

(No Model.)

P. BROWN.
CAR COUPLING.

No. 308,404.

Patented Nov. 25, 1884.

Fig. 1.

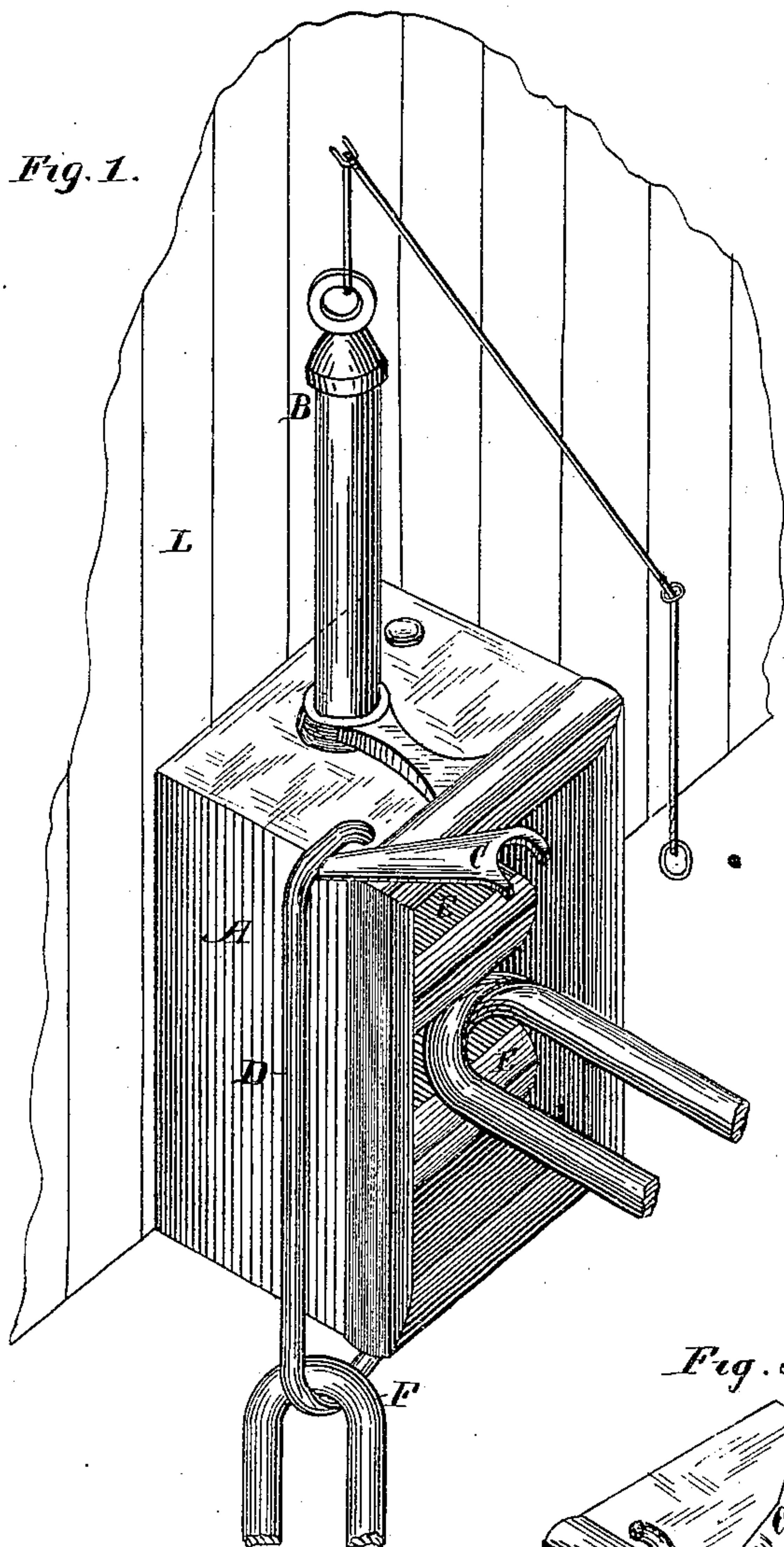


Fig. 2.

