

No. 620,515.

Patented Feb. 28, 1899.

T. S. TRIPP.
WINDOW.

(Application filed Mar. 14, 1898.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

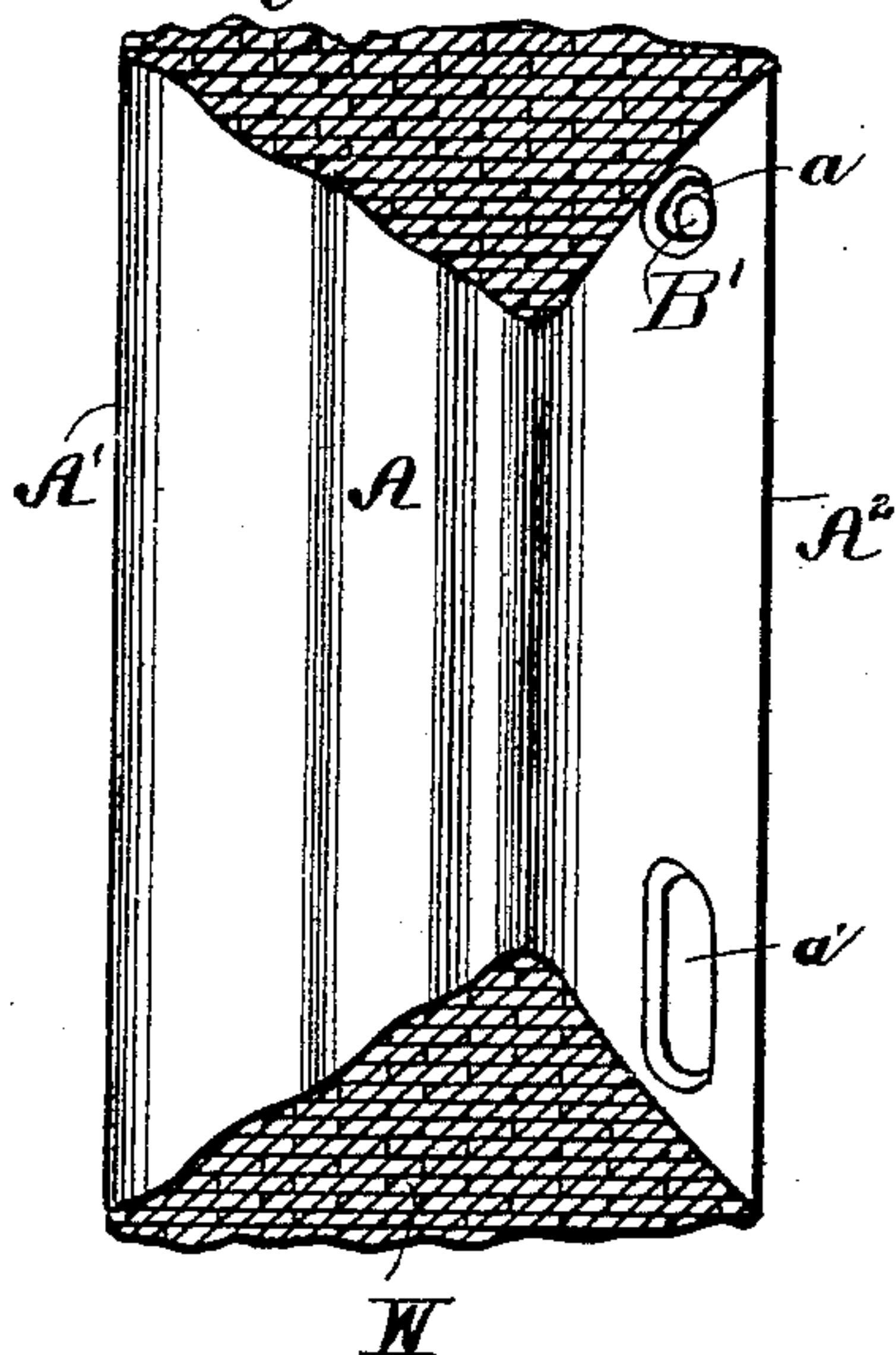


Fig. 3.

