

B. F. NICHOLAS.
CATCH BASIN FOR SEWERS.
APPLICATION FILED JULY 20, 1909.

965,832.

Patented July 26, 1910.

2 SHEETS—SHEET 1.

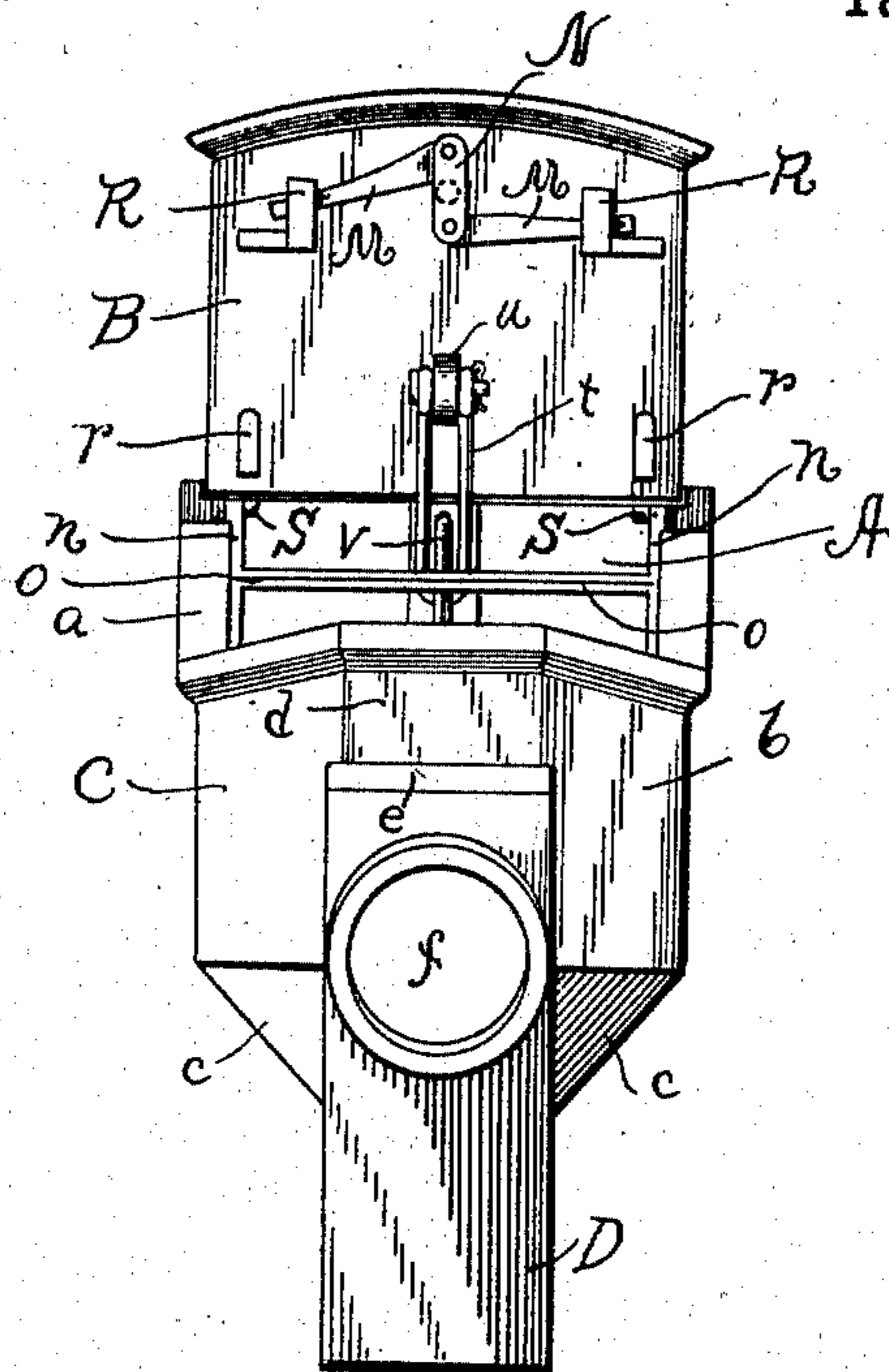


Fig. 1.

