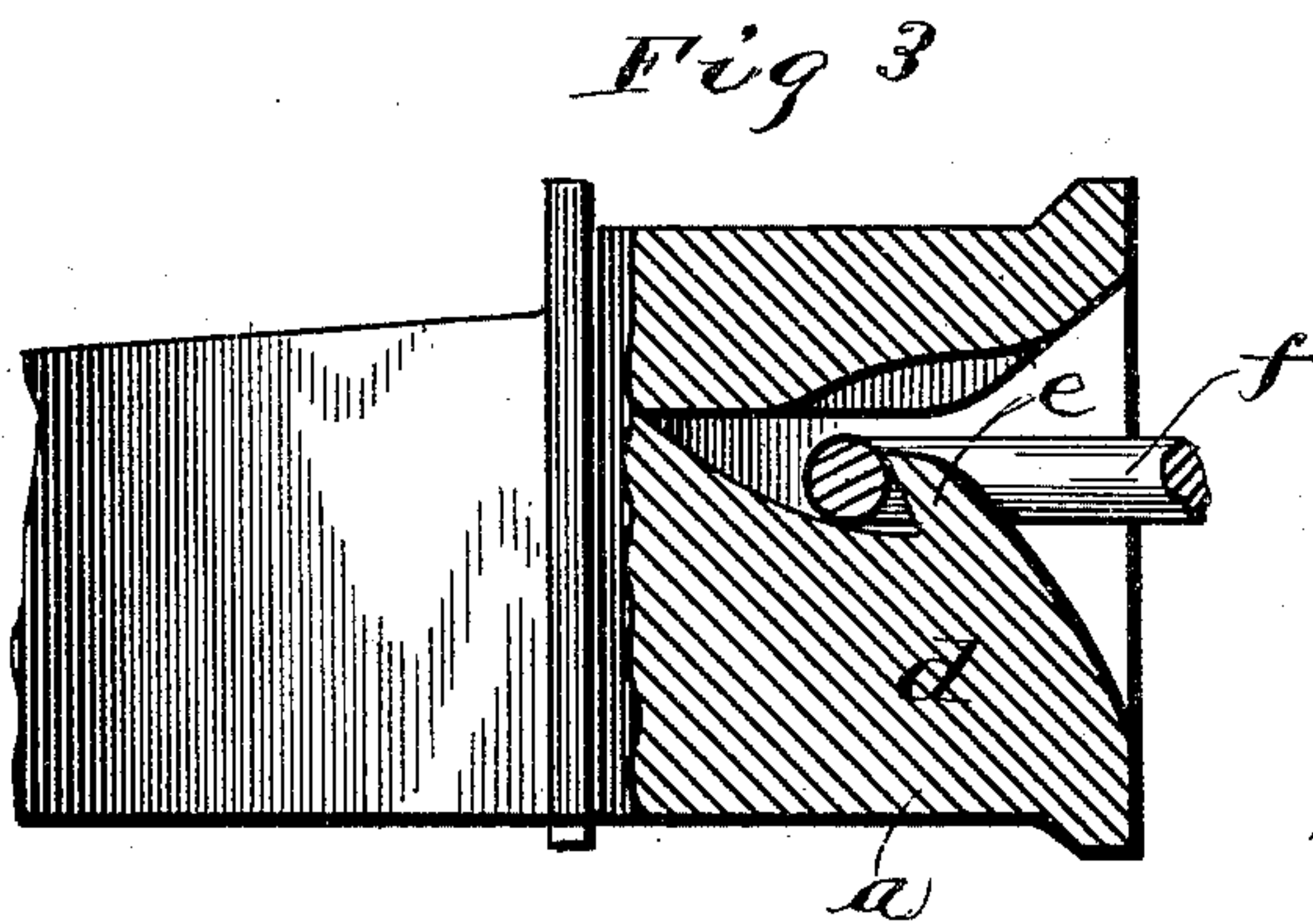
