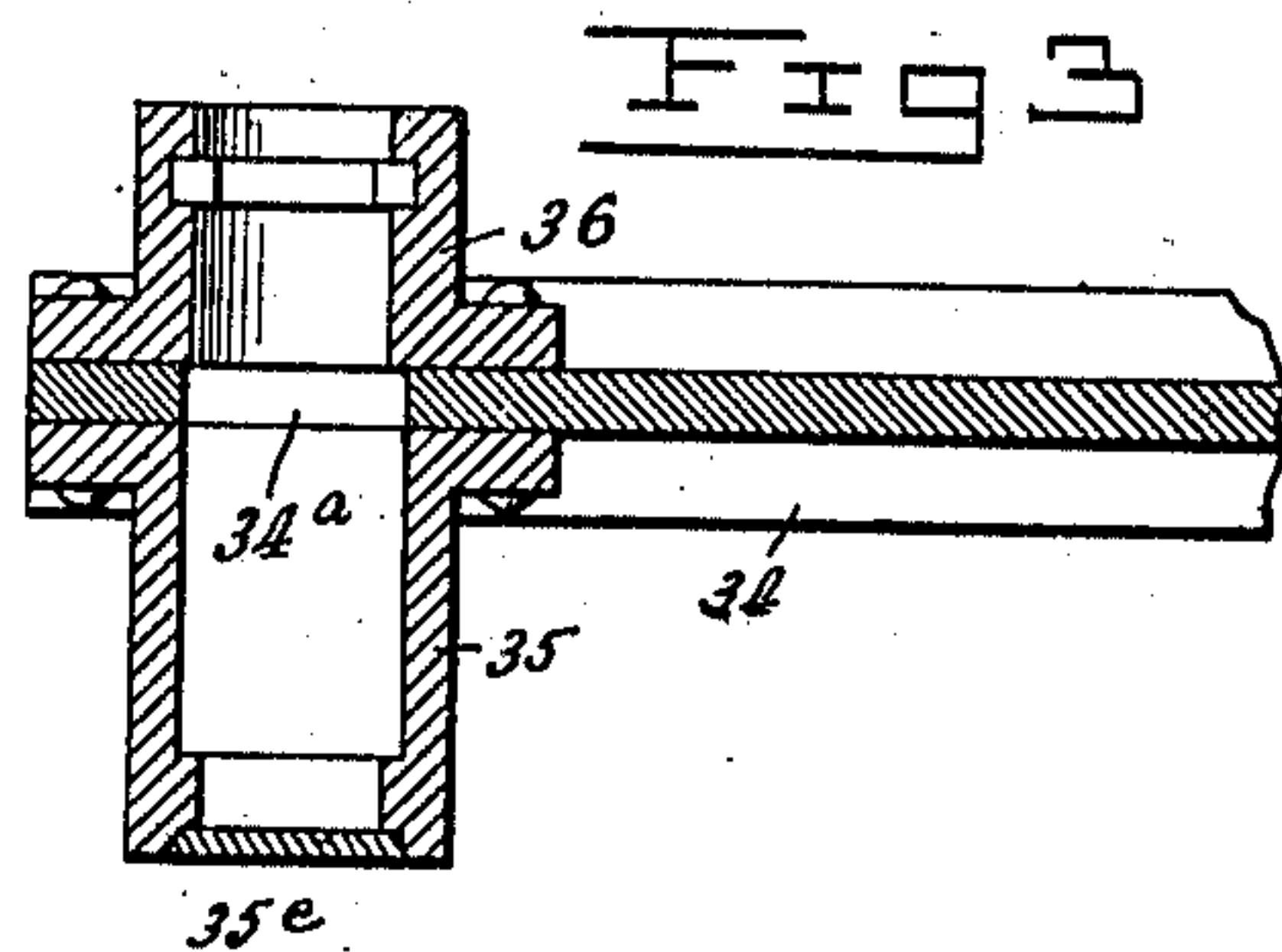
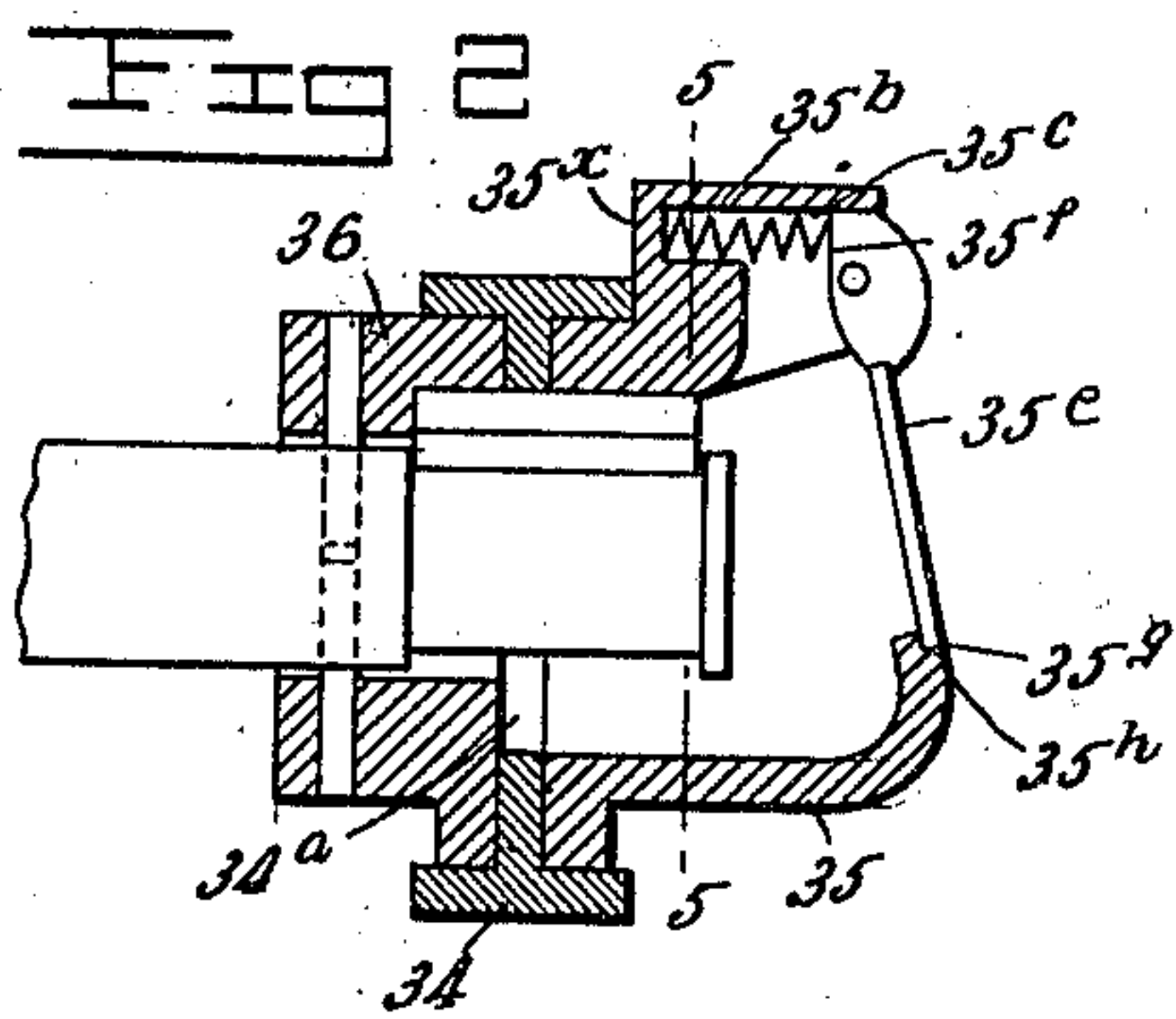