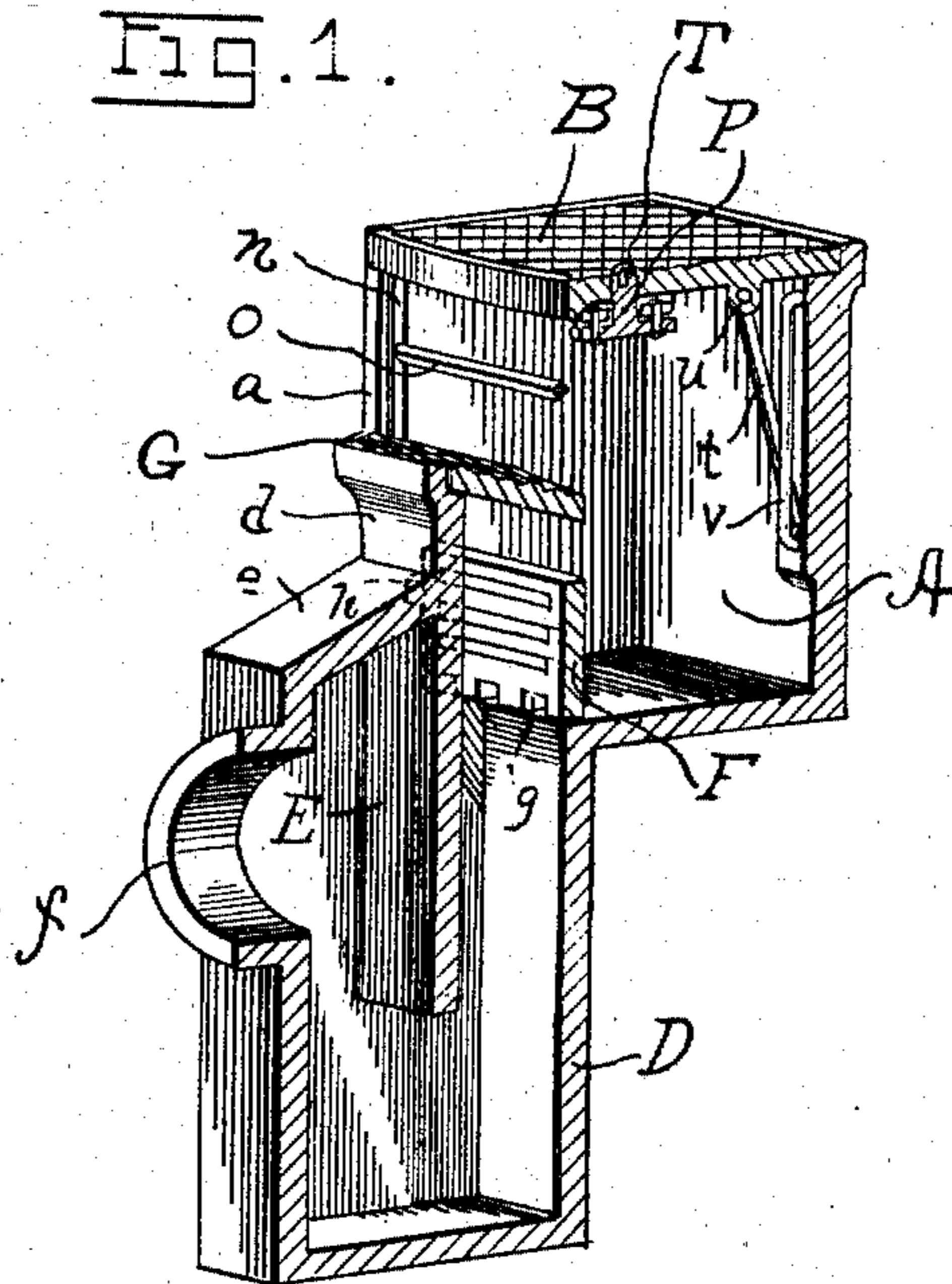
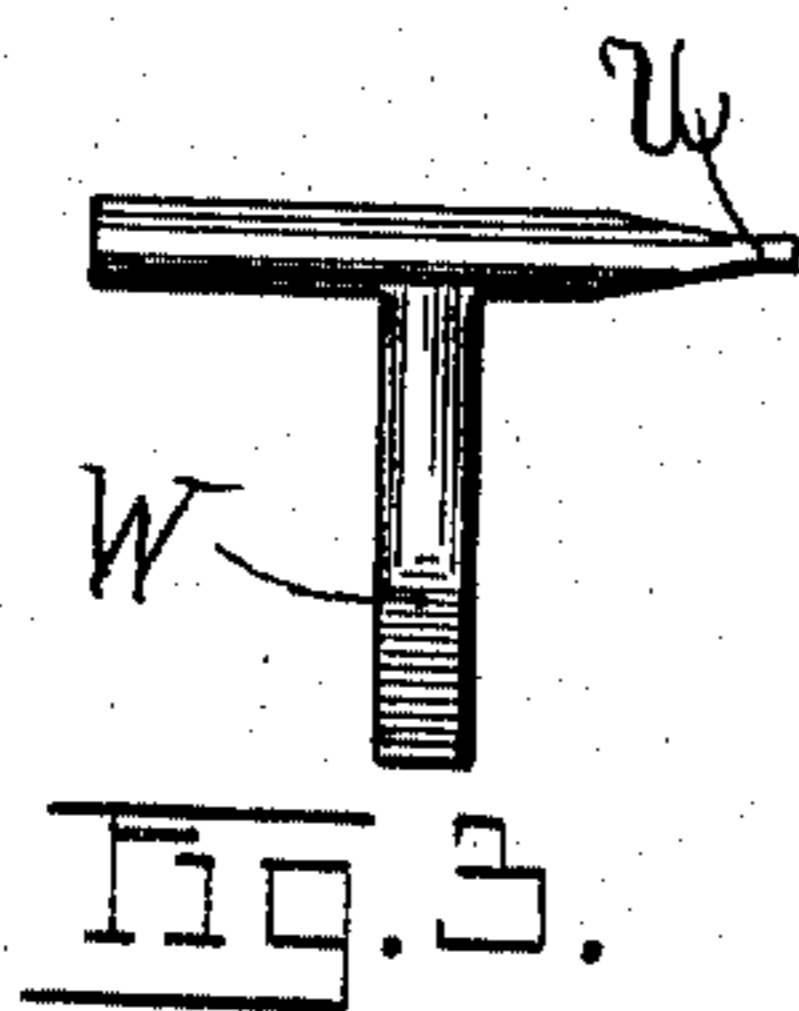


