

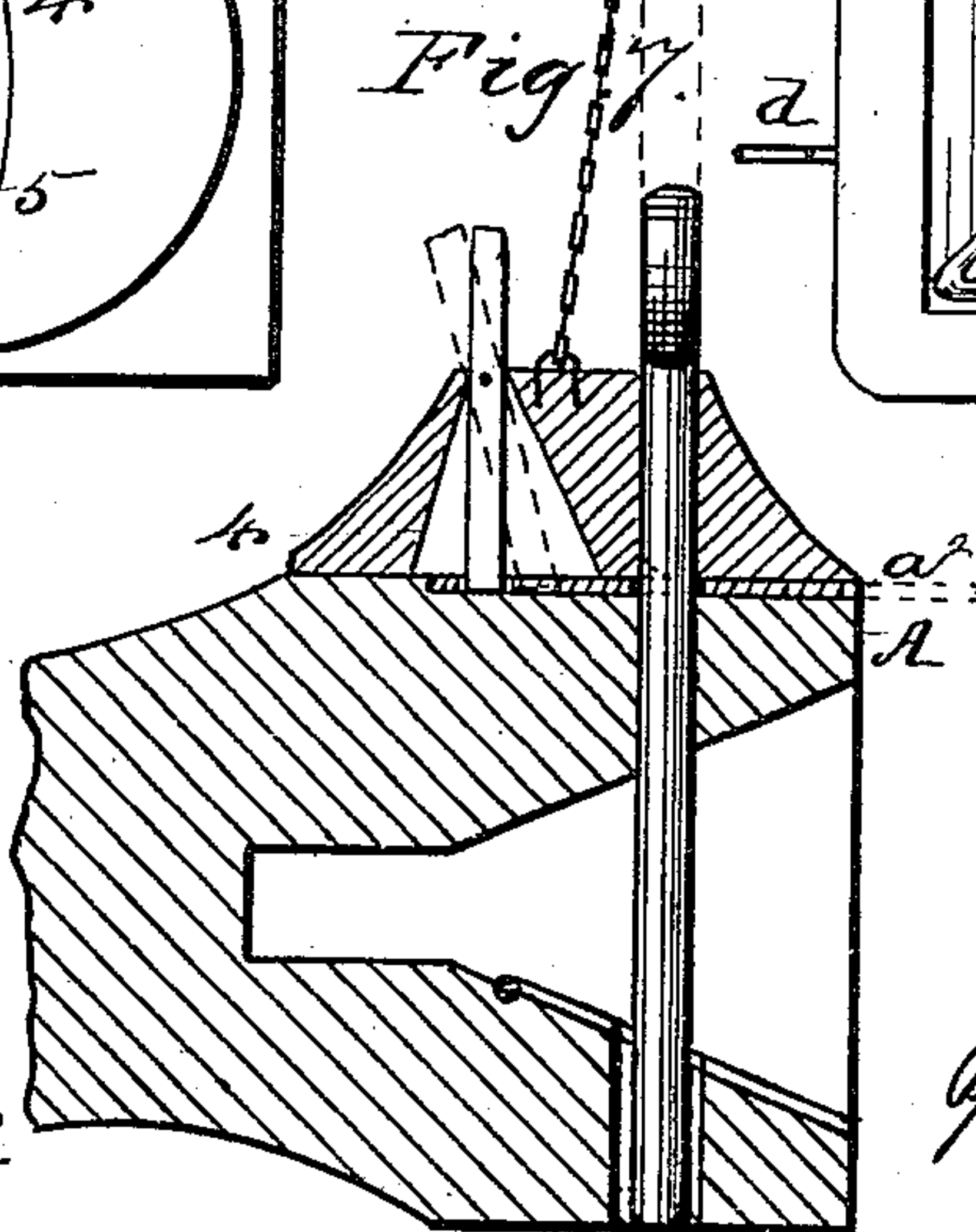
