

MILLER & HENRY.

Car-Axle Box.

No. 56,977.

Patented Aug. 7, 1866.

Fig. 1

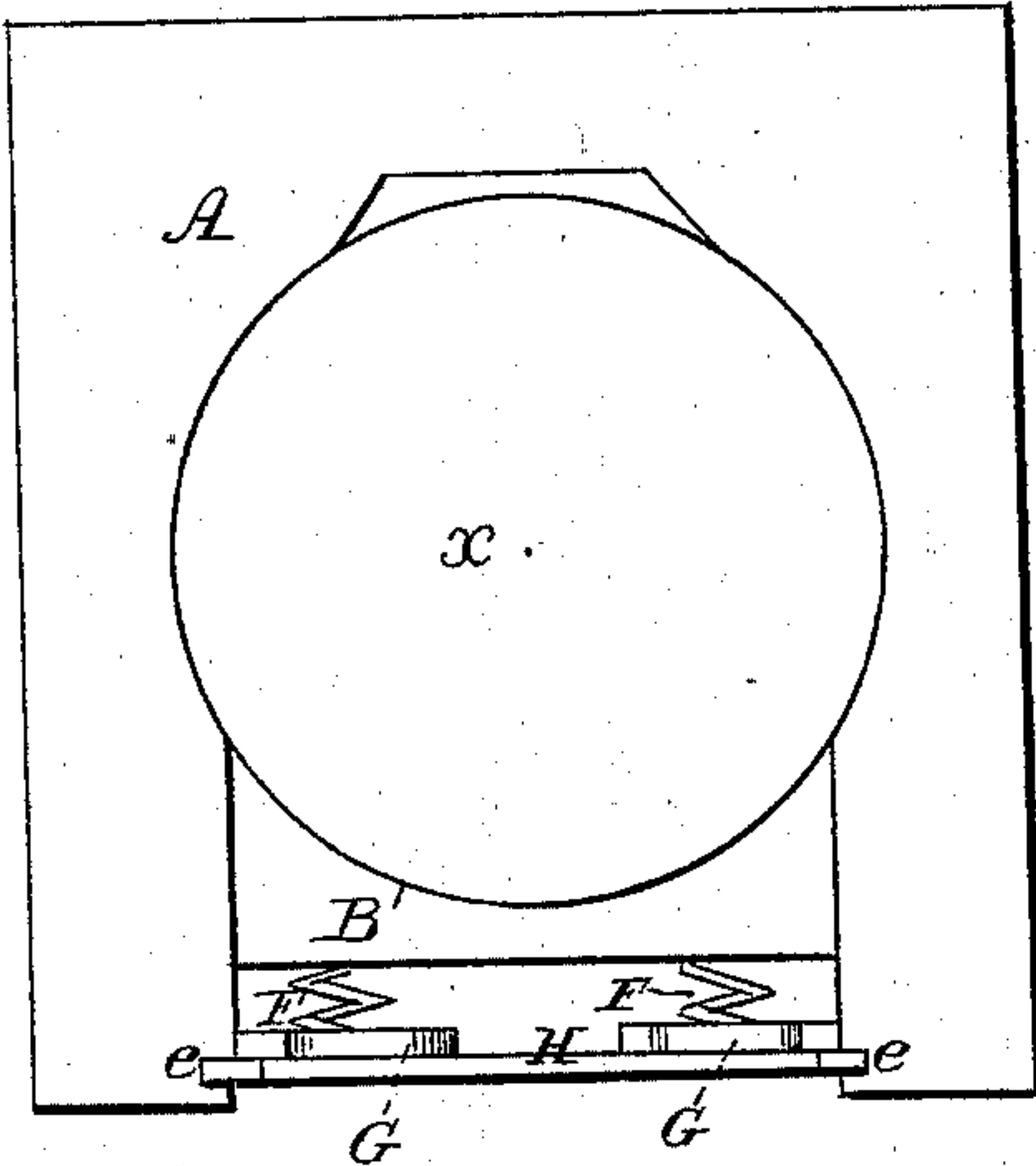


Fig. 2