Fig. 2.

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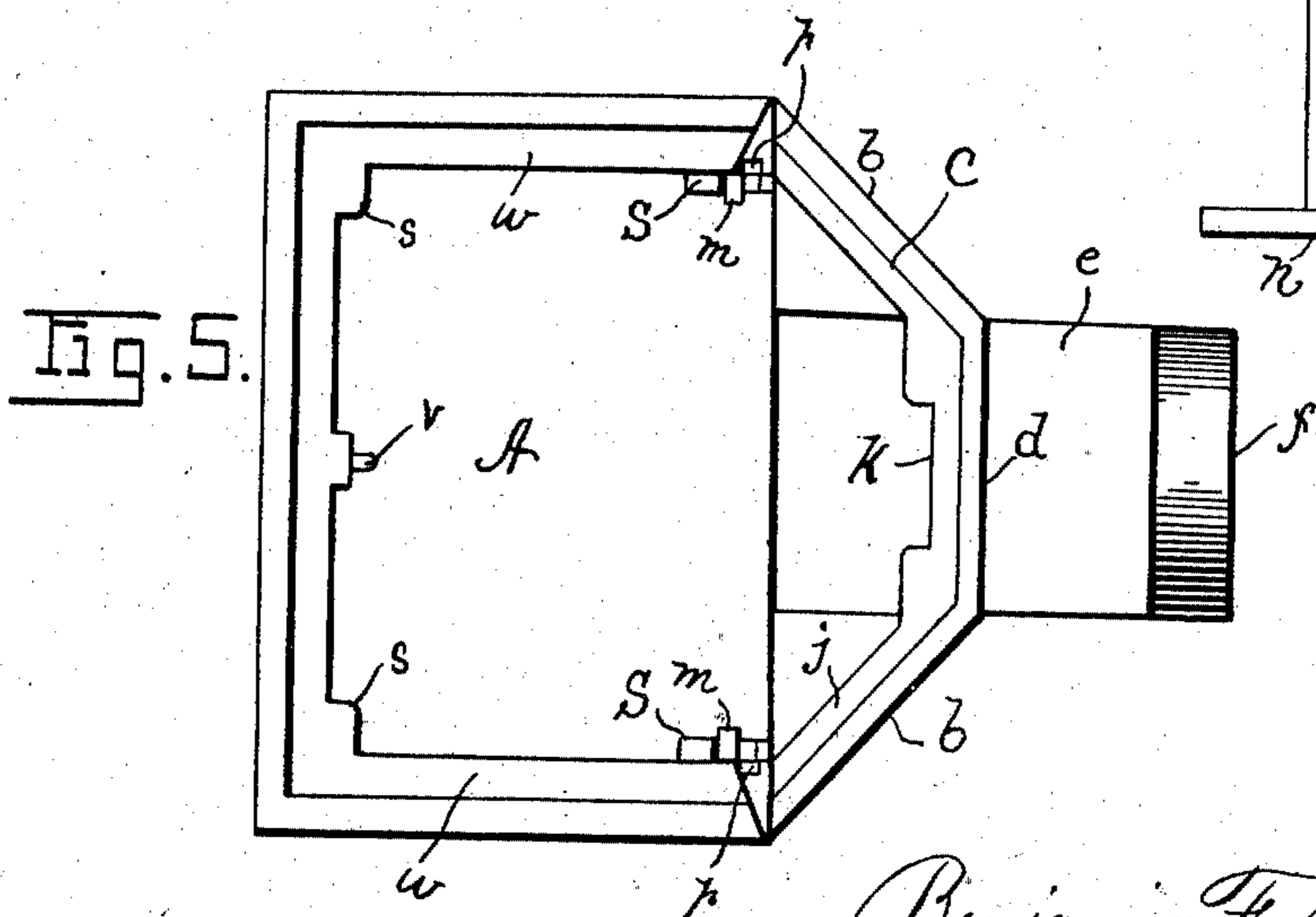