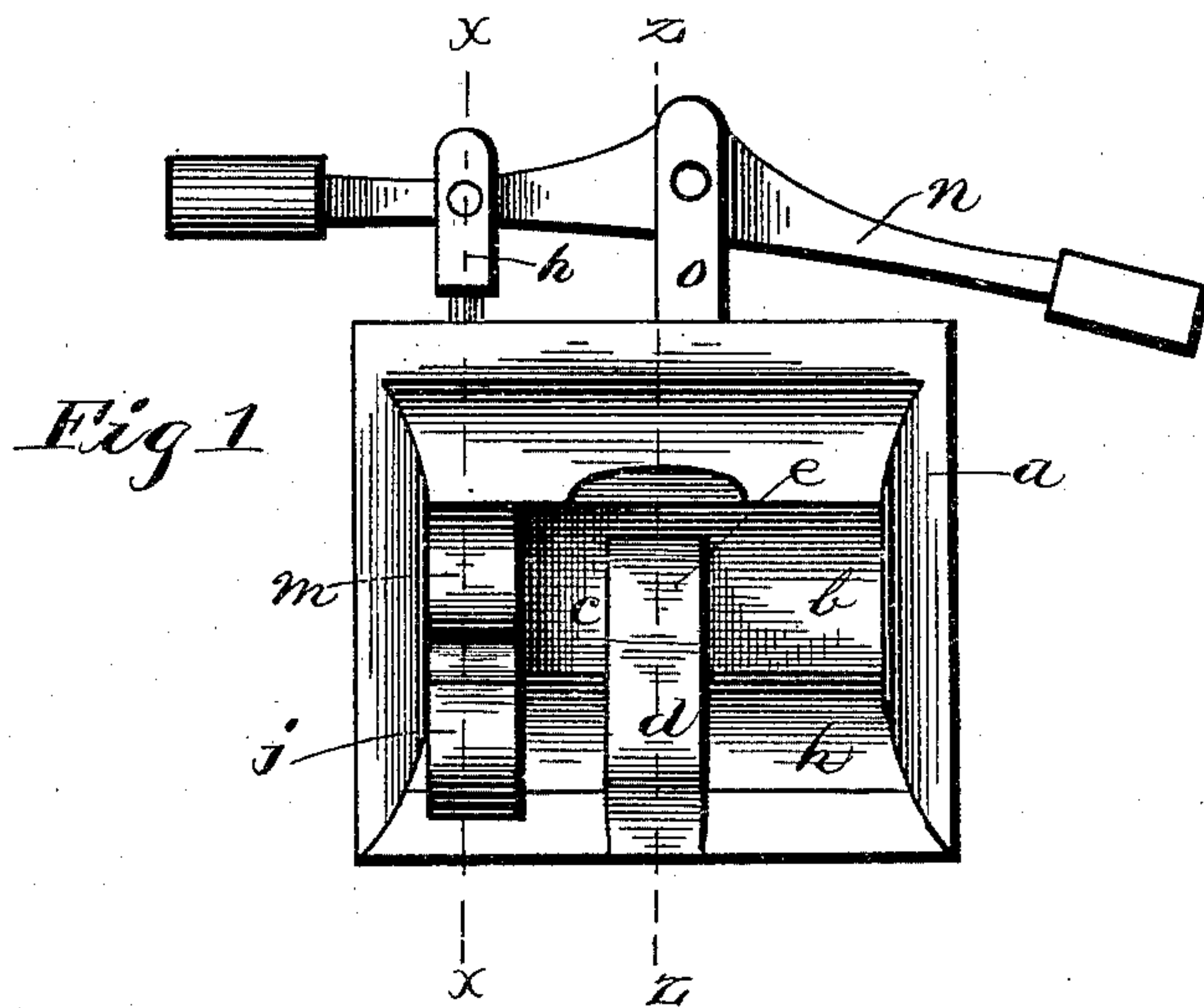
