

No. 774,215.

PATENTED NOV. 8, 1904.

J. H. VAN HORN.
CARD INDEX FILE.

APPLICATION FILED SEPT. 16, 1903.

NO MODEL.

2 SHEETS--SHEET 1.

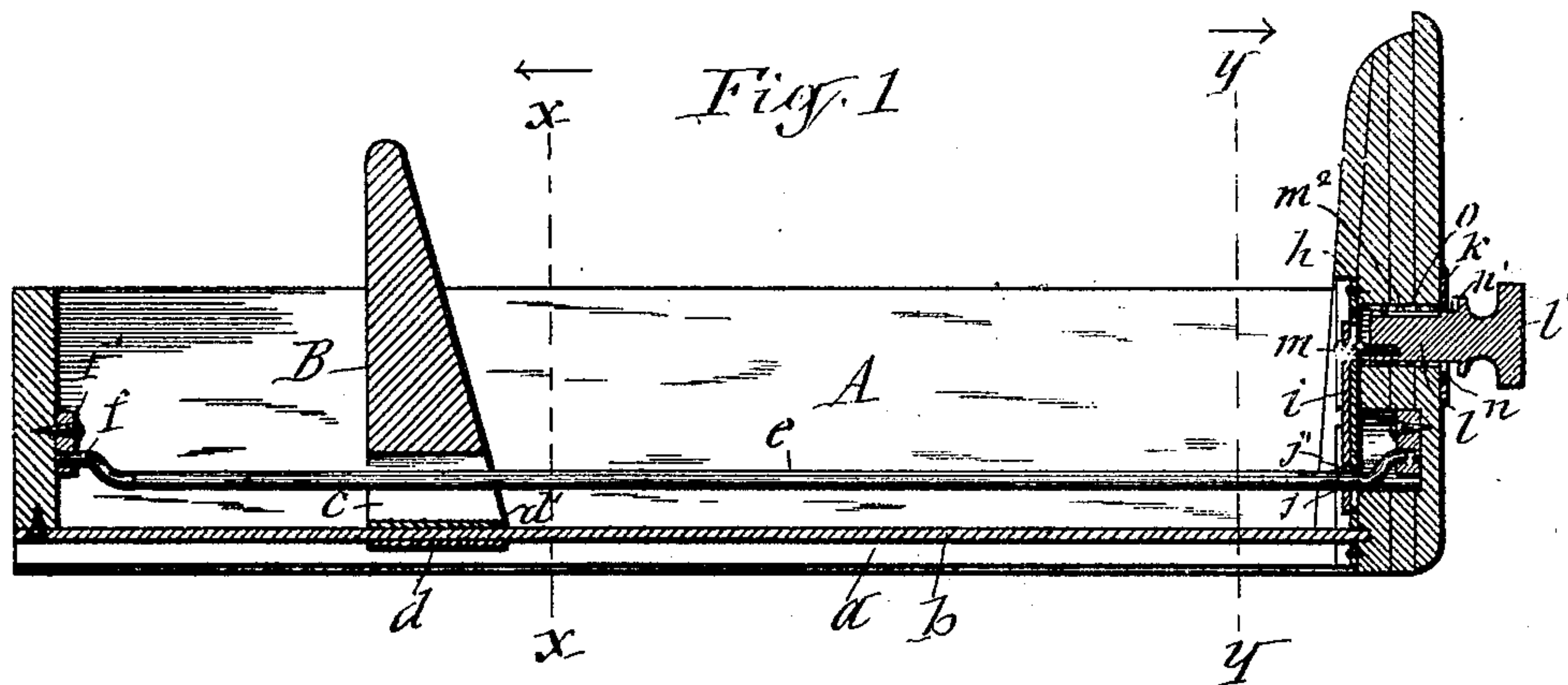


Fig. 2

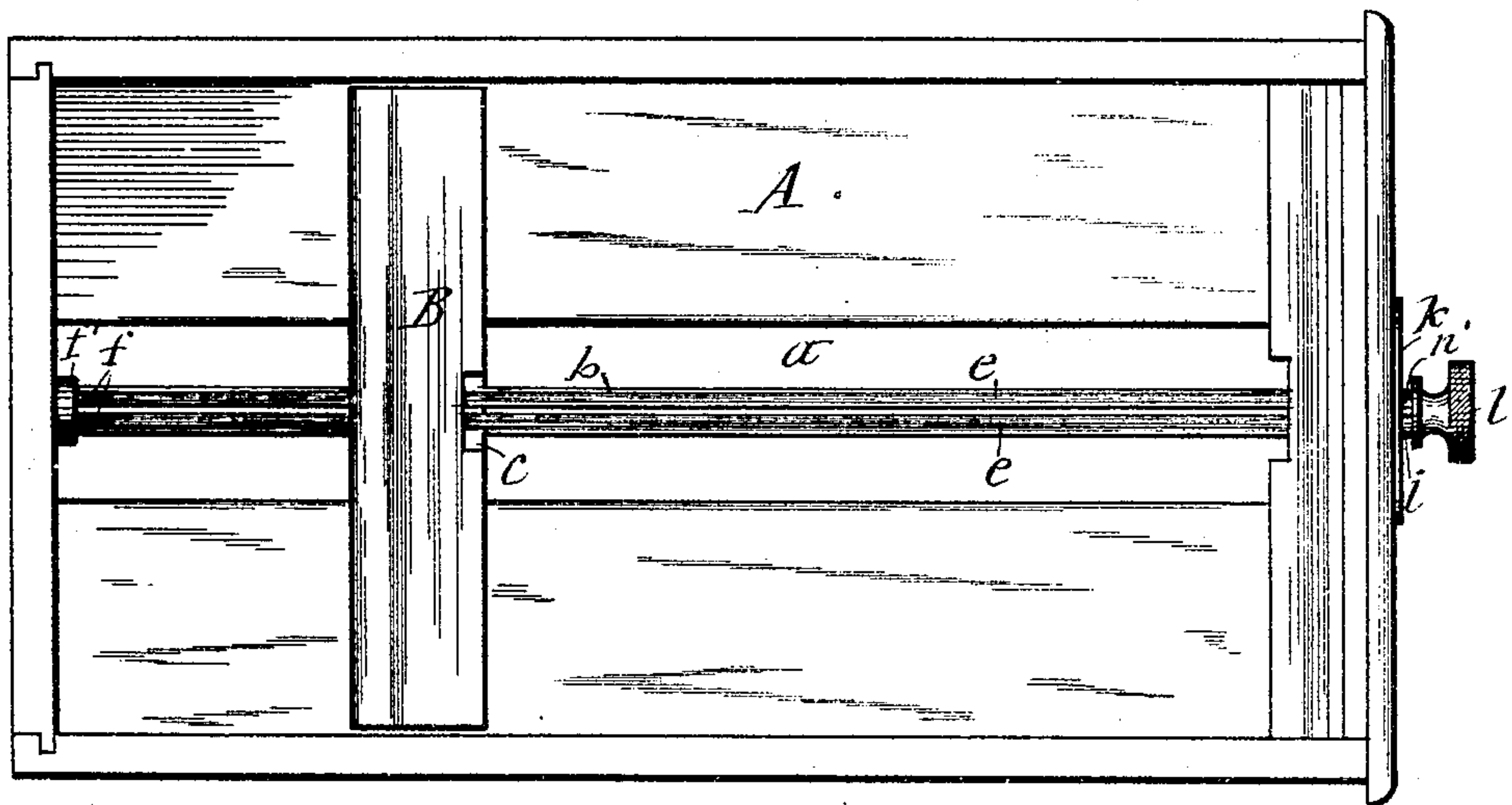
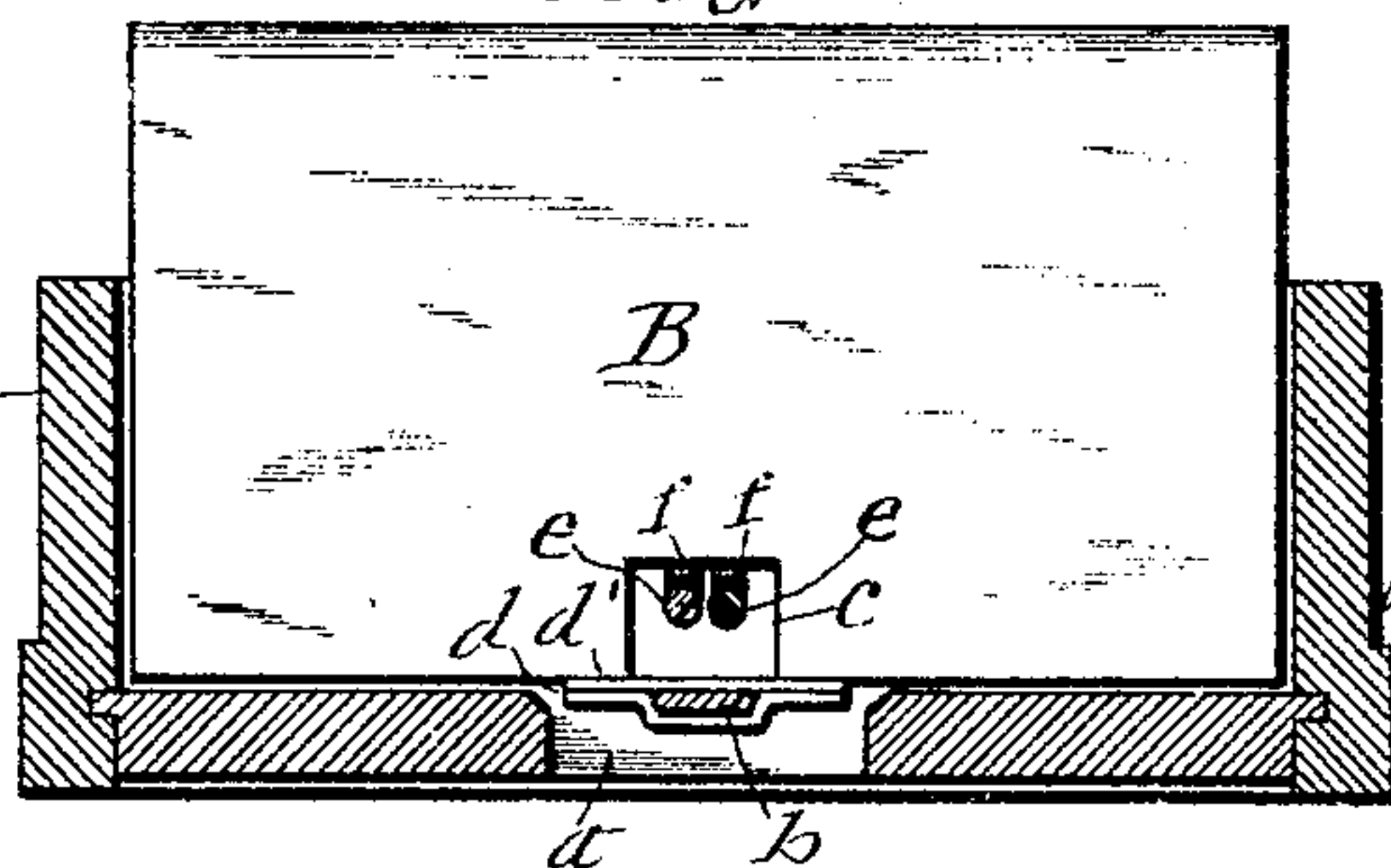