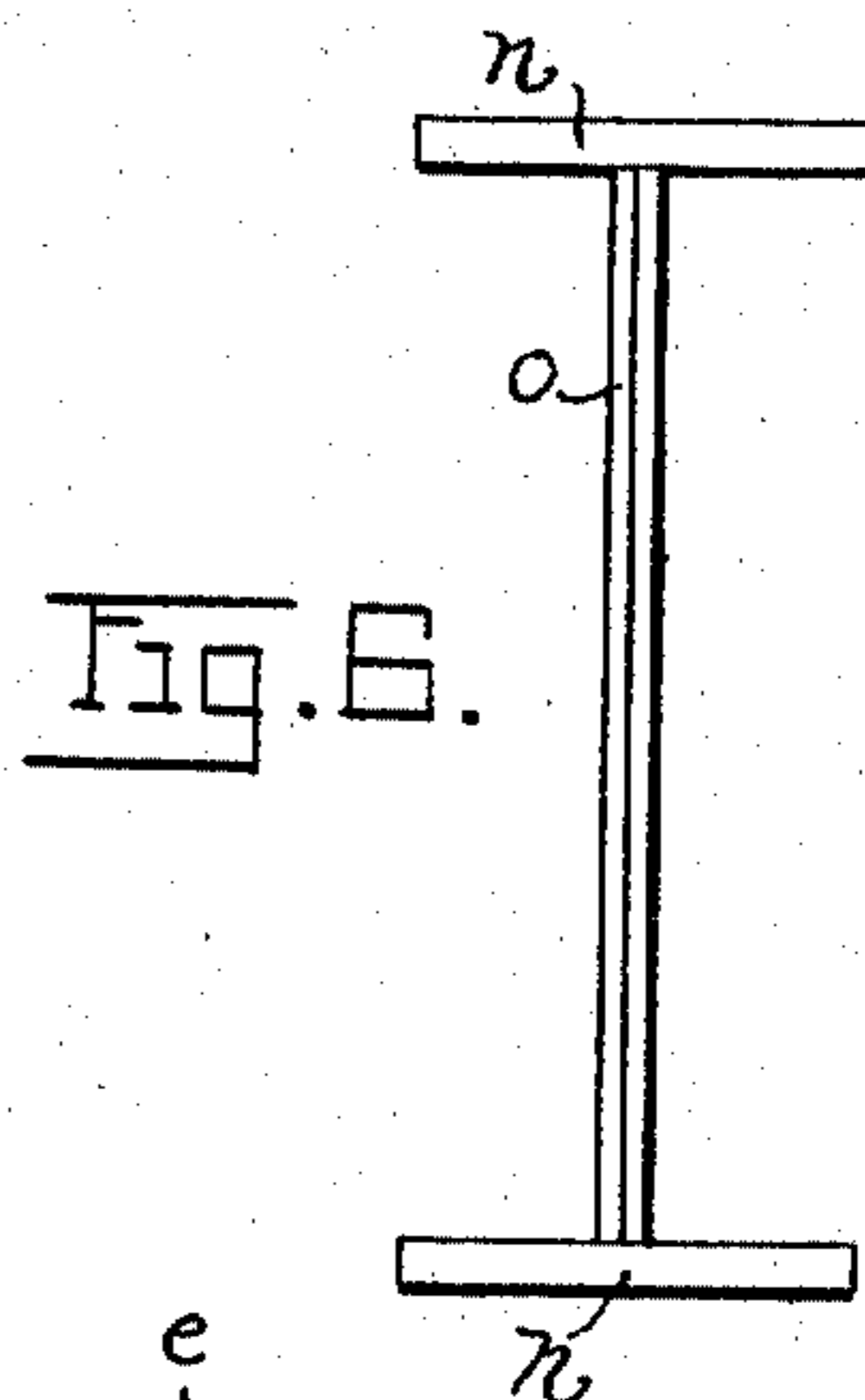
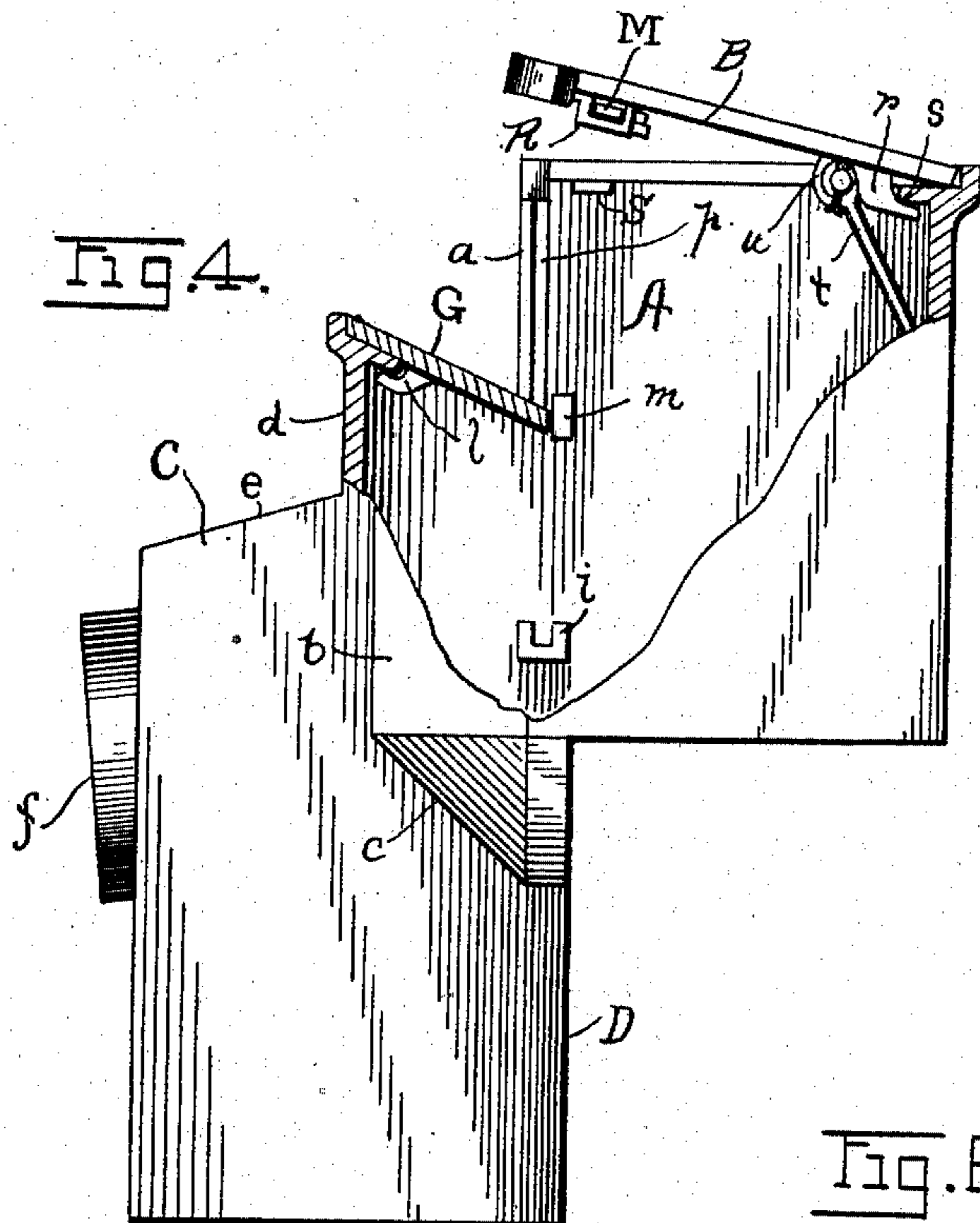
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UNITED STATES PATENT OFFICE.