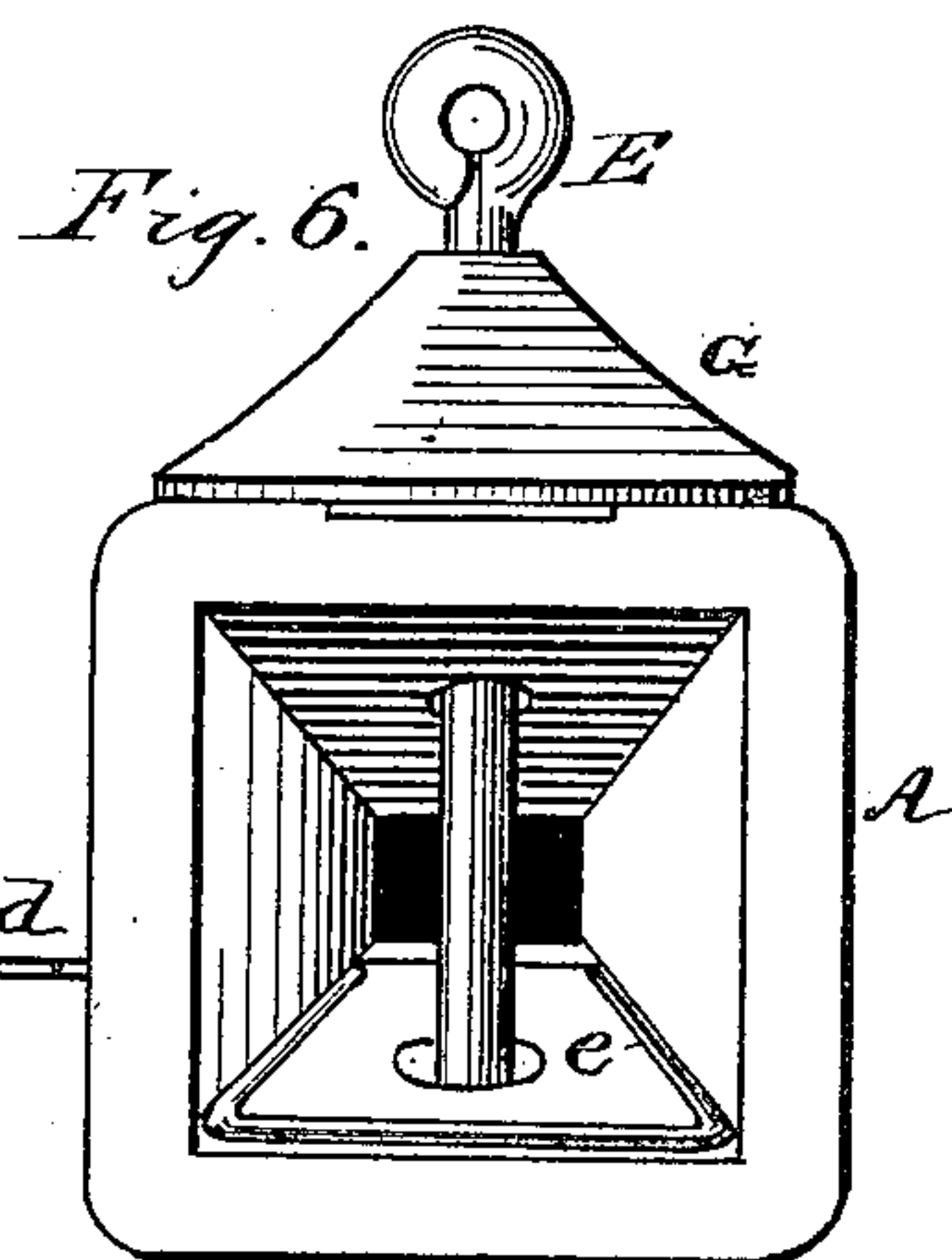