Fig. 3



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2 SHEETS—SHEET 2.

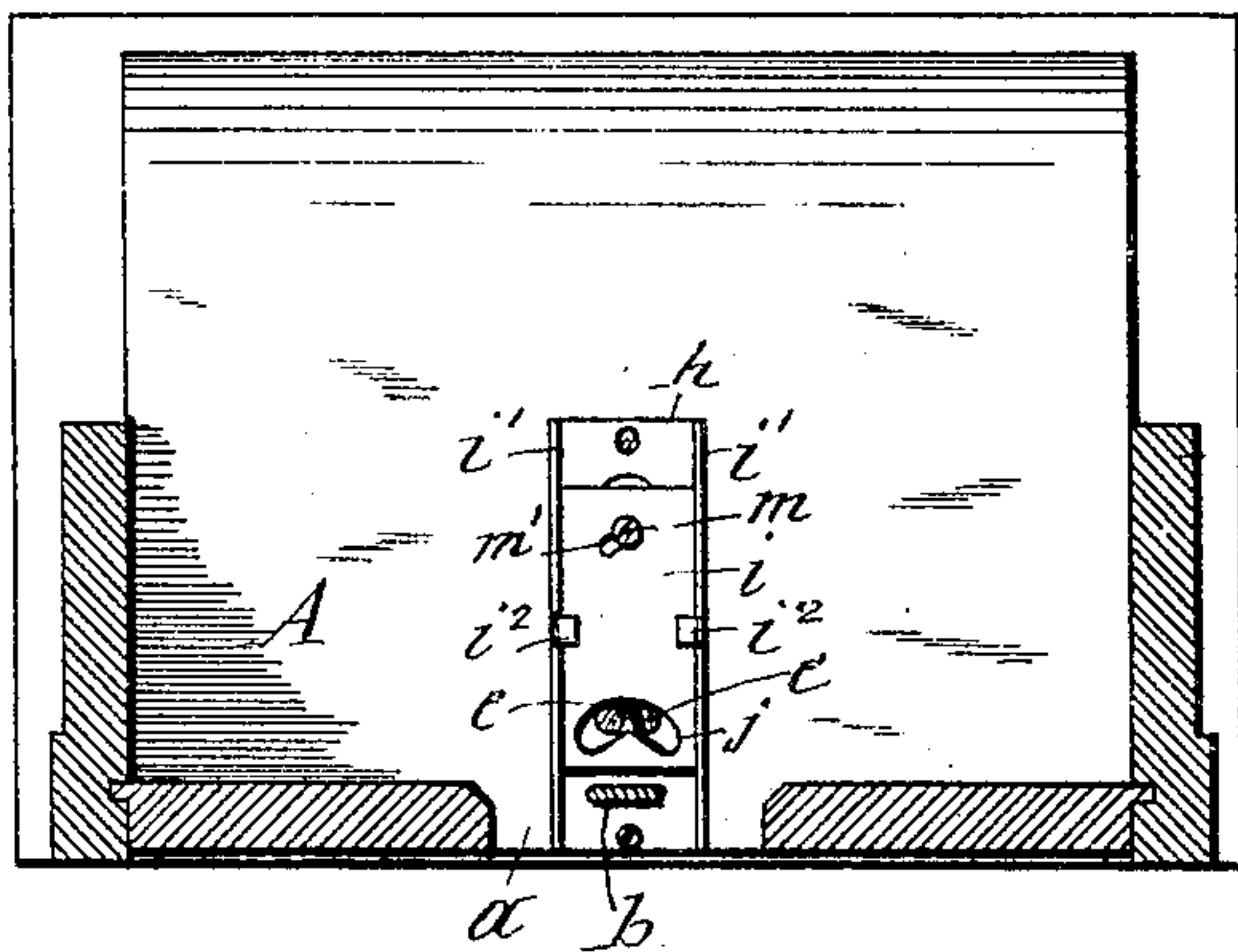


Fig. 4

Fig. 5

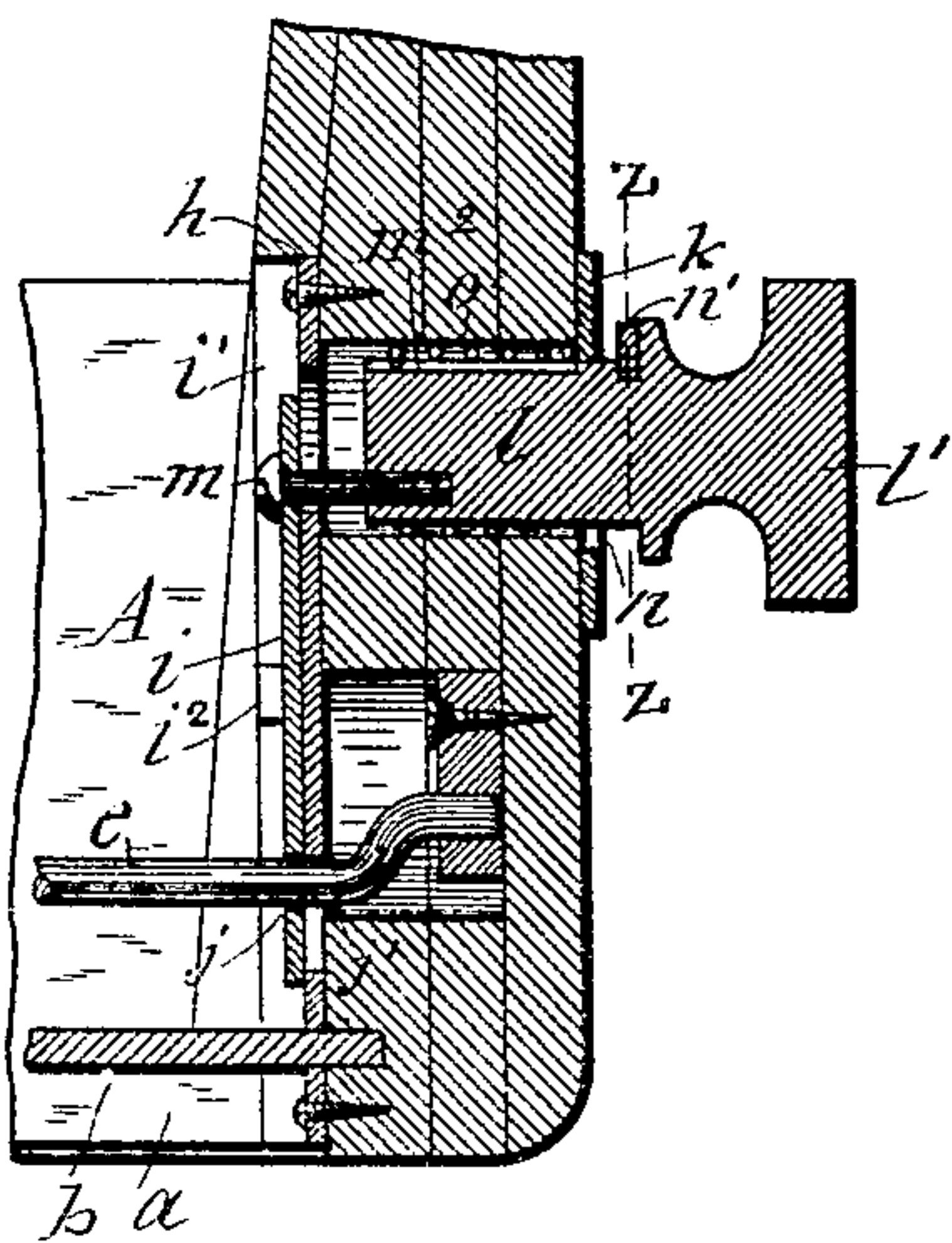