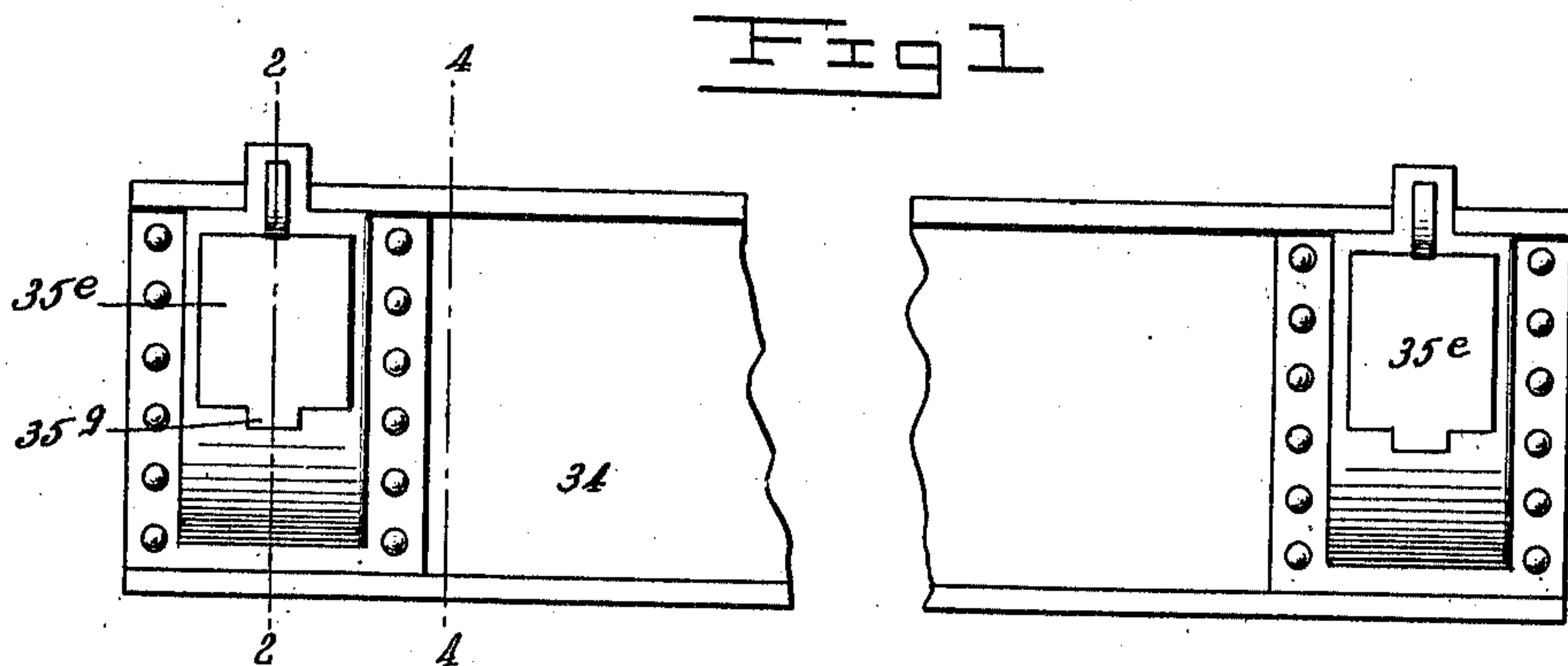