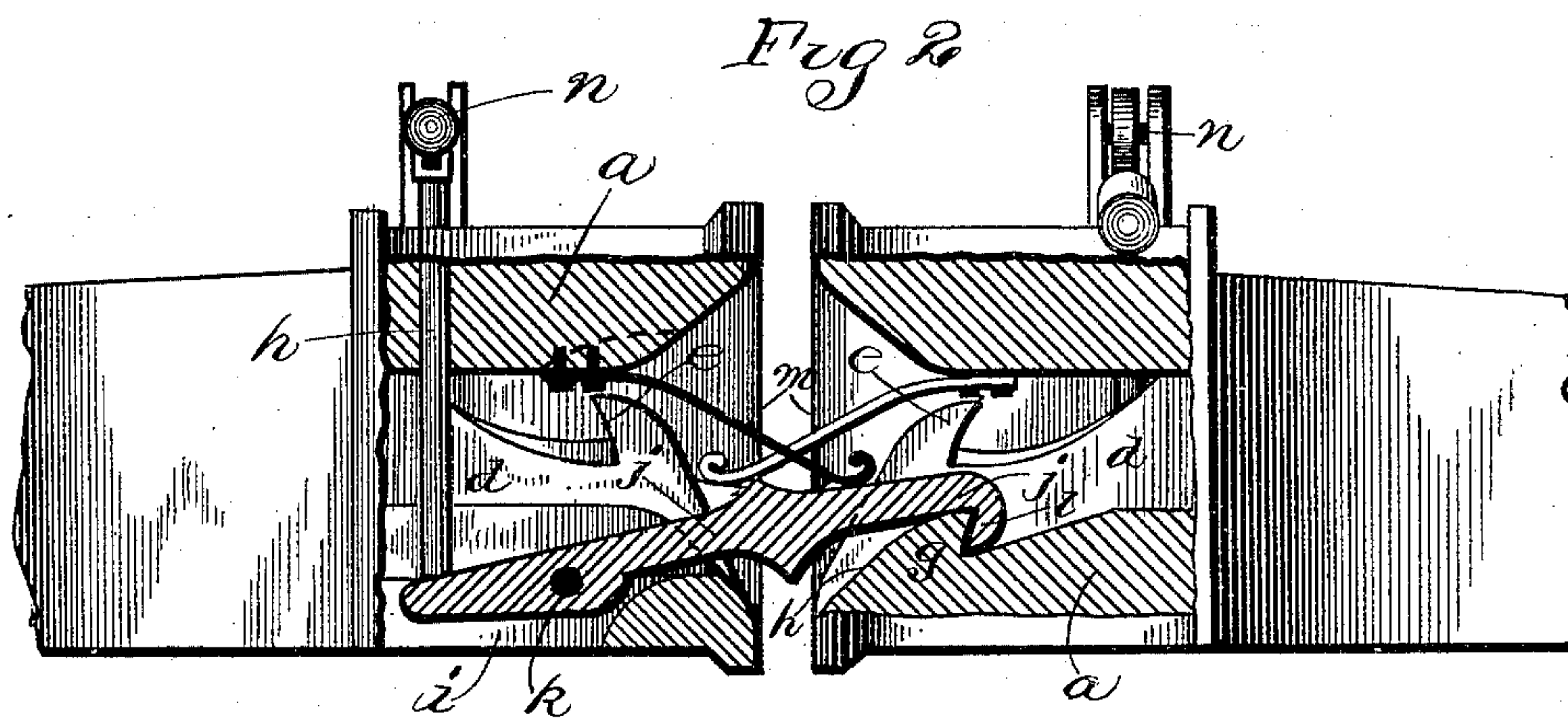