Fig. 6

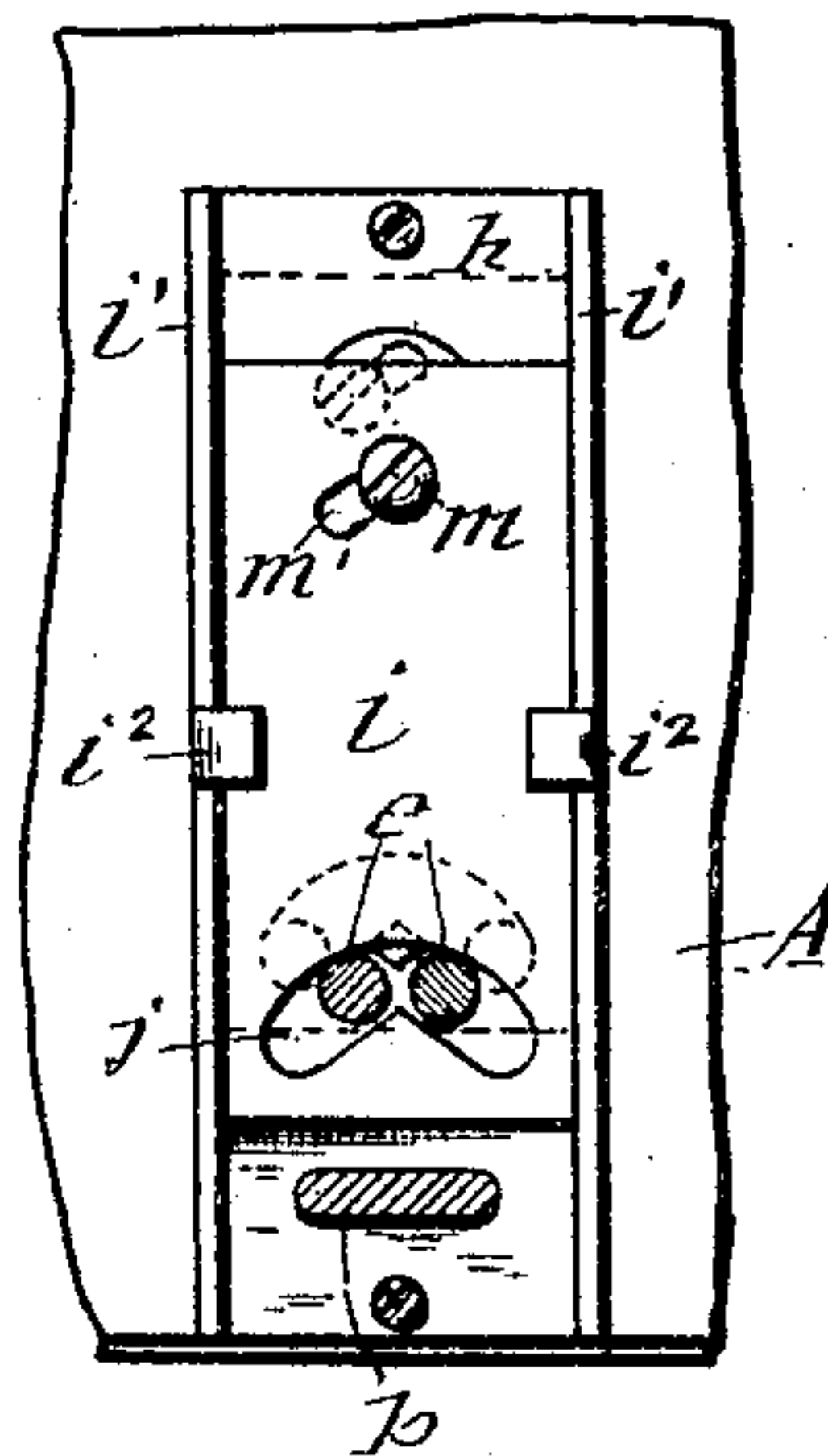


Fig. 7