H. W. BLAKE.
SIDE FRAME FOR CAR TRUCKS.
APPLICATION FILED AUG. 19, 1910.

990,189.

Patented Apr. 18, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY W. BLAKE, OF BALL GROUND, GEORGIA.

SIDE FRAME FOR CAR-TRUCKS.

990,189.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Original application filed November 23, 1909, Serial No. 529,649. Divided and this application filed August 19, 1910. Serial No. 578,003.

To all whom it may concern:

Be it known that I, HENRY W. BLAKE, a citizen of the United States, residing at Ball Ground, in the county of Cherokee and State of Georgia, have invented new and useful Improvements in Side Frames for Car-Trucks, of which the following is a specification.

My invention relates to improvements in side frames for trucks, and has particular relation to the formation of a journal box structure in connection therewith.

The principal object of my invention is to provide a construction in which the journal boxes are permanently carried by the side frames of the truck.

A further object is the provision of a journal box in the form of a two-part casing, the parts being mounted on opposite sides of the side frame, the latter having an opening within the planes of the casing.

Other and further objects will be readily understood from the following description of parts.

The invention herein disclosed is a division of that set forth in my companion application, filed November 23, 1909, Serial No. 529,649, and consists in the improved construction and combination of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

In the accompanying drawings, in which similar reference characters indicate similar parts in each of the views, Figure 1 is a side elevation of a side frame embodying my invention. Fig. 2 is a vertical sectional view taken on line 2—2 of Fig. 1, the wheel axle being shown in position. Fig. 3 is a horizontal sectional view. Fig. 4 is a vertical sectional view taken on line 3—3 of Fig. 1. Fig. 5 is a sectional view taken on line 5—5 of Fig. 2.

The side frame herein illustrated preferably forms a part of the truck structure forming the subject-matter of my companion application hereinbefore identified, the present application pertaining to the particular structure of the journal box portion thereof.

In the drawings, 34 designates a side frame, preferably of the I-beam shape in cross-section, said frame having journal

boxes secured thereto, each box being formed in two parts 35 and 36, secured, by bolts or rivets, to the opposite sides of the web of the beam. To permit of the formation of the box in this manner, the beam is formed with an opening 34^a, restricted to an area which will permit of the passage thereof through of the bearing end of the axle, the brasses, and the journal box wedge, with the necessary play of the parts in use, the area, however, being not greater than the area of the interior of the box parts on the line of connection with the beam. By this construction, weakening of the beam by the formation of the opening is restricted, while the periphery of the opening is reinforced by the flanged construction of the box parts, the reinforcement being on opposite sides of the beam.