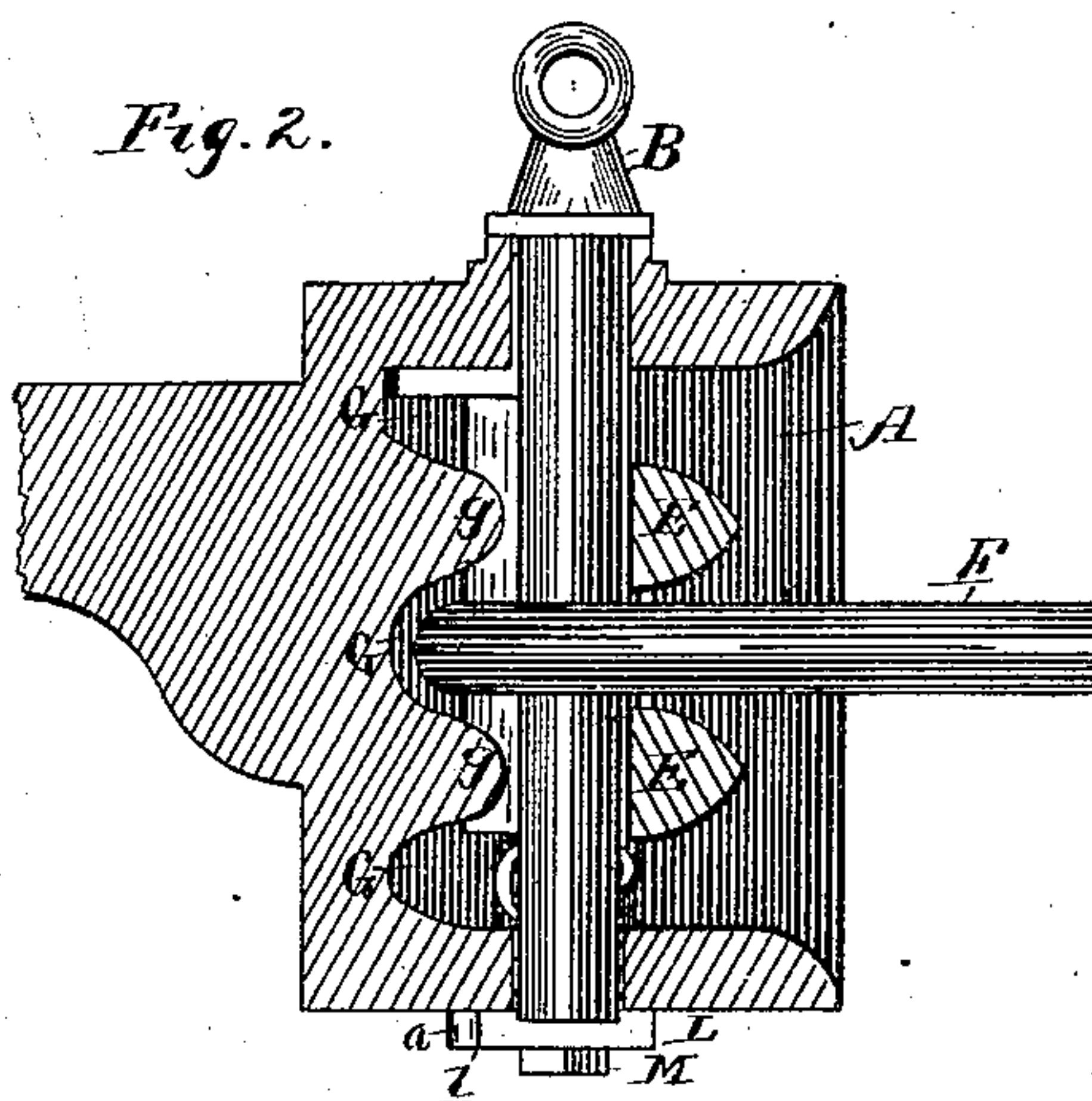


Fig. 4.