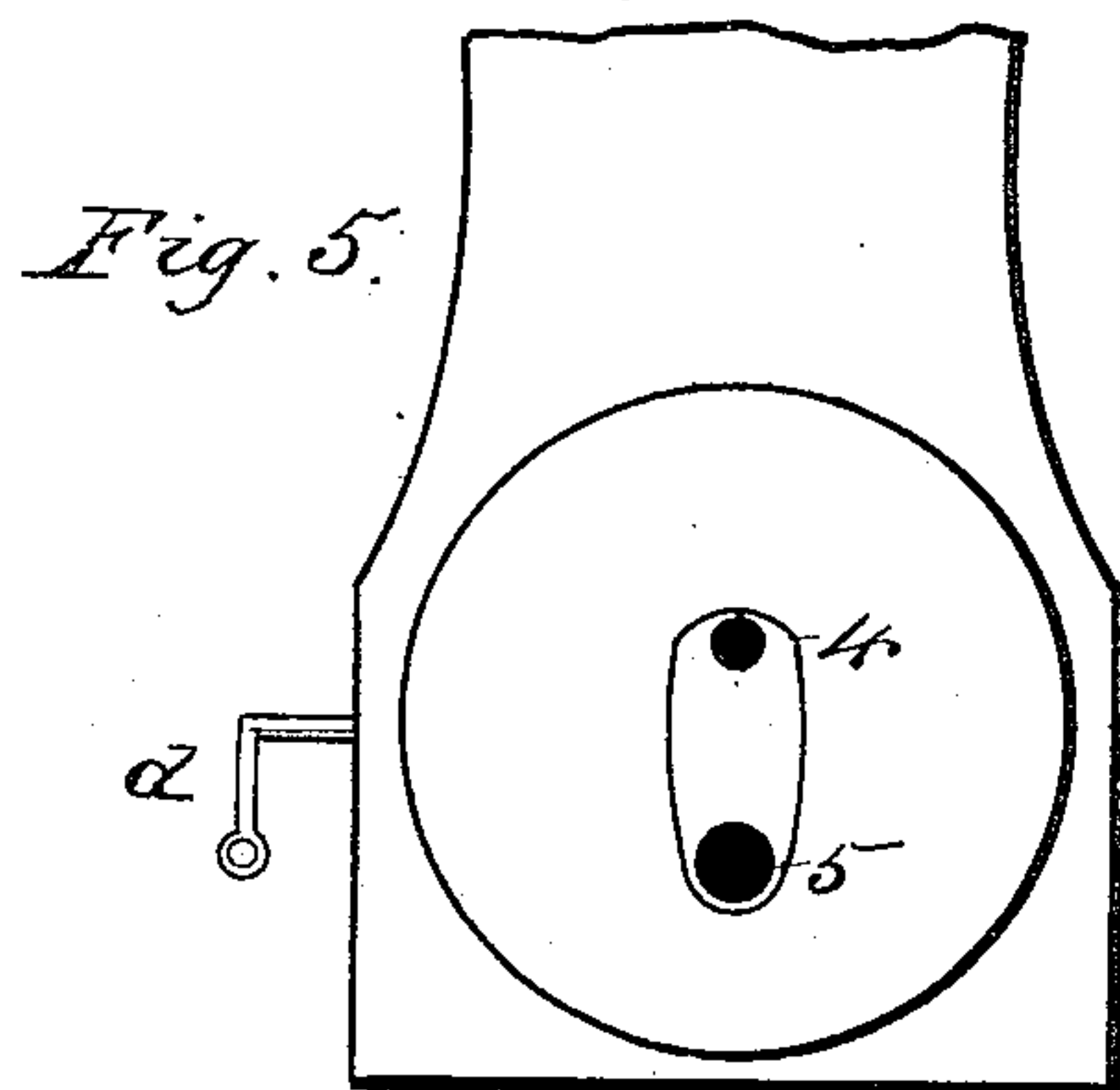
