

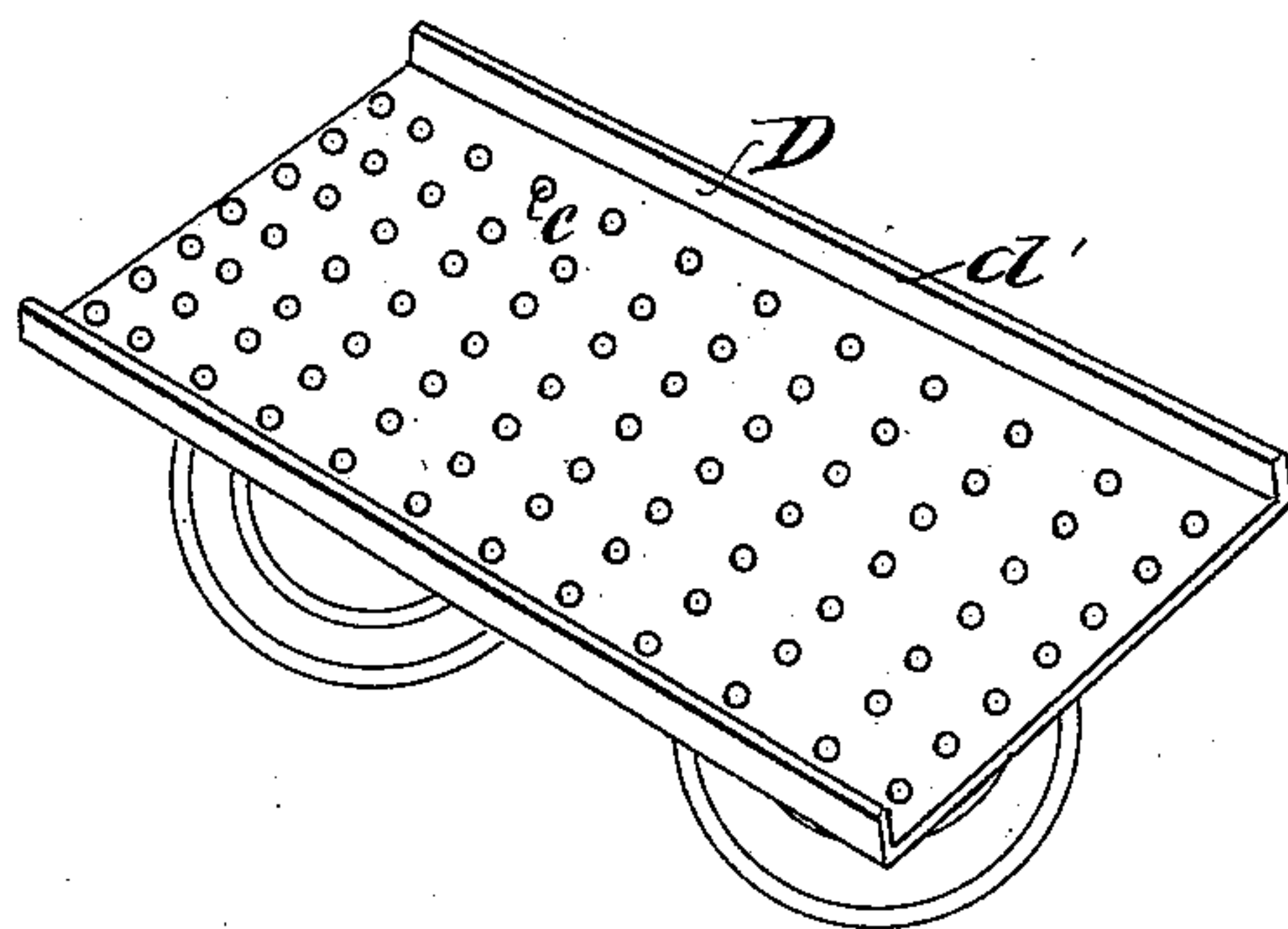
