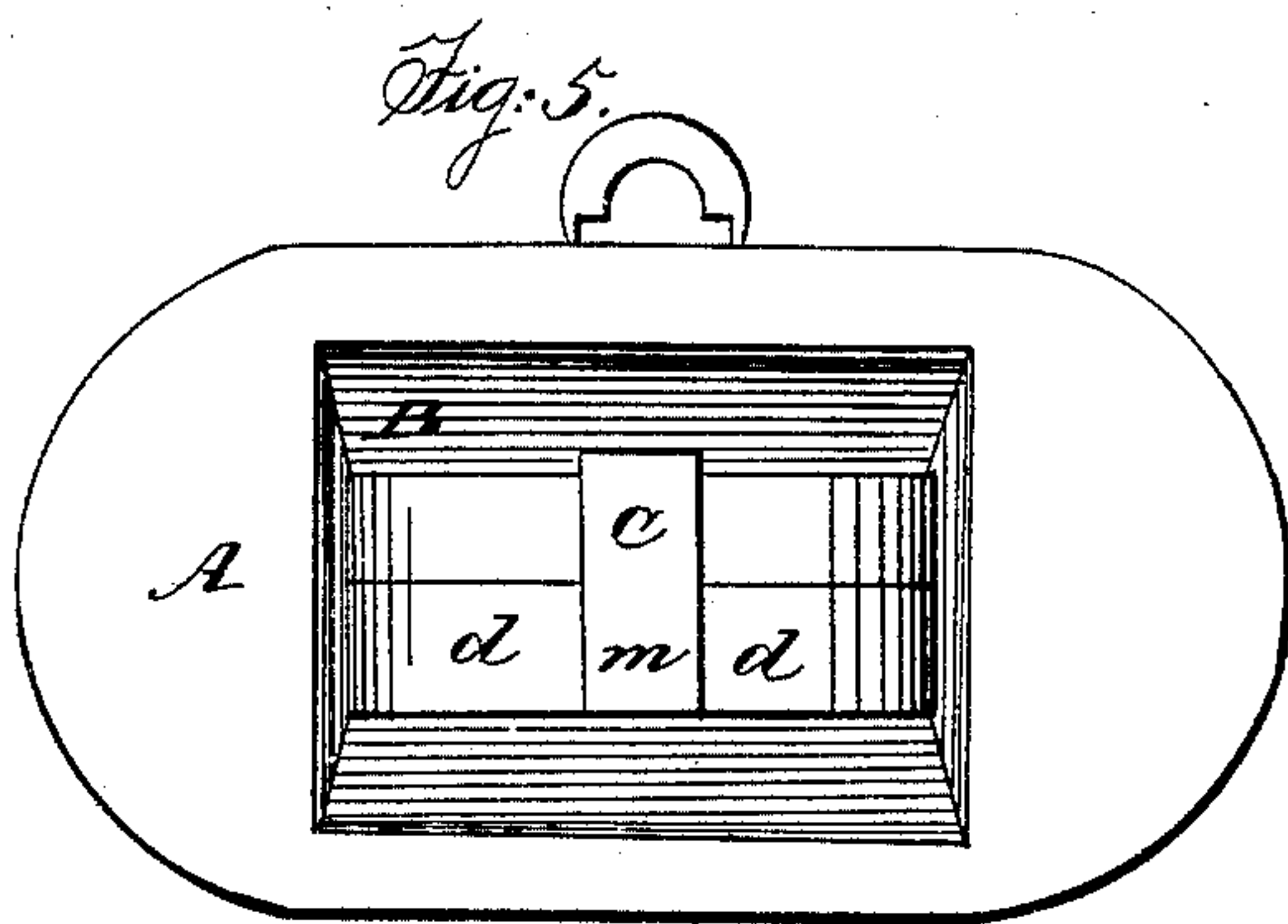