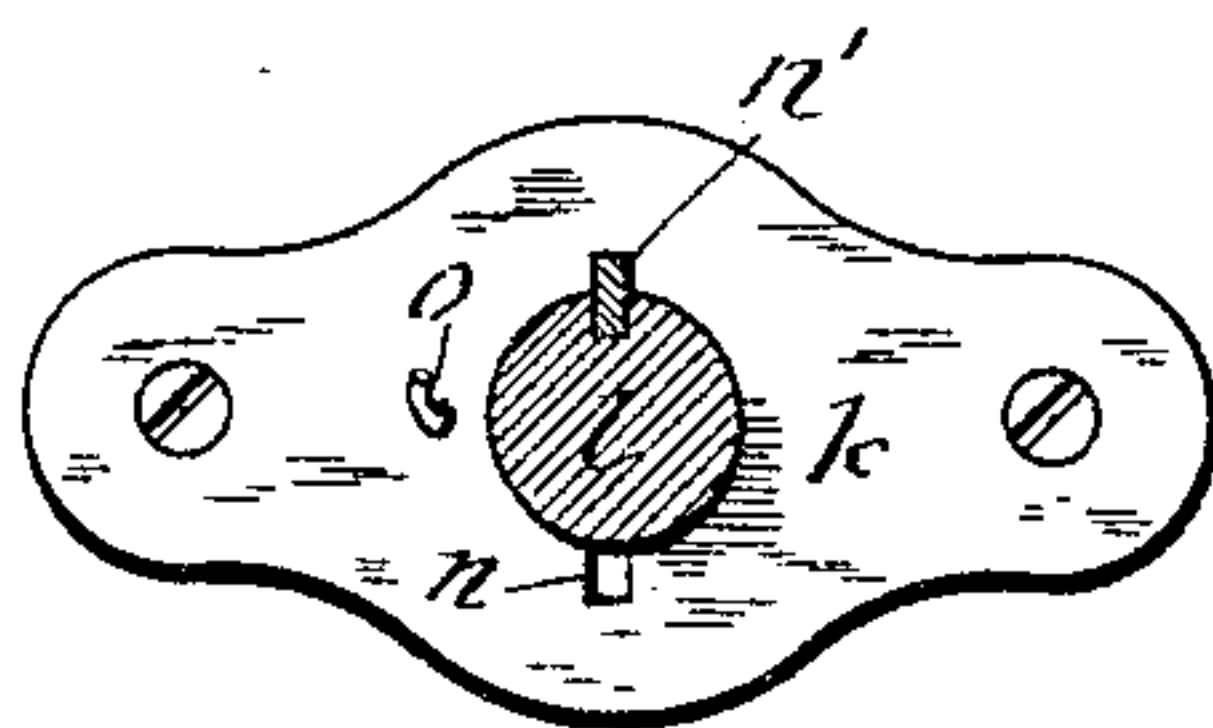
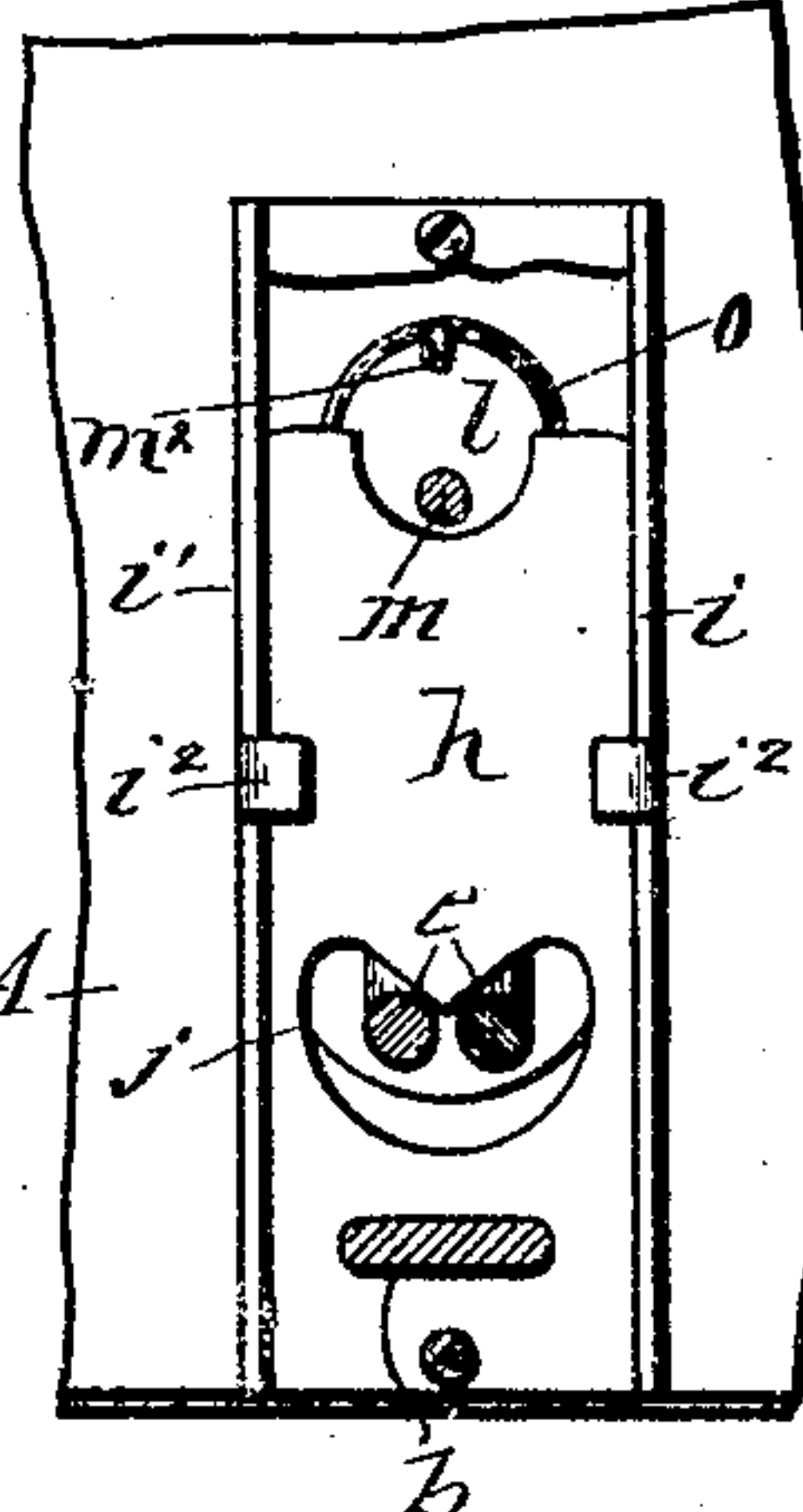