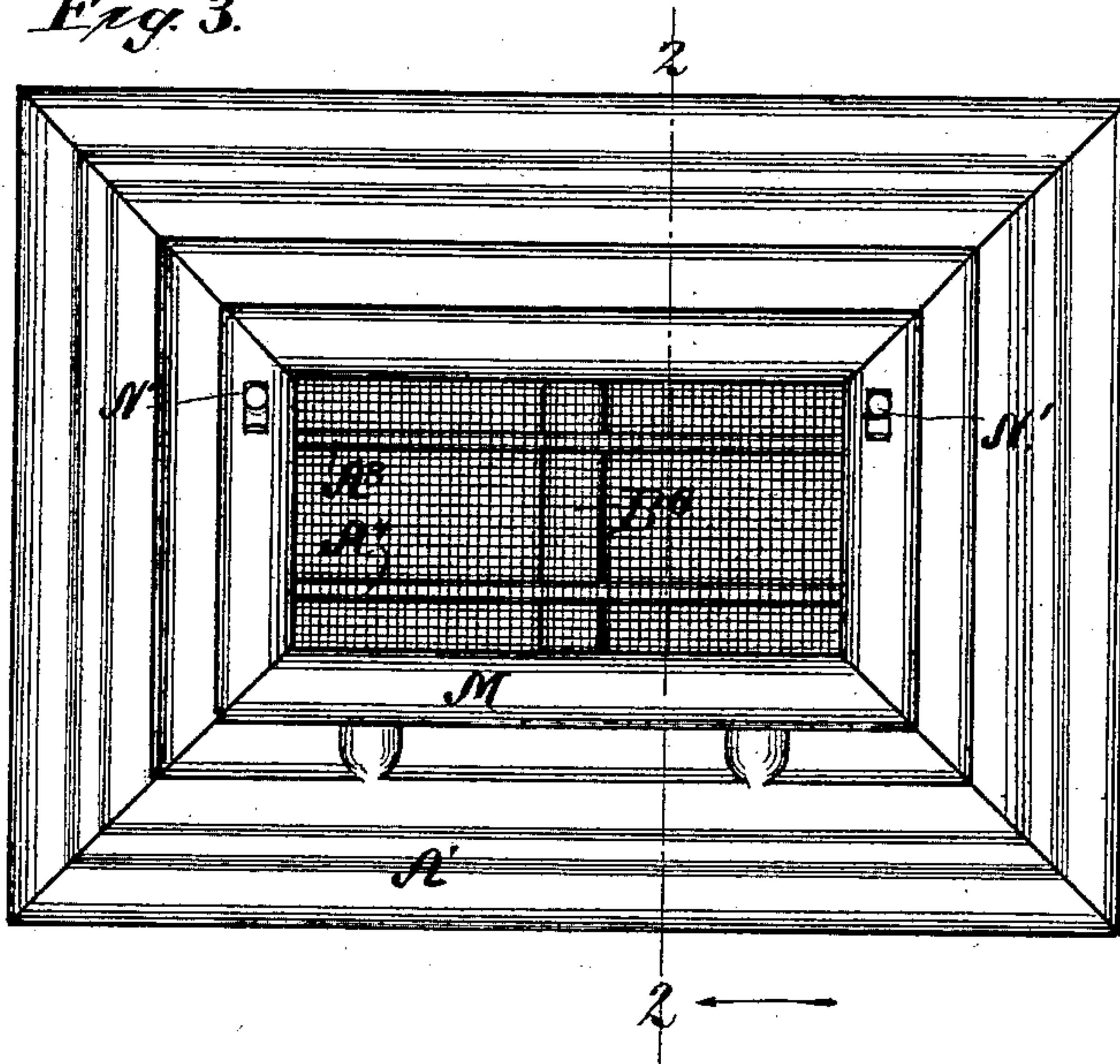


Fig. 2.