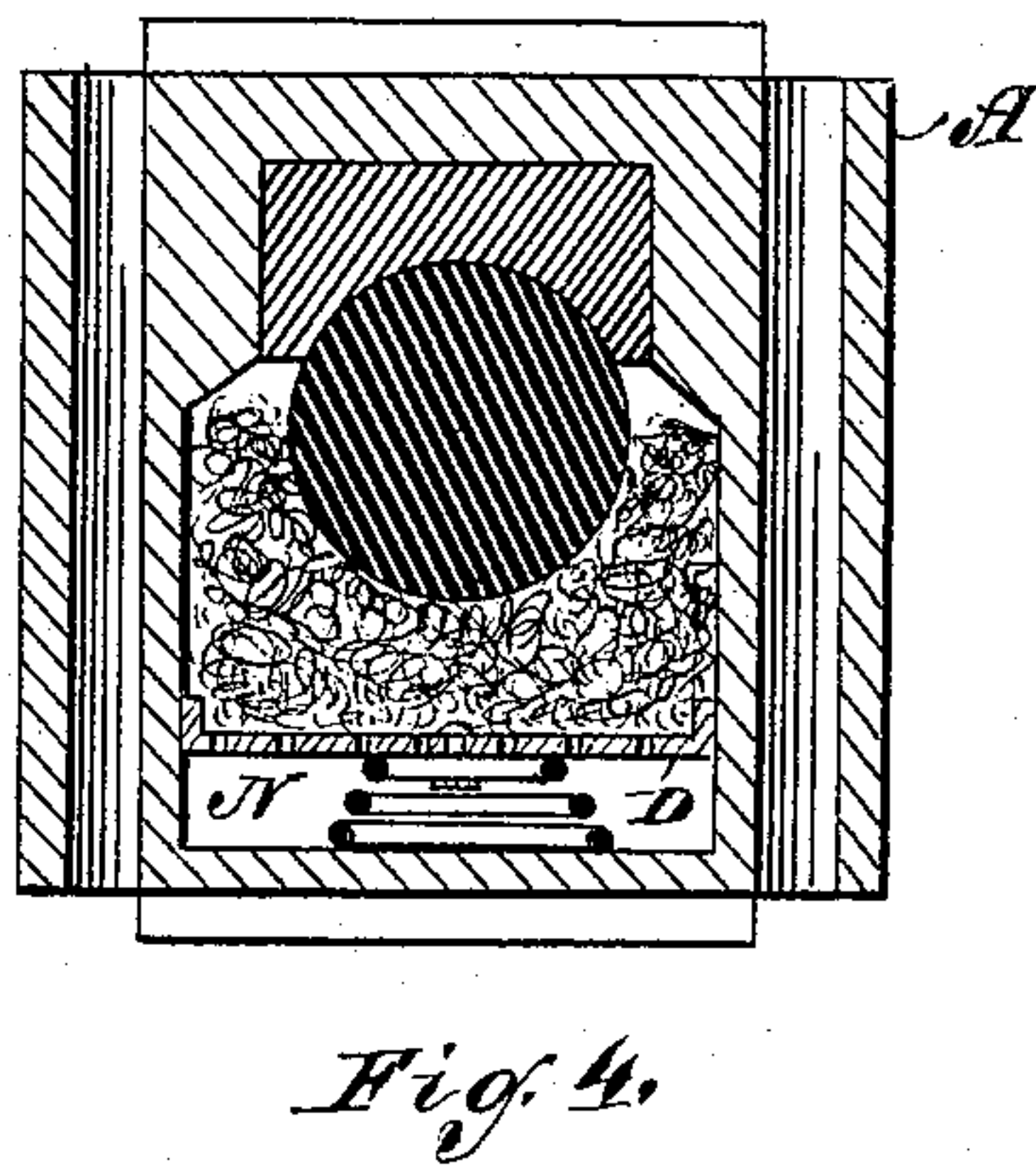