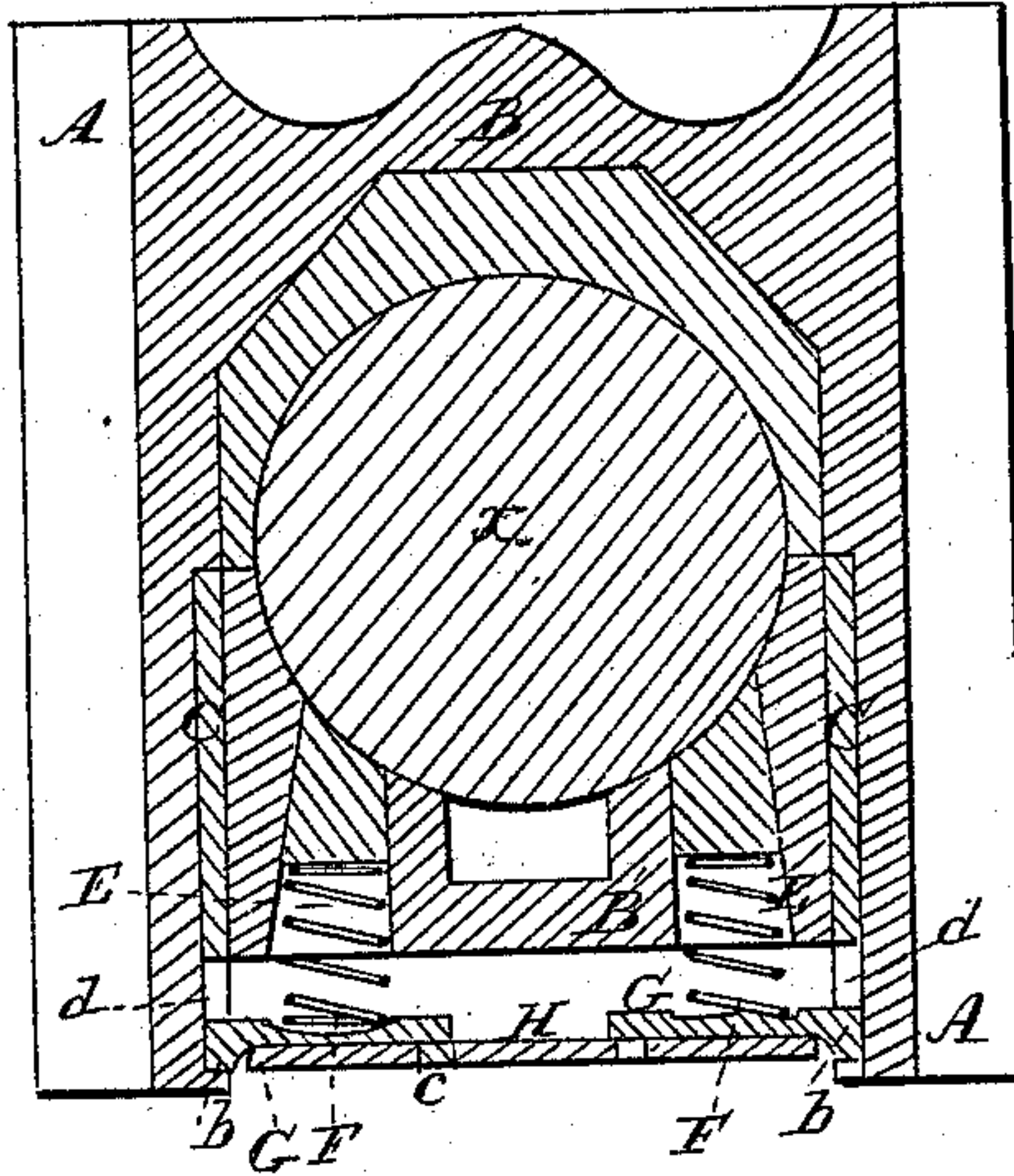


Fig. 3