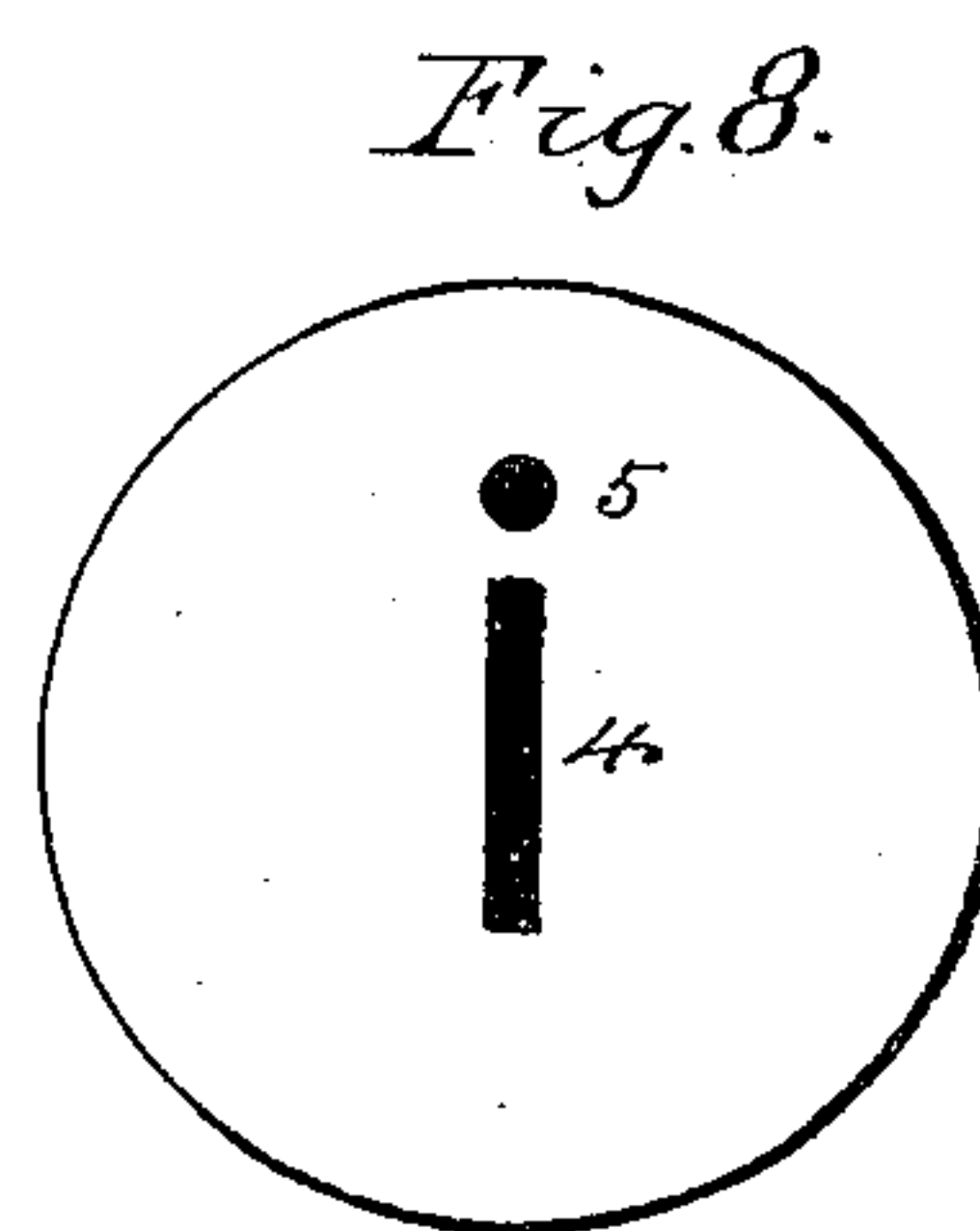