Fig. 8

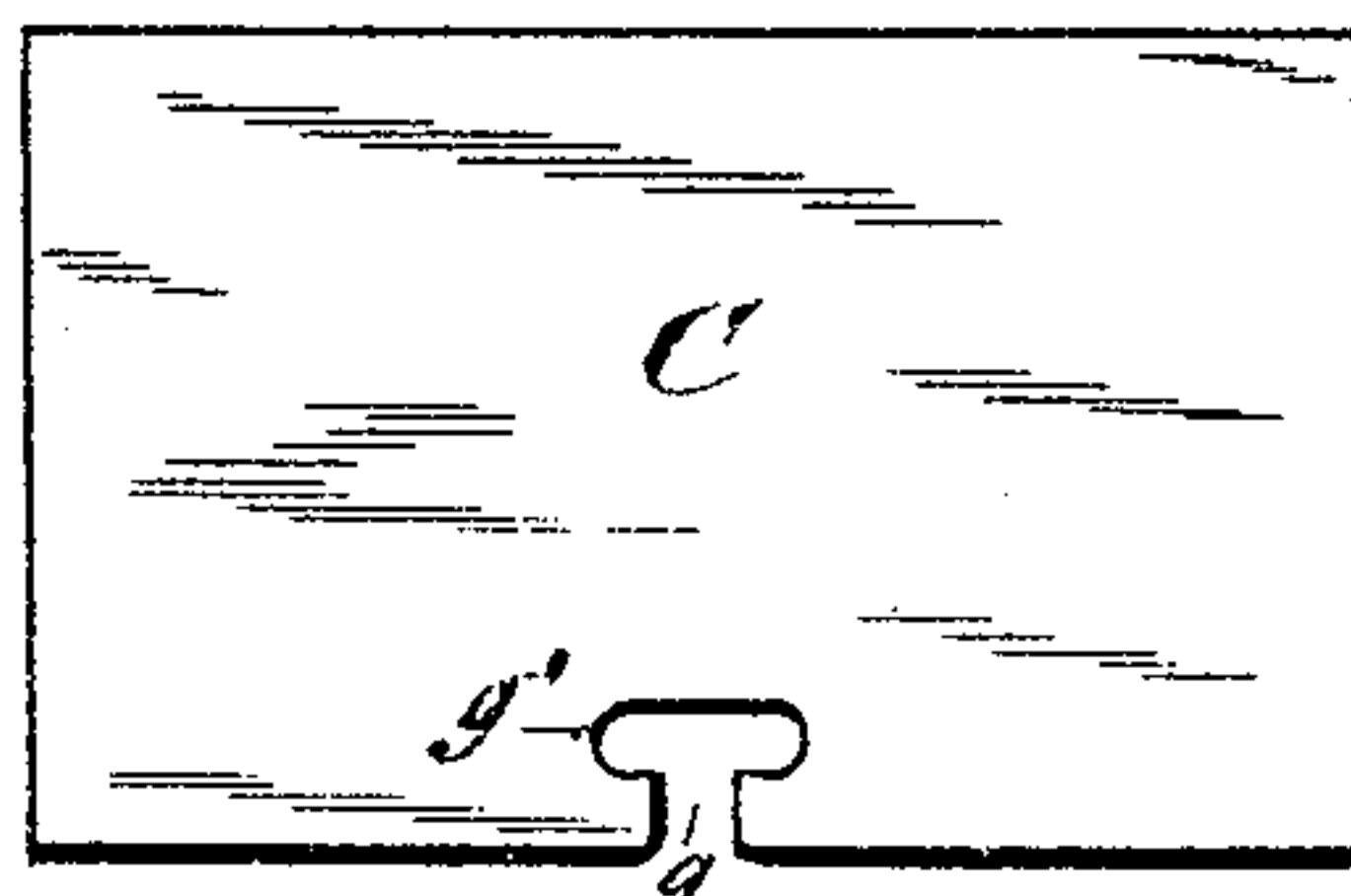


Fig. 9

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UNITED STATES PATENT OFFICE.

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CARD-INDEX FILE.

SPECIFICATION forming part of Letters Patent No. 774,215, dated November 8, 1904.

Application filed September 16, 1903. Serial No. 173,391. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. VAN HORN, a citizen of the United States, and a resident of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Card-Index Files, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of files which are designed to contain index-cards or memorandum-cards disposed in a compact, neat, and readily-accessible manner.

The object of the invention is to provide a card-file which shall be simple, inexpensive, efficient, and convenient in its use; and to that end the invention consists in the novel construction and combination of the component parts of the file, as hereinafter described and claimed.

In the drawings hereto annexed, Figure 1 is a vertical longitudinal section of a filing-case embodying my invention. Fig. 2 is a plan view of the same. Figs. 3 and 4 are vertical transverse sections on lines X X and Y Y, respectively, in Fig. 1, viewed in the directions indicated by the arrows. Fig. 5 is an enlarged vertical transverse section of the front wall of the case, showing more clearly the invention. Fig. 6 is an enlarged inner face view of a portion of the front wall, illustrating the fixed and movable plates of the mechanism which actuates the card-receiving rods. Fig. 7 is a similar view with the movable plate removed. Fig. 8 is a transverse vertical section on line Z Z in Fig. 5, showing the means for locking the aforesaid rods apart; and Fig. 9 shows one of the filing-cards used in connection with the case.

Referring to the said drawings, A represents the file-case, the bottom of which is provided with a longitudinal slot *a*, central between the sides of the case and extending through the entire thickness of the bottom. Lengthwise in the said slot is a stationary bar *b*, fastened at its ends to the bottoms of the end walls of the case.