BENJAMIN F. NICHOLAS, OF RENOVO, PENNSYLVANIA.

CATCH-BASIN FOR SEWERS.

965,832.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed July 20, 1909. Serial No. 508,571.

To all whom it may concern:

Be it known that I, BENJAMIN F. NICHOLAS, a citizen of the United States, residing at Renovo, in the county of Clinton and State of Pennsylvania, have invented a certain new and useful Catch-Basins for Sewers, of which the following is a specification.

This invention relates to sewers and particularly to catch basins or inlets for street sewers; and it has for its object to provide a simple, comparatively inexpensive, and durable catch basin adapted to be set in place without the use of bricks or other masonry, or cement, and to prevent the escape of sewer gases and foul airs therethrough, and also to so secure and lock the cover plates therefor as to prevent unauthorized access to said catch basin; and it consists in the parts and combinations of parts hereinafter described and claimed.

Figure 1 is a front elevation of my improved catch basin or sewer inlet with the top or cover raised. Fig. 2 is a vertical section in perspective. Fig. 3 is a detail view of the key for releasing or unlocking the cover. Fig. 4 is a side elevation of the basin with a portion of the upper part broken away. Fig. 5 is a plan view with the cover removed. Fig. 6 is a detail view of the locking device for the inclined gutter plate.

Similar letters refer to similar parts throughout all the views.