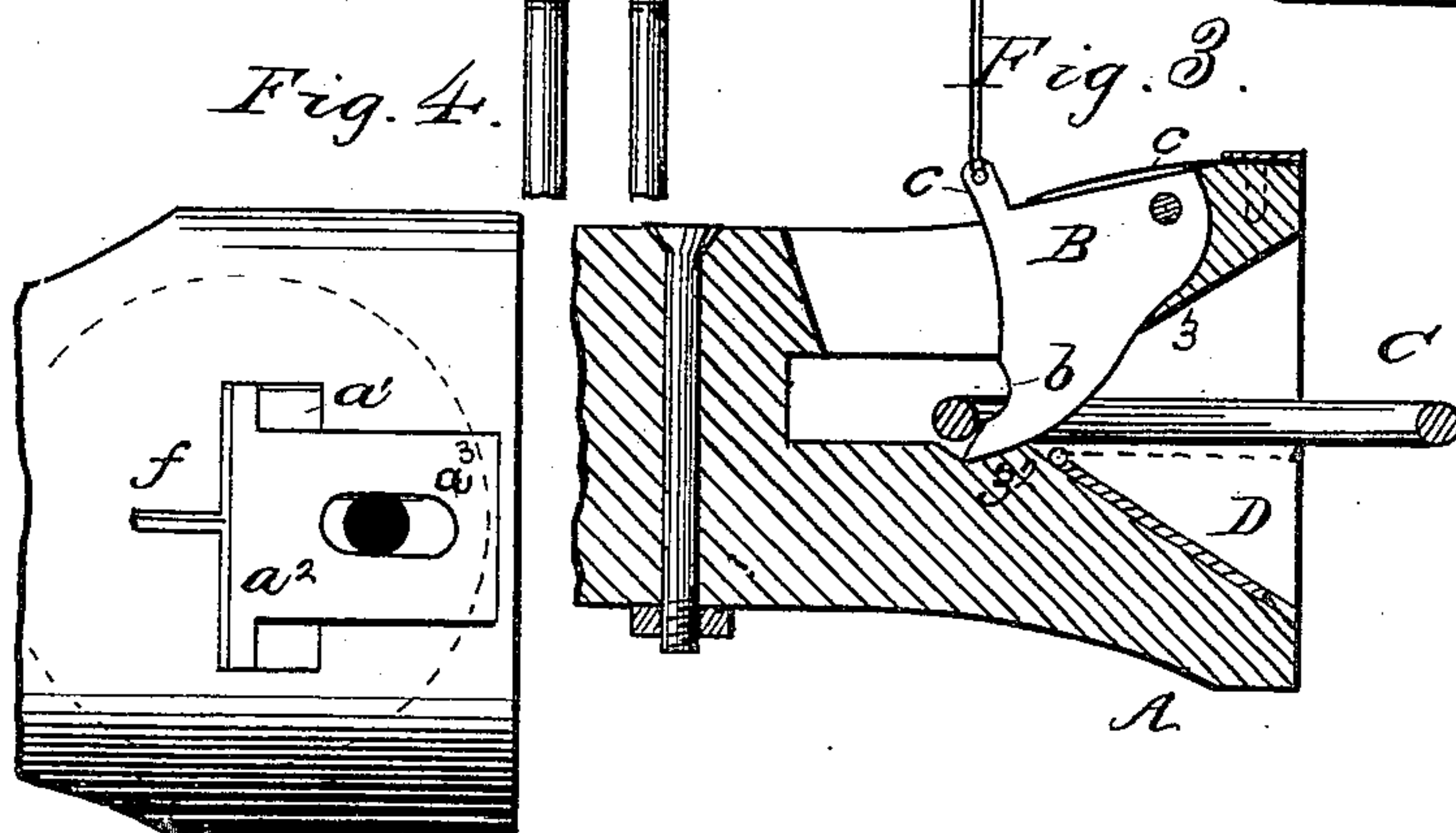