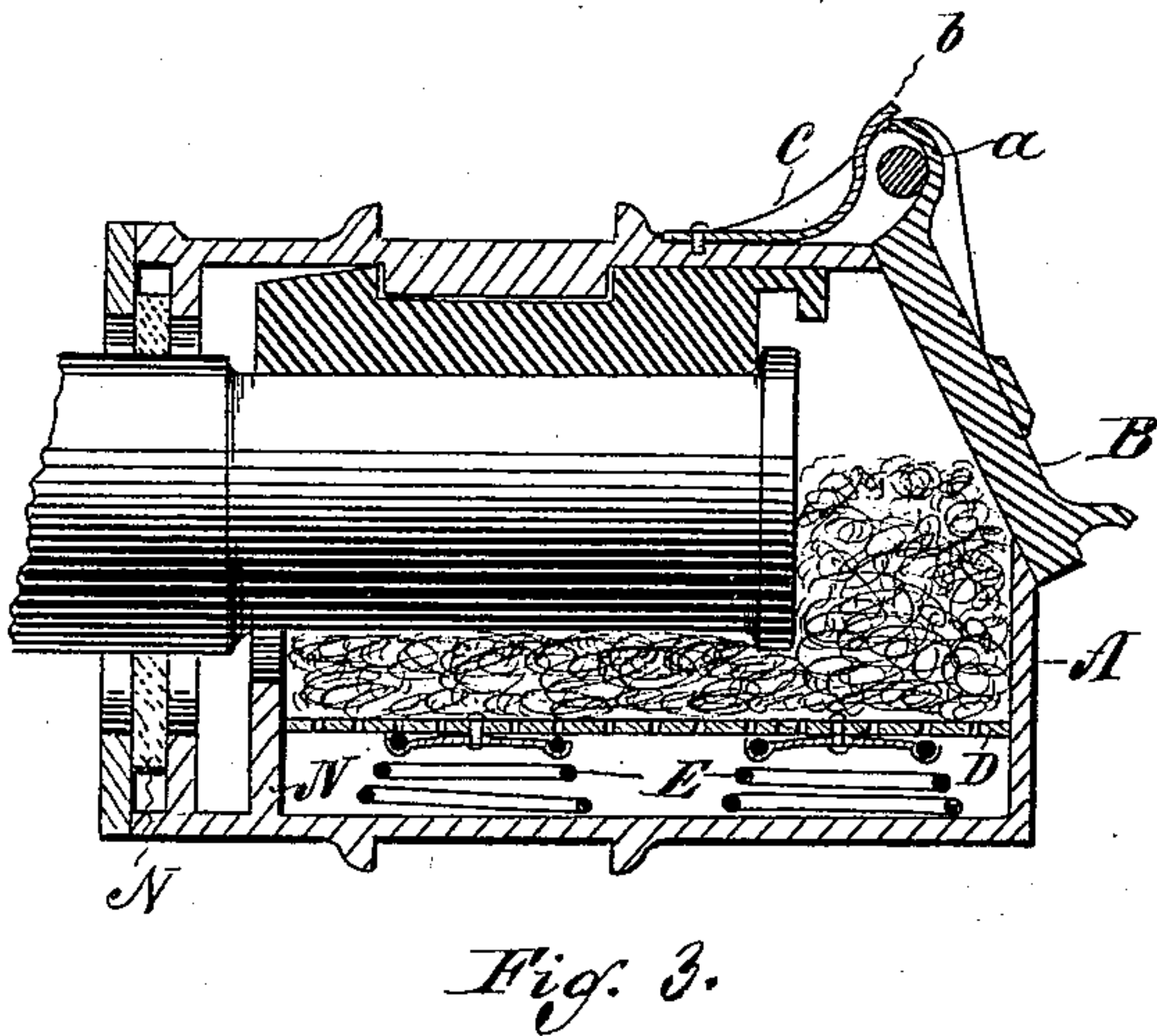