Referring to the drawings A represents the receiving chamber of my improved catch basin which is shown as in the form of a rectangular box having an open front *a*, and open at its top, and provided with a cover B. An extension C is cast at the front of the chamber A, and covers the lower half of said chamber and extends below the bottom of the same any desired distance and the upper part of which is formed with inclining or converging side walls *b* and bottom walls *c* and a short vertical front wall *d*. The extension C also includes a trap D consisting of a narrow rectangular box or chamber having an inclined top *e* and an outlet *f*. The trap is divided by a vertical partition E from a point below its outlet *f* to the top in order to form a water seal between the sewer and the chamber A and to prevent siphoning of the water from the trap through the sewer connection outlet *f*.

A grate or grid F having longitudinal slats formed therein and having vertically extending notches or openings G in its bot-

tom bar, is arranged across the lower part of the open front of the chamber A to prevent the escape of large or bulky matter from the chamber to the trap, but permitting the ready escape of all liquid matter and small particles of solid matter from said chamber into the trap. The notched bottom of the grate or grid rests on the bottom of the chamber A and the grid is supported in its vertical position by the projections *h* at each end which engage the recesses in lugs *i* cast with the side walls of the chamber.

The open top of the extension C is designed to be covered by a gutter plate G, the upper edge of said extension being inclined and formed with a shoulder *j* to receive the plate. The front section of the shoulder is recessed, as at *k*, in order to permit of the hook *l* cast on said plate to readily pass under the said shoulder when the parts are placed in position and to assist in locking the plate in place, while the opposite edge of the plate, at each end, engages lugs or projections *m* cast on the side walls of the chamber A, at its open front or mouth, in order to prevent the plate sliding forward. The plate G, as a whole, is locked in position by a frame composed of the end bars *n* connected by a bar *o*, which is adapted to slide in vertical grooves *p* formed in the side walls of the chamber A at its front, and to engage or rest on the said plate at each side thereof.

The top or cover B for the chamber A is formed with hooks *r* which engage lugs *s* cast on the rear wall of the chamber A and is connected to said rear wall by means of a link *t* loosely hung from an ear *u* projecting from the underside of said cover, said link being connected to a loop *v* which forms a guide for and limits the movement of said link and sustains the cover or prevents it falling backward when it is in its raised or lifted position. See Fig. 1. The top edge of the walls of the chamber are formed with the flange or shoulder *w* to receive the cover B, and the latter extends over the upper ends of the grooves *p* to prevent the frame composed of the bars *n* and *o* being disturbed or removed from their position by unauthorized persons. The cover itself is locked in position by the sliding bolts M carried on the ends of a cross arm N, which is secured on the end of a screw stud P screwing into a threaded opening therefor in the cover. The bolts M are supported in

loops R cast on the cover and are arranged so as to engage lugs or projections S cast on the side walls of the chamber A. The stud P is formed with square socket T, (see Fig. 2),
5 to receive the squared end U, of the key W, whereby said stud may be turned to move said bolts M in or out of engagement with said projection S and thus lock or unlock said cover in place.

10 Having thus described my invention what I claim as new is.

1. A catch basin for sewers, comprising a receiving chamber having an open front, a grid or grating for said front, an extension
15 from said chamber forming a trap, a gutter plate, and a frame arranged to slide vertically in the open front of the receiving chamber and engaging the gutter plate to lock the same in place.

20 2. A catch basin for sewers, comprising a

receiving chamber having an open front and top, a cover for said chamber, an extension from said chamber forming a trap, a gutter plate, a vertically slidable frame engaging said gutter plate, and means for locking said
25 cover and frame against movement.

3. A catch basin for sewers, comprising a receiving chamber having an open top and front, a cover for said receiving chamber, a
30 trap communicating with said chamber, a gutter plate covering said trap, a vertically slidable frame for holding said gutter plate in position, and means for locking said top cover down on said frame.

In testimony whereof, I affix my signature, in the presence of two witnesses.

BENJAMIN F. NICHOLAS.

Witnesses:

THOS. E. GUYLON,
P. H. ULFFERNAN.