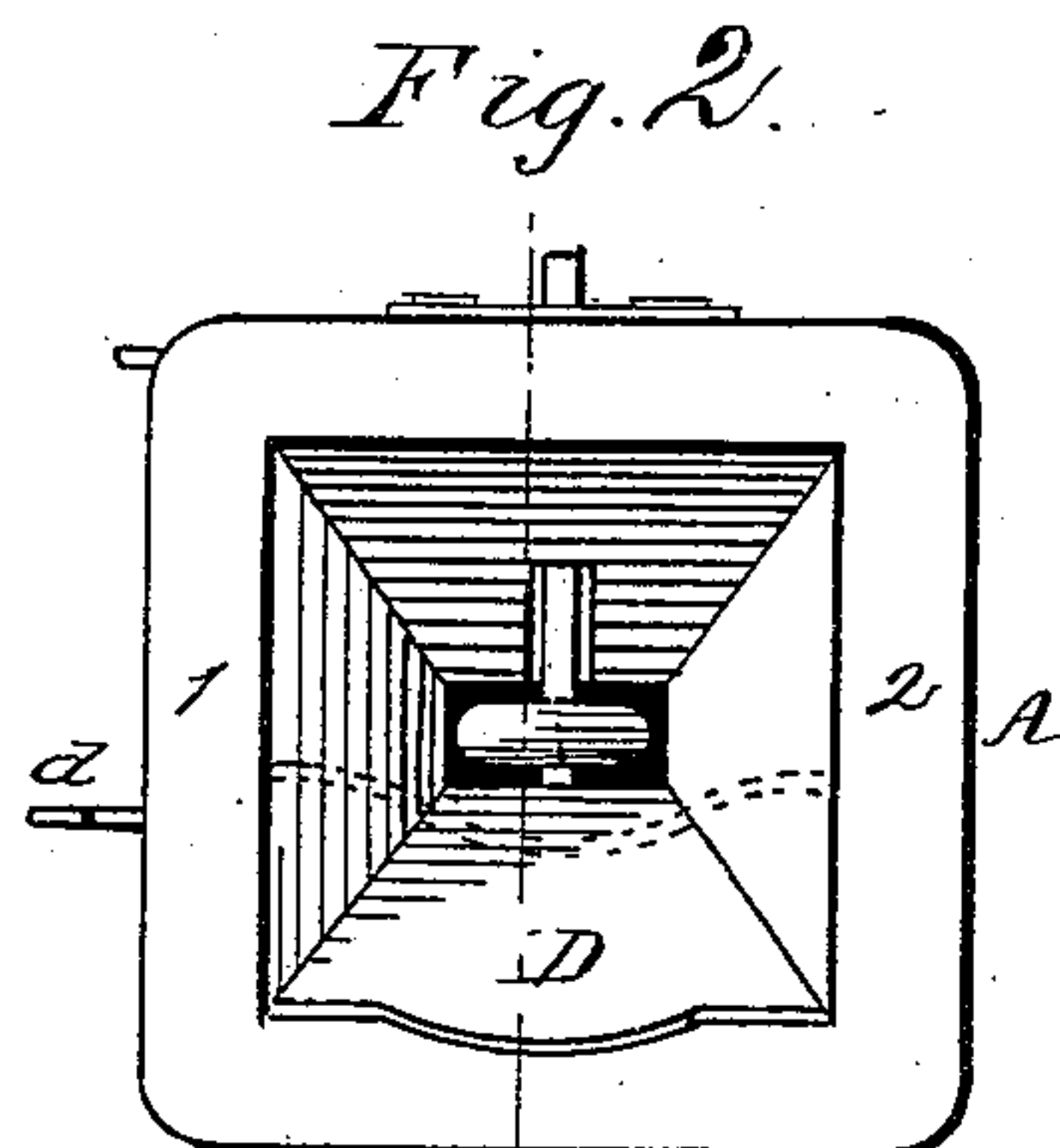