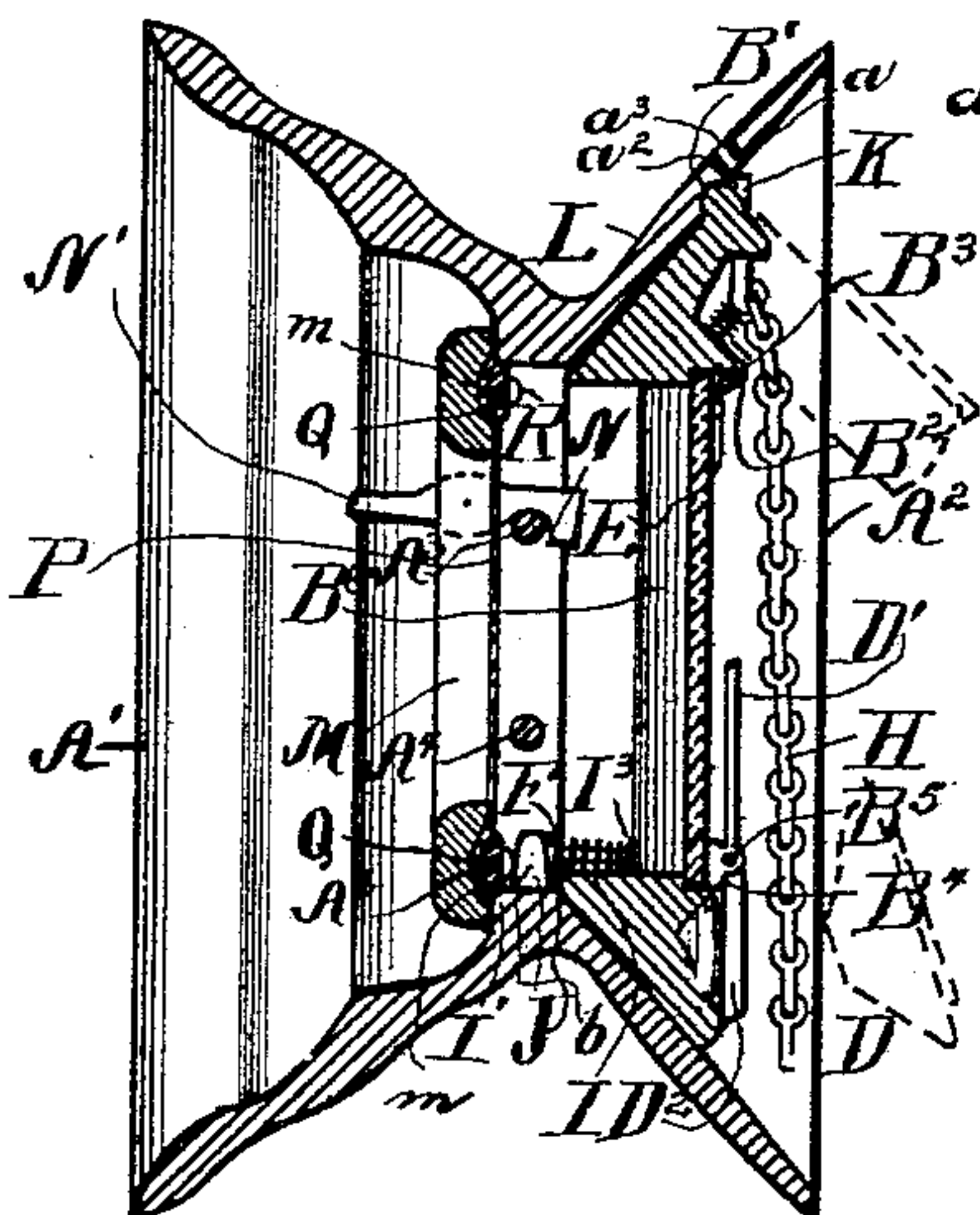


Fig. 4.