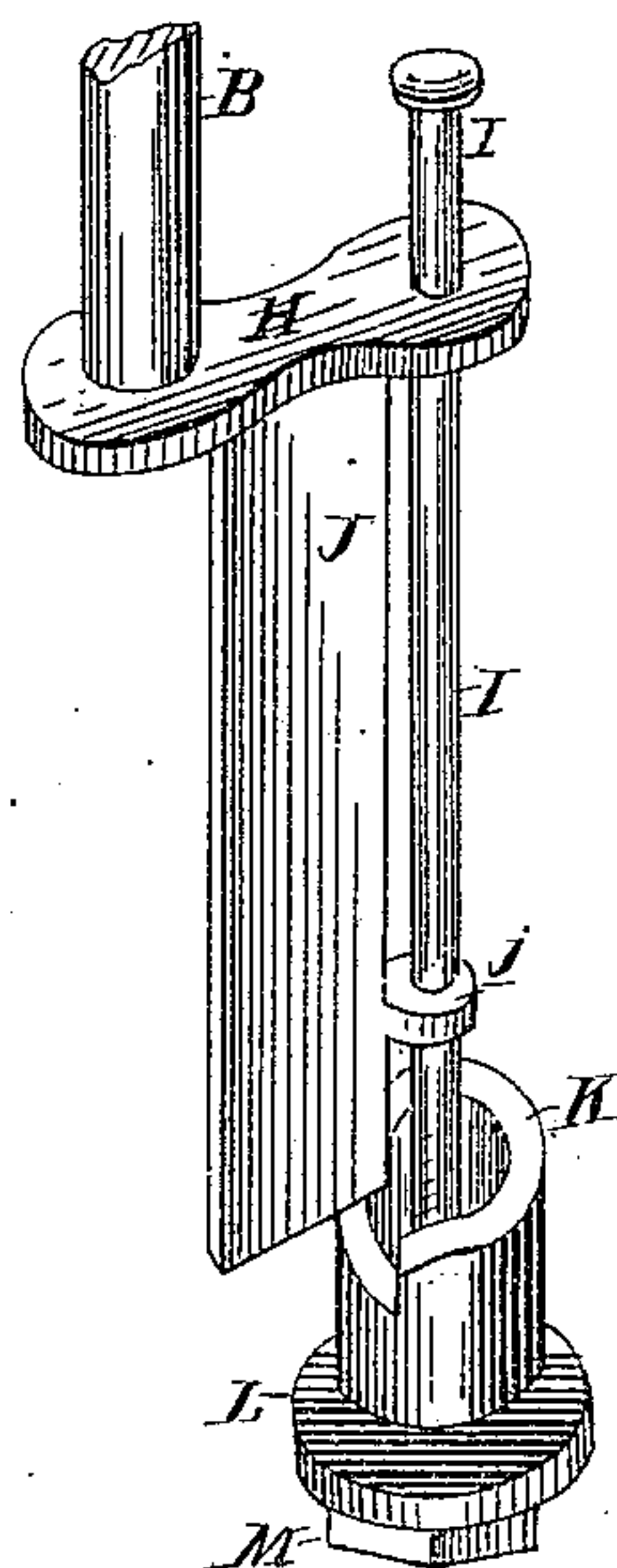