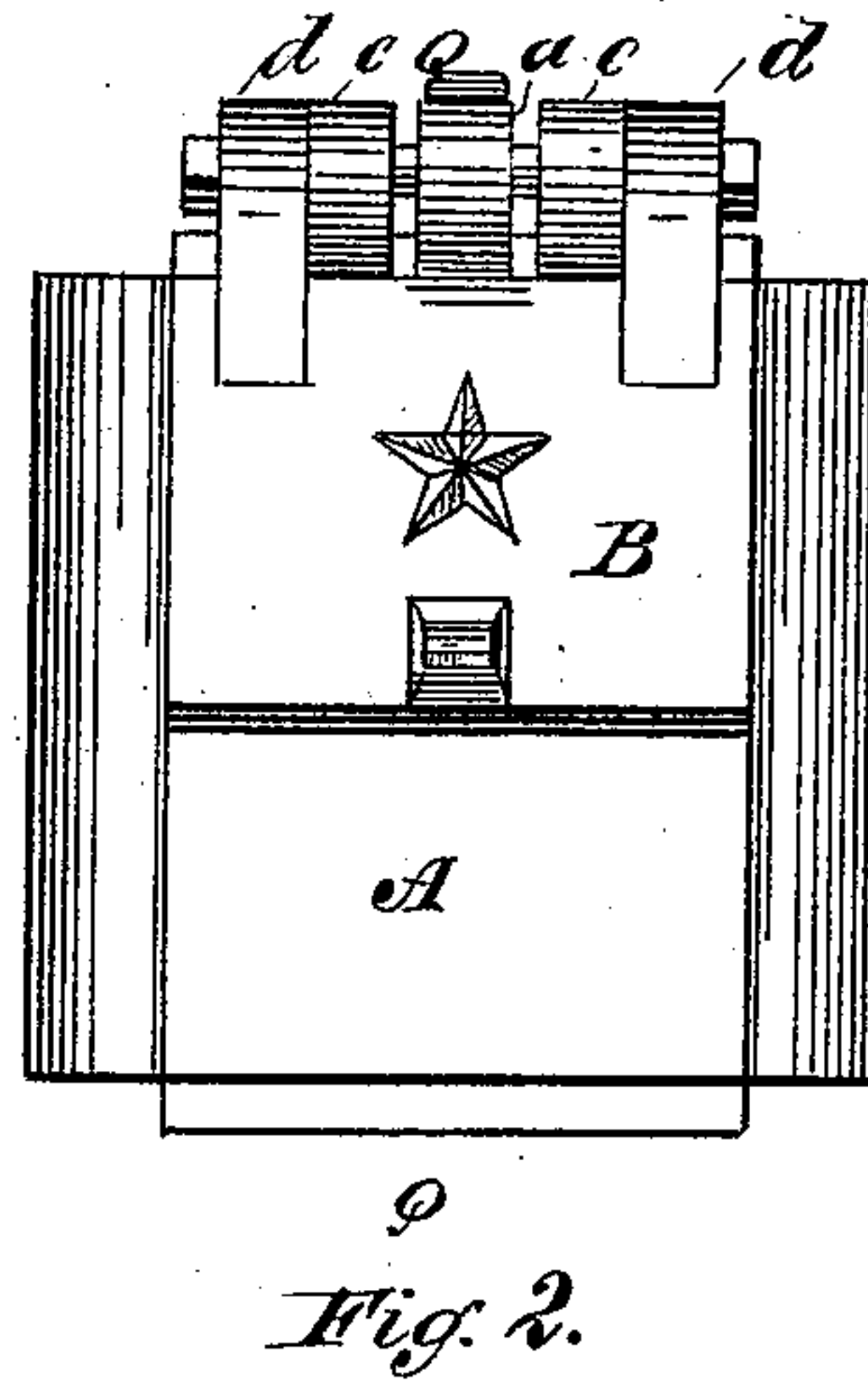