B denotes the follower, which extends across the interior of the case and rides on the bottom thereof. The bottom of said follower is

provided with a notch *c*, which is directly over the bar *b* and extends to the slot *a*. The follower is retained in a uniform erect position in the case A by means of a strap *d*, attached to the bottom of the follower at opposite sides of the notch *c* and passing across the under side of the bar *b* and frictionally engaging the same. In order to reinforce the frictional hold, I prefer to employ an additional strap *d'*, attached to the bottom of the follower and engaging the top of the bar *b*. The follower is adjustable longitudinally in the case and is retained in its adjusted position by the aforesaid frictional engagement of the straps *d d'* with the bar *b*.

ee designate two parallel rods which pass through the notch *c* above the bar *b* and are formed at one with cranks *f*, which are pivoted to the rear end of the case, preferably to a metal plate *f'*, attached to the case. The said cranks allow the rods *ee* to swing laterally toward and from each other, which movement is required to allow the cards C to be deposited in the case and to be either fastened or removed therefrom when required. The said cards are provided at their bottom with a T-shaped notch formed of a vertical notch *g*, intersecting the central portion of a horizontal slot *g'*.

The rods *ee* are moved as aforesaid and locked in their position by the following devices, viz: To the inner side of the front wall of the case is suitably fastened a stationary plate *h*, on which is sustained a vertically-movable plate *i* by means of vertical guides *i'* on the stationary plate and lips *i''* on said plate engaging the face of the movable plate. The bottom portions of the plates *i* and *h* are provided, respectively, with transverse slots *j* and *j'*, through which the front end portions of the rods *ee* pass. The top edge of the slot in the stationary plate and the bottom edge of the slot in the movable plate are formed reversely V-shaped. In the upward movement of the plate *i* the V-shaped portions of the slots *j* and *j'* wedge the rods *ee* apart, and in the downward movement of said plate the arch-shaped portion of the slot *j* forces the rods toward each other, as clearly illustrated in Figs. 6 and 7 of the drawings.

To the exterior of the front wall of the case I fasten an escutcheon *k*, in which is pivoted a hub *l*, formed on the knob *l'*, which latter is provided with a lug *n'*, adapted to engage a notch *n*, formed in the escutcheon for the purpose hereinafter explained. To the inner end of the hub *l* is connected eccentrically the plate *i* by means of a pin or screw *m*, projecting longitudinally from the hub and passing through an oblique slot *m'*, formed in said plate. A spiral spring *o* surrounds the hub *l* and is attached at its outer end to the escutcheon *k* and has its inner end engaging a longitudinal groove *m''*, formed in said hub. Said spring serves to turn the knob in one direction to impart upward movement to the plate *i*, whereby the rods *e e* are separated and maintained in engagement with the ends of the horizontal slot *g'* in the card *C*, and thus retain the cards in the case.

To remove the cards *C* from or place them in the case, the knob *l'* is turned in the opposite direction to impart a downward movement to the plate *i*, whereby the rods *e e* are forced toward each other into close position. When it is desired to lock the rods *e e* in said position, the knob is to be pushed inward, whereby the lug *n'* thereon is made to engage the aforesaid notch *n* in the escutcheon, by which engagement the parts operate in opposition to the spring *o*. By drawing the knob outward to disengage the lug from the notch and releasing the knob the said spring *o* automatically forces and maintains the rods *e e* apart in the manner hereinbefore described.

The filing-case being provided with the knob *l'* particularly adapts the same to be placed in a suitable cabinet to serve as a drawer, if desired.

What I claim as my invention is—

1. The file-case provided in its bottom with a longitudinal slot, a stationary bar disposed in said slot and secured to the ends of the case, the adjustable follower provided in its bottom with a notch extending to the aforesaid slot, and a rigid strap fastened to the bottom of the follower and bearing on the bottom of the

aforesaid stationary bar and confining the follower in a uniform erect position in combination with cards provided with T-shaped notches in their bottom edges, two longitudinal bars disposed side by side and formed at their ends with cranks pivoted to the case, and means for swinging said bars into and out of the notches of the cards, as set forth.

2. The combination with the filing-case and the follower sustained longitudinally adjustable in said case and provided with a notch in its bottom, cards provided with T-shaped notches in their bottoms, parallel rods passing through said notches and formed with cranks pivoted to the ends of the case, a plate secured stationary to one end of the case and provided with a transverse slot formed with a V-shaped portion, a vertically-movable plate sustained on said stationary plate and provided with a transverse slot formed with an inverted-V-shaped portion, said slots receiving through them the aforesaid rods, a knob pivotally supported on the case, and means for transmitting motion from said knob to the aforesaid movable plate as set forth.

3. The combination with the filing-case and the follower sustained longitudinally adjustable in said case and provided with a notch in its bottom, cards provided with T-shaped notches in their bottoms, parallel rods passing through said notches and formed with cranks pivoted to the ends of the case, a plate fixed to one end of the case, an escutcheon attached to said end of the case, a knob pivoted to said escutcheon, a vertically-movable plate sustained on the fixed plate and connected eccentrically to the hub of the knob and provided with a transverse inverted-V-shaped slot receiving through it the adjacent ends of the rods, a spring turning the knob in one direction, and locking devices on the knob and escutcheon operating in opposition to said spring as and for the purpose set forth.

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Witnesses:

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