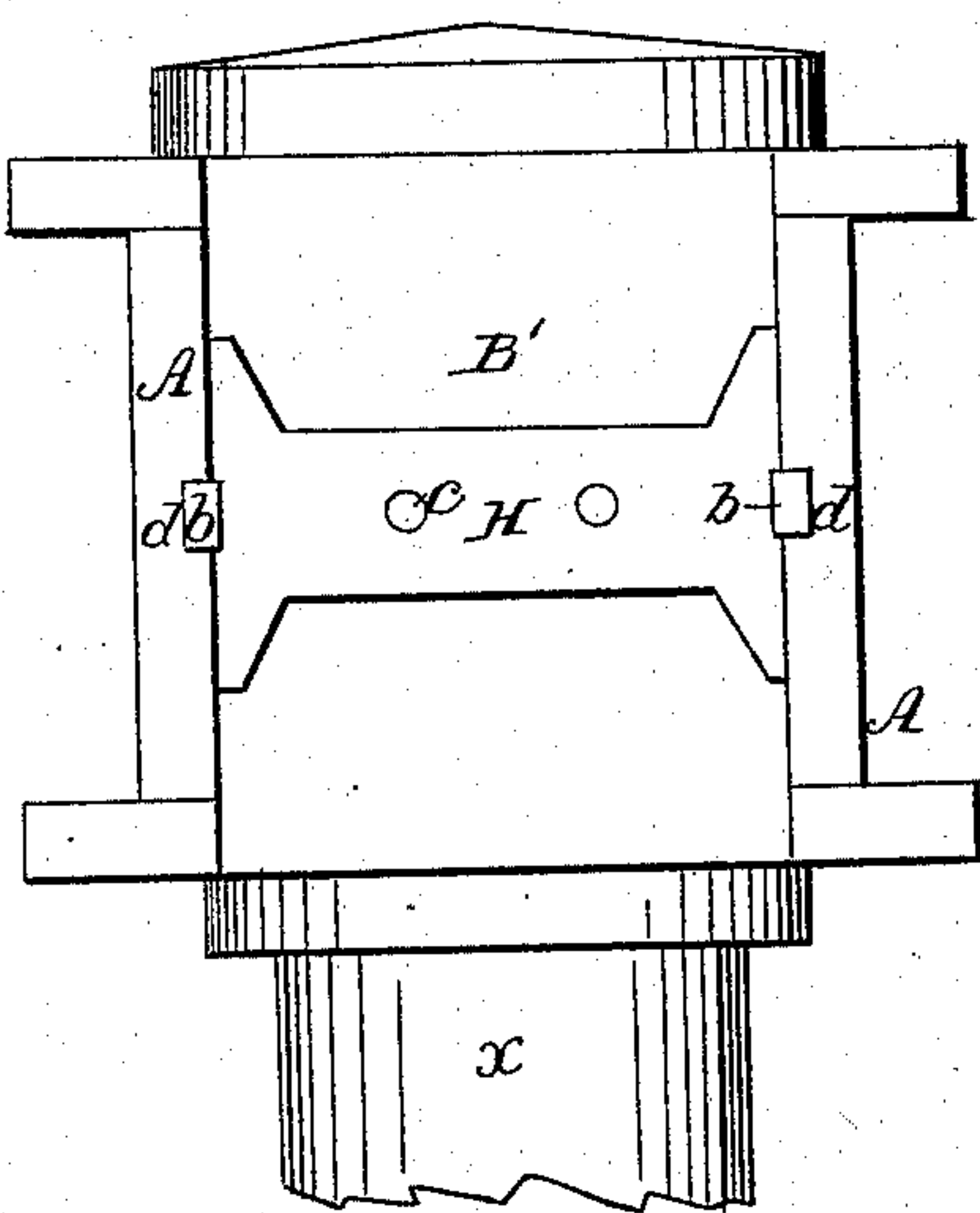


Fig. 4

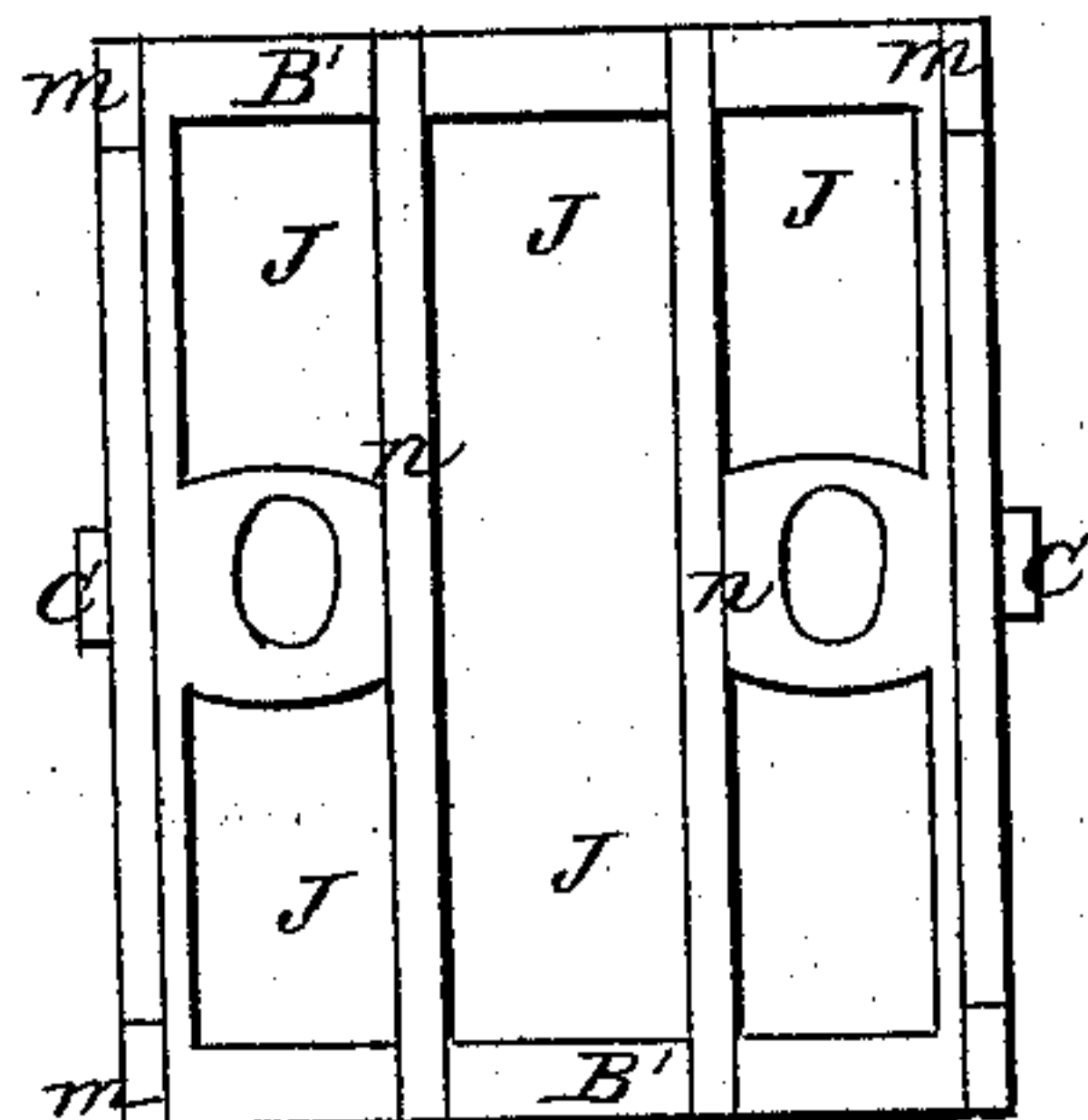