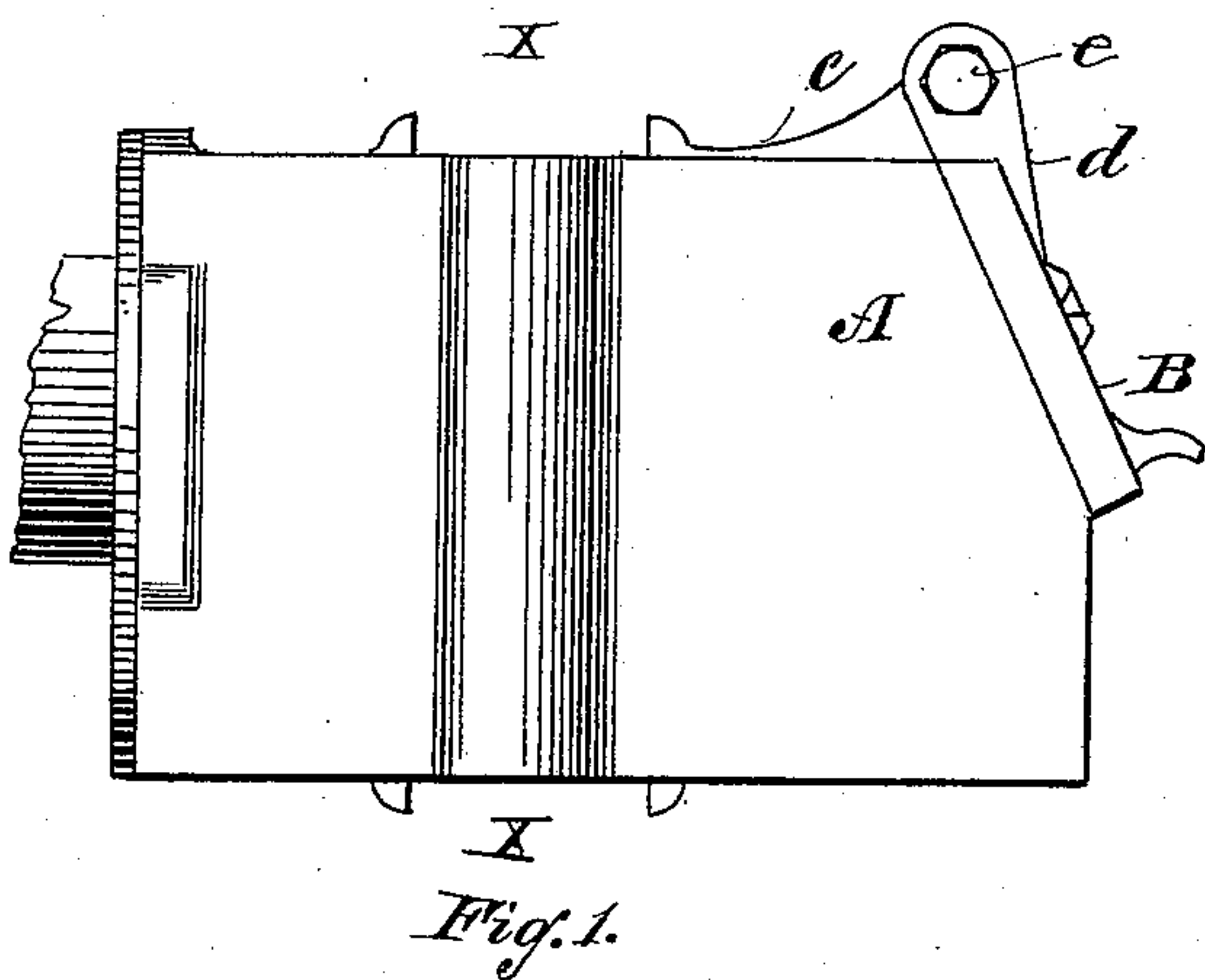
(No Model.)