(No Model.)

T. F. PHILLIPS.  
CAR COUPLING.

No. 433,487.

Patented Aug. 5, 1890.



Witnesses  
C. C. Burdine  
H. E. Peck

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T. F. Phillips  
per O. E. Duffy  
Attg



# UNITED STATES PATENT OFFICE.

THEADORE F. PHILLIPS, OF WABASH, INDIANA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 433,487, dated August 5, 1890.

Application filed April 7, 1890. Serial No. 346,925. (No model.)

*To all whom it may concern:*

Be it known that I, THEADORE F. PHILLIPS, of the city of Wabash, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Railroad-Car Couplers; 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 invention relates to certain improvements in car-couplings; and the invention consists in certain novel features of construction and in combinations of parts more fully described hereinafter, and particularly pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a front end elevation of the improved coupling-head. Fig. 2 shows two heads coupled together, the heads being in section on the line *x x*, Fig. 1. Fig. 3 is a section of a coupling-head on the line *z z*, Fig. 1.

In the drawings, the reference-letter *a* indicates a coupling-head carried by any usual draw-bar. This head is hollow and open at the front end and divided into two compartments *b c* by the vertical wall *d* extending from the bottom almost to the top of the interior of the hollow head. This partition at its top edge is formed into a hook or upwardly-extending projection *e*, of considerable strength, and so located in relation to the upper wall of the hollow interior of the head that an ordinary link *f* can be employed to lock the heads together by engaging these hooks or projections. This is a matter of great importance, for if the coupling mechanism, hereinafter described, should be rendered inoperative the coupling can be effected by an ordinary link.

The bottom of the compartment *b* of the head is provided with a heavy strong upwardly-extending shoulder *g*, and the front portion of said bottom is beveled or inclined upwardly to said shoulder, as shown at *h*. The chamber *c* is provided with a longitudinal slot *i*, and a vertically-swinging locking lever or catch *j* is pivoted by pin *k* in said

compartment, so that the rear or heel end of said lever can swing vertically in said slot. The front end of the lever extends out a distance in front of the coupling-head, and is provided with a shoulder *l* on the under side of its front end, corresponding and adapted to engage the shoulder *g* of another coupling-head, and the front end of lever *j* is beveled to correspond with the beveled surface *h*. The free end of said lever is yieldingly held down by a spring *m*, secured to the head and bearing down on the upper edge of the free end of said lever.

The free end of the coupling-lever is raised by a transverse rocking uncoupling-lever *n*, pivoted at its center to a support *o*, extending up from the coupling-head, with its two free handle ends extending to opposite sides of the coupling-head and within convenient reach from either side of the track without going between the cars. On one side of its pivotal point this lever has a vertical rod *p* pivoted thereto and extending down through the coupling-head, with its lower end loosely engaging the rear or heel end of the coupling hook or lever, so that when one end of said uncoupling-lever is drawn down or the other end drawn up said rod *p* will be forced down, and the heel of the coupling hook or lever will be depressed and the opposite end correspondingly raised.

Of course it is understood that when two such coupling-heads approach, the coupling hooks or levers of the two heads engage the beveled portions *h* of the opposite heads, and are thereby lifted and dropped into locking engagement with the shoulder *g*, each pair of heads being locked together by two coupling hooks or levers, as each head is provided with a hook on one side and a shoulder on the other.

Various modified constructions and systems of levers or other means can be employed for uncoupling the hooks in cars of different constructions.

What I claim is—

1. The car-coupling consisting of the inclosed coupling-head having the chamber in its front end divided into two compartments, the bottom of one chamber being beveled up from the front to the top of a holding-shoulder

der, and the bottom of the other chamber  
being longitudinally slotted, the vertically-  
swinging hook pivoted therein at its rear  
and having a heel behind the pivot, a spring  
5 to hold the outer end of the hook down, a ver-  
tically-movable rod extending through the  
head and resting loosely on said heel, and the  
rocking operating-lever mounted above and  
extending on both sides of the head and piv-  
10 oted at one side of its fulcrum to the upper  
end of said rod, as set forth.

2. The inclosed coupling-head open at the  
front end, the vertical partition dividing the  
interior of said head into two compartments

having its upper edge formed into a hook, the 15  
shoulder in the bottom of the chamber on one  
side, and the vertically-swinging hook at its  
rear end pivoted in the other chamber, and  
the spring and operating mechanism for said  
hook, as set forth. 20

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

THEADORE F. PHILLIPS.

Witnesses:

JOHN H. DICKEN,  
WARREN BIGLER.