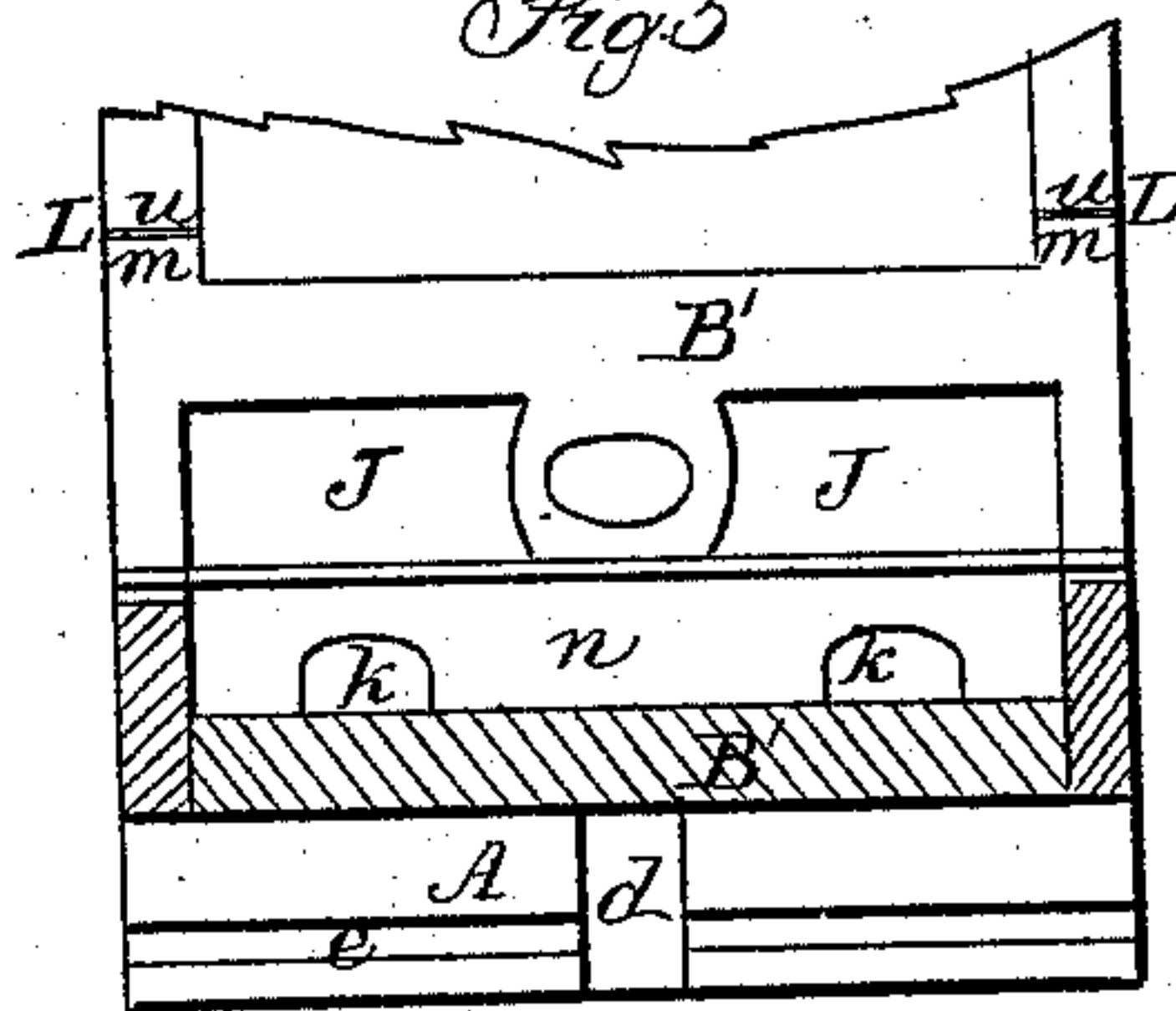