R. McDOWELL.

CAR AXLE BOX.

No. 352,979.

Patented Nov. 23, 1886.



WITNESSES:

C. W. Benjamin
James Picmann

Fig. 5.

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UNITED STATES PATENT OFFICE.

RICHARD McDOWELL, OF LAMBERTVILLE, NEW JERSEY, ASSIGNOR TO
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CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 352,979, dated November 23, 1886.

Application filed October 15, 1884. Renewed February 12, 1886. Serial No. 191,745. (No model.)

To all whom it may concern:

Be it known that I, RICHARD McDOWELL, of Lambertville, in the county of Hunterdon and State of New Jersey, have invented a new and useful Improvement in Car-Axle Boxes, of which the following is a specification.

This invention relates to car-axle boxes.

It has for its object to provide the box with a plate resting upon springs located on the bottom of the box inside, upon which the waste packing rests. The plate acts as a means to force the waste up against the axle as it becomes packed or consumed, thus enabling an inferior quality of waste to be used in less quantity, as will be fully explained hereinafter.

The drawings accompanying this specification, and forming part thereof, fully illustrate my improved car-axle box, and by the aid of the following description will show very clearly its construction and operation, letters of reference being used which indicate corresponding parts throughout the drawings.

Figure 1 is a side elevation of car-axle box. Fig. 2 is an end elevation. Fig. 3 represents a longitudinal vertical section. Fig. 4 represents a transverse vertical section through the line *xx*, Fig. 1; and Fig. 5 represents a perspective view of the perforated plate which rests upon the springs in the bottom of the box, and which keeps the waste in place.

That part of the drawings which is represented by A is the box proper, which is made of cast-iron, and which may be of any desired shape in order to conform to the standard adopted by the railroad upon which it is being used.

The perforated plate D is constructed as shown in Fig. 3, and has secured to its lower side one or more springs, preferably two, as shown at E, Fig. 1. When the plate D is in position in the box, as shown in Figs. 1 and 2, the springs E will rest against the bottom of the box. When the box is being packed, the waste *o* is stuffed in between the lower side of the journal C and the top side of the plate D. The waste *o*, when being stuffed in the box, will crowd its way through the perforation in the plate D. In the form of wicks it will also force the plate D down toward the bottom of the box and compress the springs E as much

as may be required, as shown in Fig. 2. The waste is soaked with oil or other lubricant, and as it is compressed or worn away by the action of the journal the springs E will force the plate D upward and thus keep the waste packing in position against the lower side of the journal. The space in the box A under the plate D is the receptacle for the oil, which is fed to the waste by the small strips of waste (or wicks) which hang through the holes C' and lie in the oil.

At the back end of the box inside, as shown at *n*, is a bulk-head against which the end of the plate D slides vertically, and which keeps the plate from having any end movement in the box. The bulk-head *n* is not a necessary feature to the operation of my improvement, and it may be advisable in some cases to dispense with it. I prefer to use it in the present box, however, in order to reduce the size of the plate D and the unnecessary consumption of waste. By the aid of my improved regulating-plate D, I am enabled to use a cheaper grade of packing in less quantity than has been heretofore used. I am also enabled to run the journals from six months to a year without repacking, as the springs keep the packing against the journal for any length of time, while in the case of the ordinary manner of stuffing the box full of waste, without my improved plate the boxes must be repacked on an average every month, because the waste becomes packed and drops away from the journal. I claim therefore that I have provided a very much cheaper and more perfect means of lubricating the journal.

When it becomes necessary to repack the box, the lid or cover B is opened. The requisite amount of waste packing is then stuffed in between the journal and plate and oil or any other desirable lubricant poured thereon. The cover is again closed and the box is ready for use.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a car-axle box, the plate D, extending across the entire width of the box and provided with the guide-lips *d'*, for the purpose of keeping the plate from tipping, the said plate resting upon the springs E, as and for the purpose set forth.

2. In a car-axle box, the plate D, constructed with the guide-lips d' , to keep the plate level within the box, and provided with suitable perforations through which the waste absorbs
5 the oil from the bottom of the box, the said plate resting upon suitable spiral springs, as and for the purpose specified.

In testimony that I claim the foregoing im-

provement in car-axle boxes, as above described, I have hereunto set my hand this 11th day of October, 1884.

RICHARD McDOWELL.

Witnesses:

JAMES P. NIEMANN,
WILLIE J. KELLEY.