Each part 35 and 36 is of a shape approximating a portion of a journal box, the line of division between the two parts corresponding to a line approximating the center of the usual one-piece box. The inner faces of the parts are provided with peripheral flanges 35^a and 36^a, said flanges being adapted to permit of the securing of the parts to the beam, the flanges being of a width to form an efficient reinforcement as well as securing flanges.

The part 35 of the journal box is formed at its top with an extension 35^x within which is formed a recess 35^b to receive a spring 35^c which serves to normally retain the lid 35^e closed, said lid having an ear 35^f pivotally secured within the extension, said ear having a shoulder against which the spring is adapted to contact. As shown, the lid is of less area than the area of the front periphery of the part 35, said part being recessed to receive the lid to a depth which will permit the lid, when closed, to lie flush with the face of the part 35, this construction preventing liability of the lid being accidentally opened. To permit of a ready opening of the lid, the latter is provided with a small tongue 35^g which enters a recess 35^h of the part 35, the tongue and recess being complementally formed to permit of the insertion of a tool or the fingers beneath the tongue to raise the lid. The journals are located approximate the ends of the frame 34, and as will be readily un-

derstood, each journal is in the form of a two-part casing mounted on opposite sides of the vertical portion of the side frame.

It is to be understood that wherever found
5 necessary cotter pins will be made use of for the purpose of retaining pins and other removable parts in position and against separation. Furthermore, it is to be understood that where necessary, parts will be
10 riveted together to retain them in permanent engagement.

Having thus described my invention, what I claim as new is:—

1. A truck side frame having a two-part
15 journal box secured to and located on opposite sides of the frame, the frame forming a permanent portion of the box, said journal box being adapted to receive a wheel axle and its bearing adjuncts.

20 2. A truck side frame having an I-beam configuration in cross-section and also having a two-part journal box secured thereto, said frame forming a permanent portion of the box, said journal box being adapted to
25 receive a wheel axle and its bearing adjuncts.

3. A truck side frame having an opening, and a journal box part located on each side of the frame and positioned to inclose the
30 opening, the several journal box parts being adapted to receive a wheel axle and its bearing adjuncts.

4. A truck side frame having an opening, and a journal box part located on each side of
35 the frame and positioned to inclose the opening, the frame forming a permanent portion of the complete journal box, said journal box being adapted to receive a wheel axle and its bearing adjuncts.

40 5. A truck side frame having an opening, and a journal-box part located on each side of the frame and positioned to inclose the opening, one of said parts carrying the journal-box lid.

45 6. A truck side frame having an opening, and a journal box having a part located on each side of the frame and positioned to inclose the opening, one of said parts carrying the journal-box lid, said lid being pivotally

mounted and normally seated within a recess of the part and lying flush with the
50 face of the part.

7. A truck side frame having a vertical portion and a separately formed journal box secured thereto and comprising a two part
55 casing mounted on opposite sides of the vertical portion, said journal box being adapted to receive a wheel axle and its bearing adjuncts.

8. In a car truck, a side frame having a
60 vertical portion, a two-part journal box secured thereto and located on opposite sides of the vertical member, the frame forming a permanent portion of the box, said journal box being adapted to receive a wheel axle
65 and its bearing adjuncts.

9. In a car truck, a side frame having a vertical portion, provided with a journal opening, and a journal box part located on
70 each side of the vertical portion and positioned to inclose the opening, the frame forming a permanent portion of the complete journal box, said journal box being adapted to receive a wheel axle and its bearing
75 adjuncts.

10. A truck side frame having a vertical portion, a two-part journal box secured thereto and located on opposite sides of the vertical member, the frame forming a permanent portion of the box, said journal box
80 being adapted to receive a wheel axle and its bearing adjuncts.

11. A truck side frame having a vertical portion, provided with a journal opening, and a journal box part located on each side
85 of the vertical portion and positioned to inclose the opening, the frame forming a permanent portion of the complete journal box, said journal box being adapted to receive a wheel axle and its bearing adjuncts.
90

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY W. BLAKE.

Witnesses:

A. W. ROBERTS,
J. N. DONALD.

It is hereby certified that in Letters Patent No. 990,189, granted April 18, 1911, upon the application of Henry W. Blake, of Ball Ground, Georgia, for an improvement in "Side Frames for Car-Trucks," errors appear in the printed specification requiring correction as follows: Page 1, line 105, the word "journals" should read *journal-boxes*; and page 2, line 1, the word "journal" should read *journal-box*; and that the proper corrections have been made in the files and records of the Patent Office and are hereby made in the said Letters Patent.

Signed and sealed this 25th day of July, A. D., 1911.

[SEAL.]

E. B. MOORE,
Commissioner of Patents.