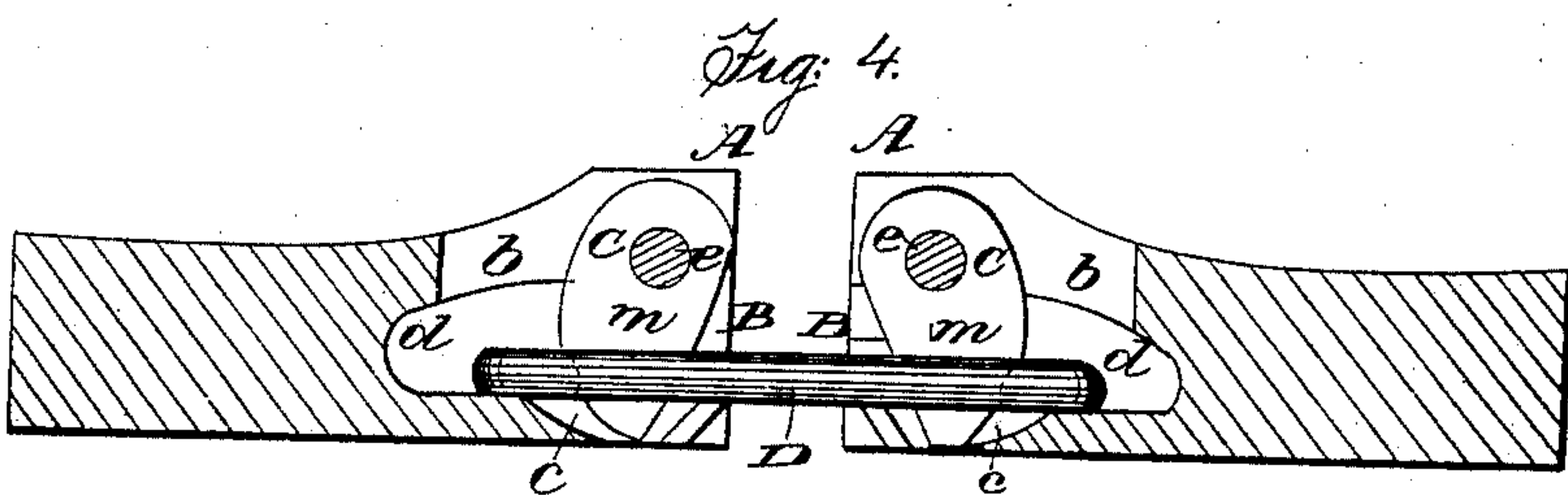
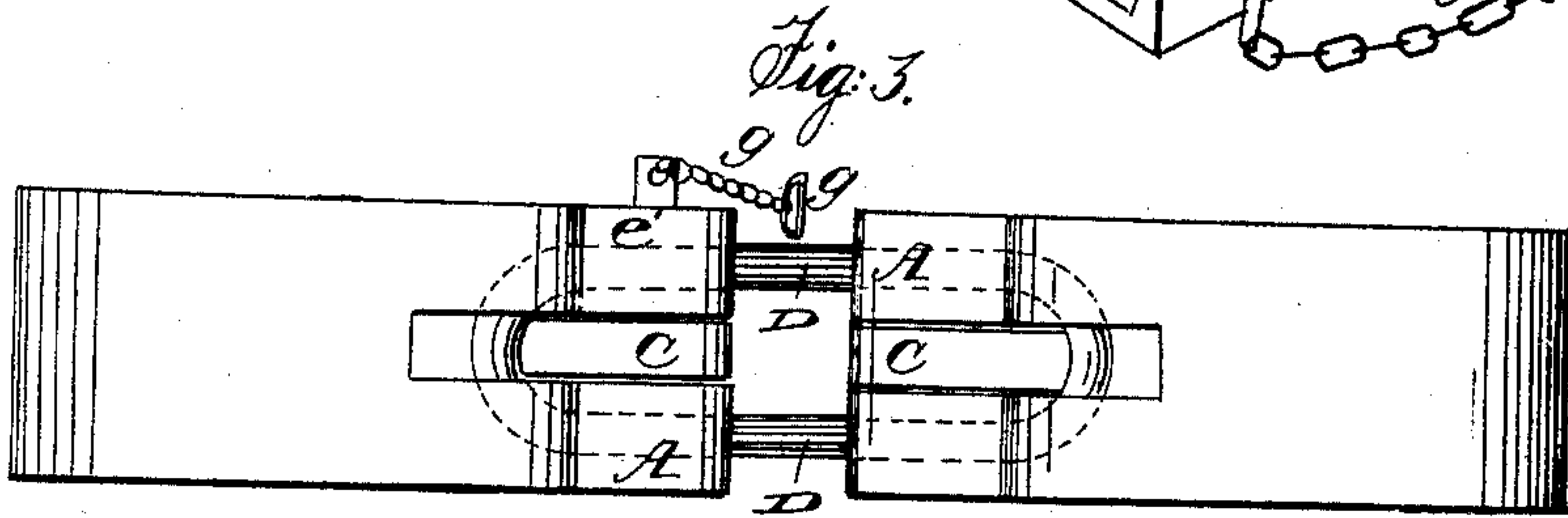