Fig. 5



Witnesses
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M. V. MILLER, OF MANCHESTER, PENNSYLVANIA, AND GEORGE HENRY, OF STEUBENVILLE, OHIO.

IMPROVED AXLE-BOX.

Specification forming part of Letters Patent No. 56,977, dated August 7, 1866.

To all whom it may concern:

Be it known that we, M. V. MILLER, of Manchester, in the county of Allegheny and State of Pennsylvania, and G. HENRY, of Steubenville, in the county of Jefferson and State of Ohio, have invented certain new and useful Improvements in Railroad Axle-Boxes; and we do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an end view of the axle-box. Fig. 2 is a transverse vertical section through the same. Fig. 3 is a view of the under side. Figs. 4 and 5 will be referred to in the description.

Like letters of reference refer to like parts in the different views.

Our improvement relates to a railroad axle-box so constructed and arranged that it is kept in close contact with the wrist or journal of the axle as the box and journal may wear away, and also to the manner of constructing the box so that the waste and oil cannot work out or dust and dirt enter the box, as hereinafter described.

A, Figs. 1 and 2, is a case in which the journal box or seat B B' is placed. X is the axle and its journal. The box is fitted into the case and prevented from moving sidewise by means of tongues or projections C on the sides, (seen in Figs. 2 and 4,) fitting into corresponding grooves d in the case. In the lower part, B', of the box are holes E E, Fig. 2, in which spiral springs F F are placed. The upper part of the springs are in the holes, and the lower end rests in stops G, which are cut or grooved out for this purpose. These stops are supported on a plate, H, shaped as shown in Fig. 3, the ends of which fit and slide in grooves e in the sides of the case. (Seen in Fig. 3.) The stops G are held in place on the plate by a pin or projection, c, at the inner end, fitting into a hole in the plate, and there is a tongue or projection, b, at the outer end, that fits into the grooves d in the case, as shown in Fig. 3, which holds them in place, and also prevents the plate H from having any lateral movement.

The object of this arrangement of the springs is to keep the box or seat B B' constantly in close contact with the journal or wrist as they may wear away by rubbing and wearing on each other. The elasticity of the springs will produce this, as the lower half, B', of the box is fitted in the case so that it can be moved up or down by the action of the springs keeping the box and journal in close contact with each other.

In the lower part of the box there are chambers J. (Shown in Fig. 4, which is a top view of this part of the collar detached, and also in Fig. 5, that is a vertical section through a part of the box and case.) These chambers communicate with each other through openings or holes k, (seen in Fig. 5,) and are for holding the waste caused by the wearing of the journal and box as it may accumulate, and also for holding oil. The ribs or partitions n n, between the chambers, prevent the waste from turning in the box, also preventing, by this means, the wearing of the journals and boxes by the grit and dirt.

The waste and oil cannot escape from the ends of the box, on account of projections m, at each end of the lower part of the box, fitting into corresponding recesses u in the upper part, as seen at L in Fig. 5, thus breaking the joint where the upper and lower part of the box unite, that prevents the oil from running out and dust and dirt from working into the box.

What we claim as our improvement, and desire to secure by Letters Patent, is—

1. The plate H, stops G, in combination with the springs F, journal-box B B', and case A, when arranged as, in the manner, and for the purpose set forth.

2. The combination of case A, journal-box B B', axle or journal X, springs F F, stops G, and plate H, constructed and arranged substantially as shown and described, and for the purpose set forth.

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Witnesses:

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