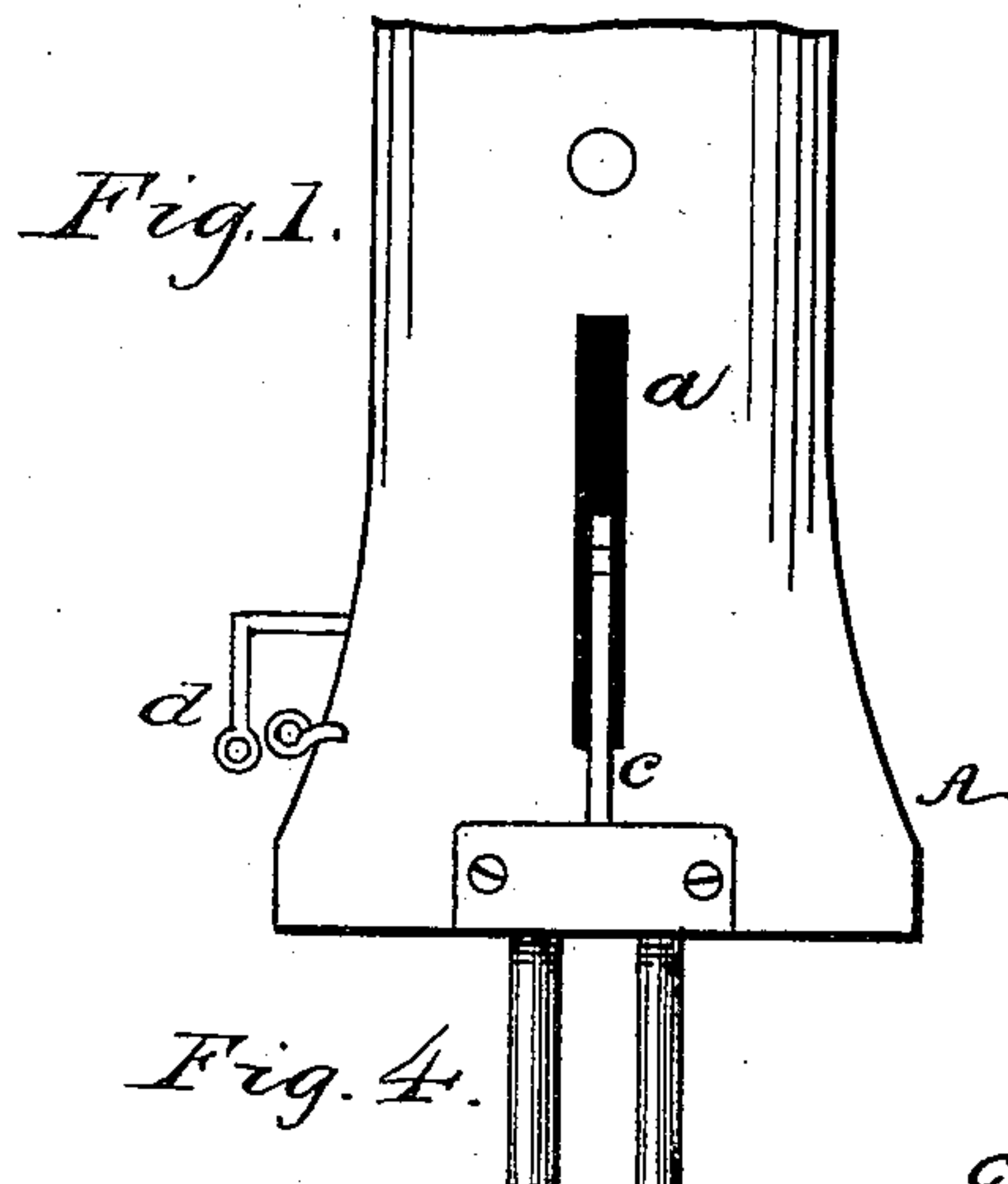
(No Model.)