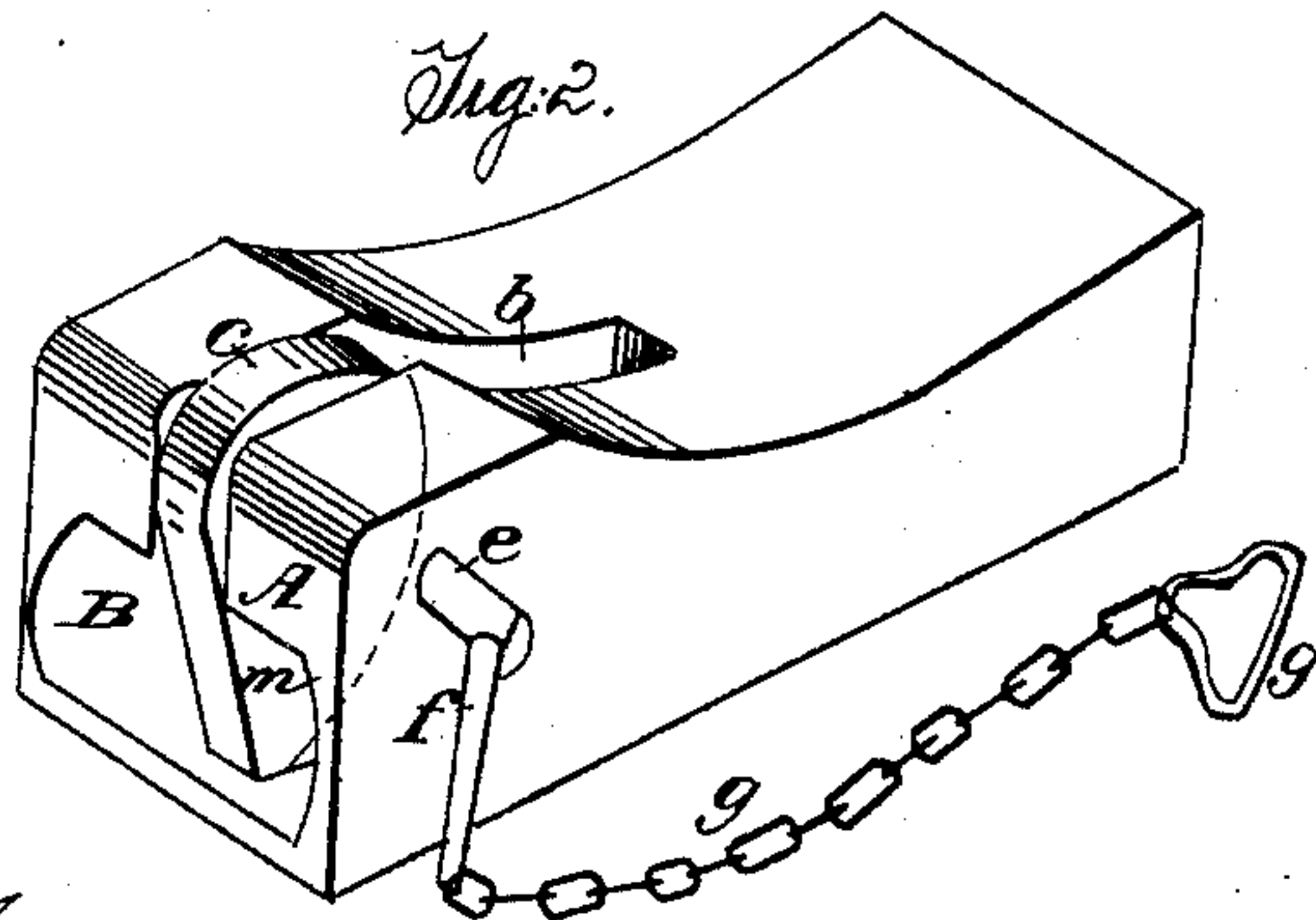