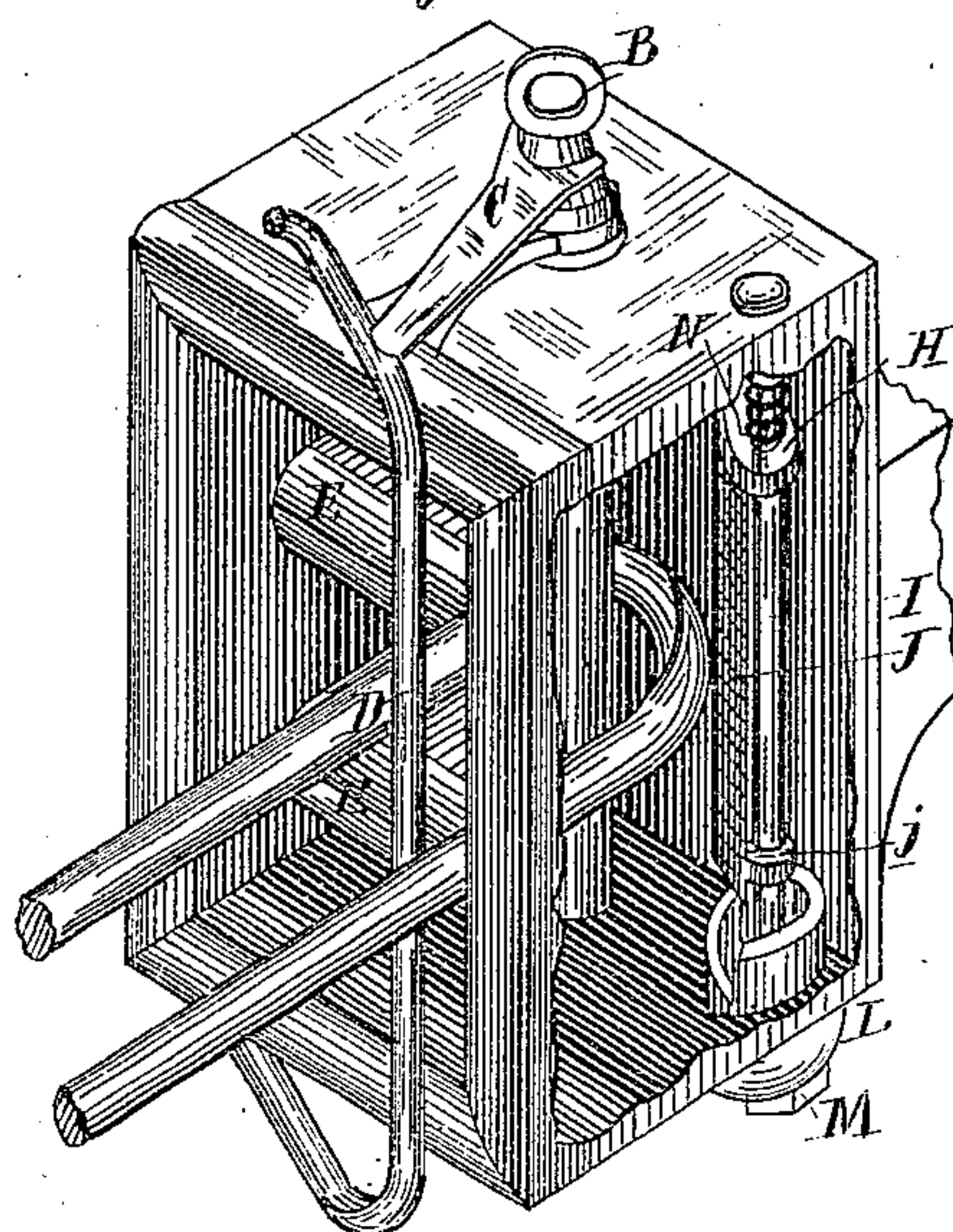