J. J. PURSLEY.

CAR COUPLING.

No. 271,655.

Patented Feb. 6, 1883.



Witnesses:
W. Reynolds, Jr.
Eugene D. Harris.

Inventor:
John J. Pursley
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att'y

UNITED STATES PATENT OFFICE.

JOHN J. PURSLEY, OF WETMORE, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 271,655, dated February 6, 1883.

Application filed November 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. PURSLEY, of Wetmore, in the county of Nemaha and State of Kansas, have invented certain new and useful Improvements in Automatic Car-Coupling Devices; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This application is for an improvement upon that class of inventions known as "car-couplings," and has for its object ease of manipulation, and to obviate and lessen the danger of accident, so often resulting from their management, simplicity of construction of the several parts, &c.

In the drawings, Figure 1 is a top view, and Fig. 2 and end view, thereof. Fig. 3 is a longitudinal section of Fig. 1. Figs. 4 and 5 are plan views, Fig. 6 is a front view, and Fig. 7 a longitudinal section, of a modification of my invention; Fig. 8, a top view.

The same letters of reference denote corresponding parts in all the figures throughout the entire specification.

A is the draw-head, provided on its top with an opening, *a*, within which is pivoted, hinge-like, a coupling-plate, B. This plate is formed with a projection at its lower end, somewhat resembling a hook, as shown at *b*, so as to catch the link C automatically, when it is forced into the draw-head, and hold it. Said plate works in the opening *a*, and to the top of the draw-head, on a line with the opening, is provided a spring, *c*, which extends over the coupling-plate, so that when the plate is forced up by the link C the spring forces it down again and secures said link. The spring also acts by its downward pressure upon the plate to keep it from flying up from the jolting of the cars, and thus prevents them from coming uncoupled. The mouth of the draw-head A converges inwardly, and in the bottom thereof is arranged a guide-tongue, D, the shape of which of course corresponds to the side on which it lies. This tongue does not project outside of the end of the draw-head, and it is secured upon a bar, *d*,

which extends through the two sides 1 and 2 of the draw-head. At the inner converged portion thereof this bar may have a handle, or may be bent to form a crank, and can be made to extend as far out as the side of the car, so that when two cars are about to be coupled this handle can be grasped and turned so as to bring the guide-tongue D, with one end of the link C resting upon it, on a line with where the hooked end of the plate falls, and thus obviate the necessity of going in between the cars to couple them. The coupling-plate B bears on the surrounding metal which forms the draw-head, both above and below the link, as shown at 3 and 3', Fig. 3, thus relieving the strain upon it to a very great extent. This is an important feature of the invention. Instead of the guide-tongue D being of a solid piece of metal, as intended with reference to Fig. 2, a bar, *e*, bent to the proper shape, can be used, as shown in Fig. 6, and operated in the same manner.

Besides the above-described coupling device, can be used the modification, as shown in Figs. 4, 5, 6, and 7, which I will now describe.

The top of the draw-head has cast in it the recess *a'*, of shape to permit the metal plate *a*², having lateral wings, to work back and forth. This is done by a sort of small lever extending down through a dome, G, pivoted therein, and is capable of being moved back and forth by the shape of the slot within which it works, the slots widening at the bottom, as shown at 4. This lever is long enough to extend down into a groove or channel, *f*, made in the recess, and running a little back of it. The draw-head is provided with a hole for the coupling-pin, both at the top and bottom parts thereof. The guide-tongue D in this case also has a hole therein on a straight line with those just mentioned, and the metal plate *a*² has in it a sort of oblong slot.

Having described the several parts, I will now describe their operation. The link C being forced into the draw-head (guided by the tongue D, operated by the handle *d*) by the two cars approaching one another, the coupling is made automatically by one end of the link C striking the rounded side of the hook portion of the coupling-plate, which raises it, and it is forced back by the pressure of the spring

and the link caught. When it is desired to uncouple the cars it can be done by an operator, either on the top or side of the car, or on the platform, by pulling on a chain or bar 5 extending upward from the lug c' on the coupling-plate, and when the cars are separated and the hold on the chain or bar let go the spring forces the plate back again, and by these means the coupler is always ready for a 10 coupling to be made.

When the dome, &c., are used the operation will be obvious. The lever, extending down through slot 4 into the channel f under the metal plate a^2 , is pulled backward, and operating against the plate pushes it out, the 5 coupling-pin F having been raised as high as permitted by the chain which connects the lever and pin, and is of length just sufficient to permit being raised high enough for the 10 metal plate a^2 to slide under it, which holds it in readiness for coupling. Then, when the cars

bump together, the plate is pushed in and the pin falls through, the guide-tongue in this case having a hole in it also on a straight line with those in the top and bottom of the draw-head. 25

Having thus described my invention, what I claim is—

The draw-head, in combination with guide-tongue operated by a handle, the spring, and coupling-plate, said plate having the lug and 30 hook-like projections, and bearing or resting against seats formed in the draw-head, whereby the strain upon the pivot of the plate is relieved, substantially as described.

In testimony that I claim the foregoing as 35 my own I affix my signature in presence of two witnesses.

JOHN J. PURSLEY.

Witnesses:

B. F. MORSELL,

EUGENE D. CARUSI.