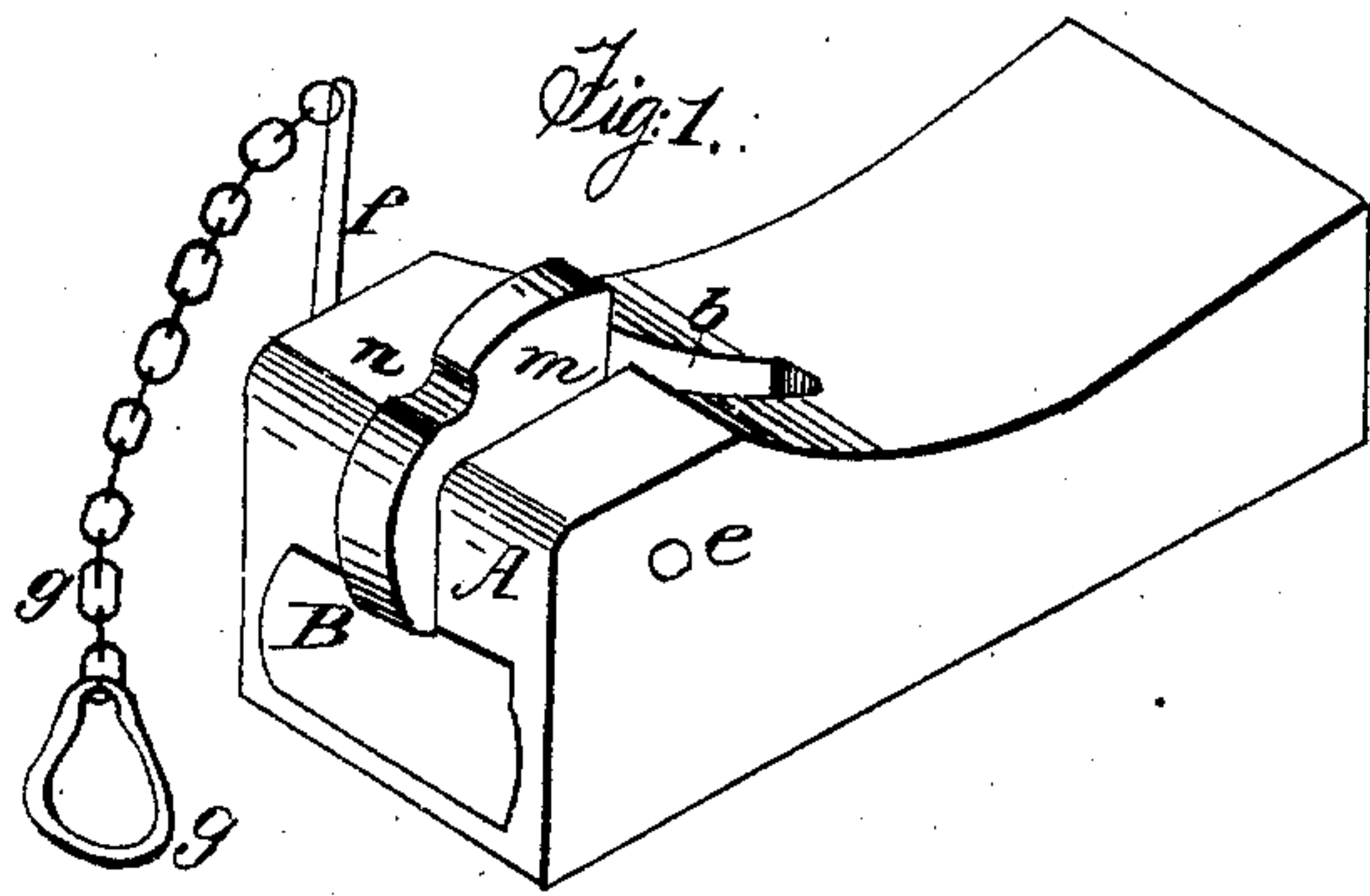