Fig. 3.



WITNESSES:

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PERRY BROWN, OF LOUISVILLE, KENTUCKY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 308,404, dated November 25, 1884.

Application filed September 23, 1884. (No model.)

To all whom it may concern:

Be it known that I, PERRY BROWN, a citizen of the United States of America, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain improvements in the car-couplings shown in the Patents Nos. 132,238, 133,406, 163,633, and 187,096 heretofore issued to me; and it consists in the peculiar construction, combination, and arrangement of parts, hereinafter more particularly described, and then pointed out in the claims.

15 In the accompanying drawings, Figure 1 is a perspective view of one-half of my improved coupling in position for coupling. Fig. 2 is a vertical section of the same detached and with the link in position. Fig. 3 is a perspective of the same with part broken away; and Fig. 4 is a detail.

25 Referring now to the details of the drawings, in which similar letters refer to the same parts, A represents the draw-head, and B the pin passing through sockets in the same in the ordinary manner to hold the link F in its place.

30 At D is the stirrup for carrying a coupling-link pivoted in the top in the same manner as shown in my Patent No. 187,096, and provided with a slotted arm or keeper, C, which holds down the pin, so that it cannot readily be pulled out until the keeper has been removed.

35 At J is shown the wing, and at H the pin-rest, which are substantially the same as the corresponding parts in my aforesaid patent, and therefore do not require particular description here. This wing, instead of being cast integral with its pivots, is held in its position by a pin, I, which passes down through the top of the draw-head, through the end of the pin-rest H, through a lug, j, cast on the back of the wing, and through an incline, K, the top of which is somewhat similar in form to that shown in my aforesaid patents, but instead of being formed integral with the draw-head, as heretofore, it is made separate, so as to pass through a hole in the bottom of the

draw-head, and is held fast there by a nut, m, which screws against a flange, L, formed on the bottom of the incline, and forces it firmly against the bottom of the draw-head. The latter has a projection, a, cast on it fitting against a flat-side, l, of the flange L, so as to prevent the incline being set in wrong position or from turning out of place after it is in position.

40 Above the rest H and surrounding the pin I is a spring, N, having one point of resistance on the top of the rest and the other against the top of the cavity in the draw-head, the object of which will be hereinafter explained. The draw-head may be made with rollers, as shown in my previous patent, but I have shown in this case fixed bars E. At the back of the draw-head will be seen three recesses, G, to receive the end of the link, and between each two of these recesses is a projection, g, extending out so far as to be substantially in line with the pin, so as to form a support therefor and prevent its being bent when from carelessness or otherwise an attempt is made to couple the cars with the pin in its lowest position. It will be seen that the bars E also extend backward in line with the front of the pin, so as to form a support for the pin between its ends when the coupling is in use.

45 The operation is as follows: When it is desired to couple cars together, the pin B of one of the cars is raised until it is clear of the rest H, when the weight of the wing and rest causes them to slide down the incline K and assume the position shown in Fig. 4, when the outer end of the rest H will be under the top pin-socket in the draw-head, and the pin B will then rest on it in the position shown in Figs. 1 and 4. The link of the opposite coupling is put in position, as shown in Fig. 3, with the keeper C resting on the top of the pin, and the two cars are run together so as to cause the link of one car to enter the draw-head of the other, as shown in Fig. 1. When the link strikes the wing J, it pushes it backward in the manner shown in my previous patents, and causes the pin to drop through the link, as shown in Fig. 3. By making the wing separate from its pivots the coupling can be more readily made, as the wing and rest can be more easily fitted to the draw-head.

It has been found that in casting the incline

integrally with the draw-head it is frequently imperfect, and thus the entire casting is lost; but by casting it separately this trouble is avoided, and, besides this, the face of the incline can be much more readily finished when cast separately.

The keeper C has the advantage of preventing the drawing out of the wrong coupling-pin, which sometimes occurs through carelessness, in which case the stirrup is likely to be broken, which cannot occur when the keeper is used, because when the link is in both draw-heads the keeper cannot be removed from the top of the pin, although before the cars are coupled the link can be turned to one side sufficiently to move the keeper off of the top of the pin, and thus allow of its removal when required.

In ordinary use it will be found that the weight of the wing J and rest H is sufficient to cause them to descend the incline. In some conditions, however, it may be found that this will be insufficient; but the additional force of the spring N will cause them to descend under all circumstances.

What I claim as new is—

1. The combination, with a draw-head, A, and wing J, of the incline K, formed separately from the draw-head, substantially as described.
2. The combination, with a draw-head and the wing J, of the incline K, formed separately from the draw-head, and inserted in a hole formed in the bottom of the draw-head, substantially as described.

3. The combination, with a draw-head, of the wing J, the incline K, and the pin I, constructed and arranged to perform the double function of a pintle for the wing and a fastening for the incline, substantially as described.

4. The combination, with the draw-head A and pin B, of the stirrup D, provided with the keeper C, substantially as and for the purpose specified.

5. The combination, with the draw-head A and pin B, of a keeper, C, constructed and arranged to be held over said pin by the coupling-link when the cars are coupled together, substantially as described.

6. The combination, with the bumper A and pin B, of the stirrup D, constructed and arranged to perform the double function of carrying the keeper C and one of the coupling-links, substantially as described.

7. The combination, with the wing J and incline K, of the spring N, constructed and arranged to press on the wing and cause it to descend the incline, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 20th day of September, 1884.

PERRY BROWN.

Witnesses:

T. J. W. ROBERTSON,
H. A. HALL.