A. OOT.
Car Coupling.

No. 30,496.

Patented Oct. 23, 1860.



Witnesses
Lewis Stearns
James McFrumble

Inventor
Adam Oot

UNITED STATES PATENT OFFICE.

ADAM OOT, OF MINETTO, NEW YORK.

CAR-COUPLING.

Specification of Letters Patent No. 30,496, dated October 23, 1860.

To all whom it may concern:

Be it known that I, ADAM OOT, of Minetto, in the county of Oswego and State of New York, have invented a new and useful
5 Improvement in Automatic Railroad - Car Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of
10 this specification in which—

Figure 1 is a longitudinal view of one of the bumpers or draw heads, exhibiting the elbow or hook of the same, when not in operation. Fig. 2 represents the draw head,
15 or bumper in a position ready for operation. Fig. 3 is a plan view of my coupling in operation. Fig. 4 is a section view of my coupling in the same condition, as represented in Fig. 3 and Fig. 5 is a front end view
20 of one of the bumpers.

Similar letters of reference in each of the figures indicate corresponding parts.

Before going into a minute description of my invention, I would remark that I am
25 aware, that a great number of automatic car-couplings have been patented, and that the same principle which I have adopted in my coupling has been embodied in some of these, and that therefore I do not intend
30 to cover by my patent, and new principle, but simply the embodiment of an old principle in a new, and improved organization of mechanism.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A, A, represent the bumper, or draw head of a car.

The socket B, B, is made flaring at its
40 front end in every direction, so as to readily admit the coupling link D. The socket at the front end is made larger than at its rear end, or from the front to the rear ends of the socket it diminishes in size. By thus
45 constructing the socket, the deep portion B, B, in front is of sufficient size to readily admit the link and allow the same considerable up and down play, but the shallow portion *d*, in the rear of the slot *b*, *b*, is but a
50 trifle larger than the link, and when the link enters the shallow portion of the socket it has no chance to play, and consequently remains in a horizontal position, or in such
55 a position in the bottom of the bumper or draw head that the hook of an approaching, or stationary car will certainly strike the

link, in the right manner to insure a perfect coupling of the two cars together.

C, C, represent the elbow or lever hook of the bumper or draw head. This hook is
60 attached to an axle rod *e e* which passes through the hook, and also through the bumper or draw head above the socket. The vertical portion *m*, of the hook passes down through the slots *b*, *c*, the front side of the
65 slot *c*, acting as a stop to the extremity of said portion of the hook, and the slot *b*, providing room for the lower end of the hook to play backward and when it is desired to effect an uncoupling of the cars.
70

The lever *f*, *f*, attached to the axle rod *e* extends down diagonally at the side of the bumper or drawhead, and is of a proper length to give a sufficient leverage to lift
75 the hook out of the link, or overcome the longitudinal strain upon the link, when the cars are in motion, and safety requires a discontinuance of one or more cars of the train.

The position of the lever is such that the
80 hook will always have a tendency to keep down in the link, when the train is checked or when the longitudinal pull against the hook from any cause ceases.

At the end of the lever *f* a chain is at-
85 tached, *g g*, the end of which extends to the platform if a passenger car, or to the top of the car if a freight car, thus enabling an uncoupling to be effected by a simple pull on the chain. This arrangement is far prefer-
90 able to a lever attached to the hook and extending horizontally either backward or forward above the bumper or drawhead, as such horizontal lever must be more or less in the way of persons passing from one car
95 to another, and if used on cars designed for the carrying of freight, the horizontal lever compels the train-hand to climb down to the bumper or drawhead, to effect an uncoupling, whereas the chain, will instantaneously
100 lift the hook out of the link, thereby saving time, and avoiding the risk of descending to the drawhead or bumper while the cars are at full speed.

The front side of the hook is made con-
105 cave, so as to insure a slipping of the link down under the hook when it comes in contact with the same, and the rear side of the hook, at its extremity is made slightly convex, so that it will immediately slip out of
110 the link, when the operation of uncoupling is being performed.

Just above that part of the hook made convex a small notch is sunk (see Fig. 1 *n*,) which effectually keeps the link from upward play while in motion.

5 From the foregoing description it will be seen that my invention is the desideratum sought by railroad companies, it being nearly as simple as the common coupling pin, and yet free from very great objection to the
10 same, viz: the necessity of men risking their lives in going between the cars to adjust it. It also possesses the very great advantage of providing sufficient leverage in the hook itself, whereby the cars can be uncoupled
15 while in motion or exerting longitudinal strain on the links, by an upward pull of the train-hand, upon the chain, and thus the

power of the train-hand obtained, instead of only his weight as in lever-links which are operated by a downward thrust. 20

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the peculiarly constructed drawhead *A*, *B*, *a*, *b*, *c*, with the peculiarly constructed, gravitating lever 25 hook *c*, *m*, *f*, *g*, in the manner and for the purpose herein described.

The above specification signed and witnessed this twenty sixth day of February, 1860.

ADAM OOT.

Witnesses:

JAMES TRIMBLE,
ANTHONY OOT.