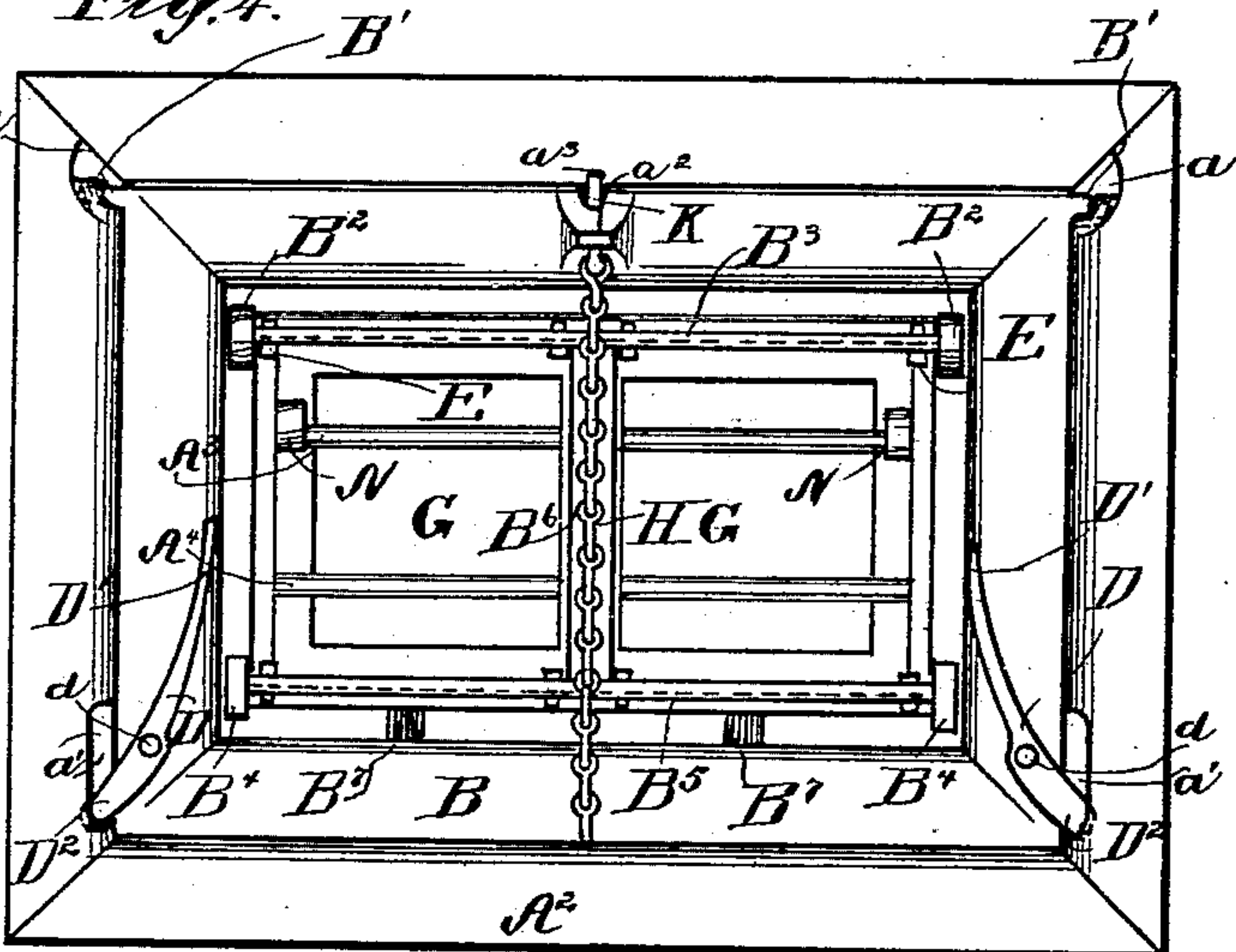
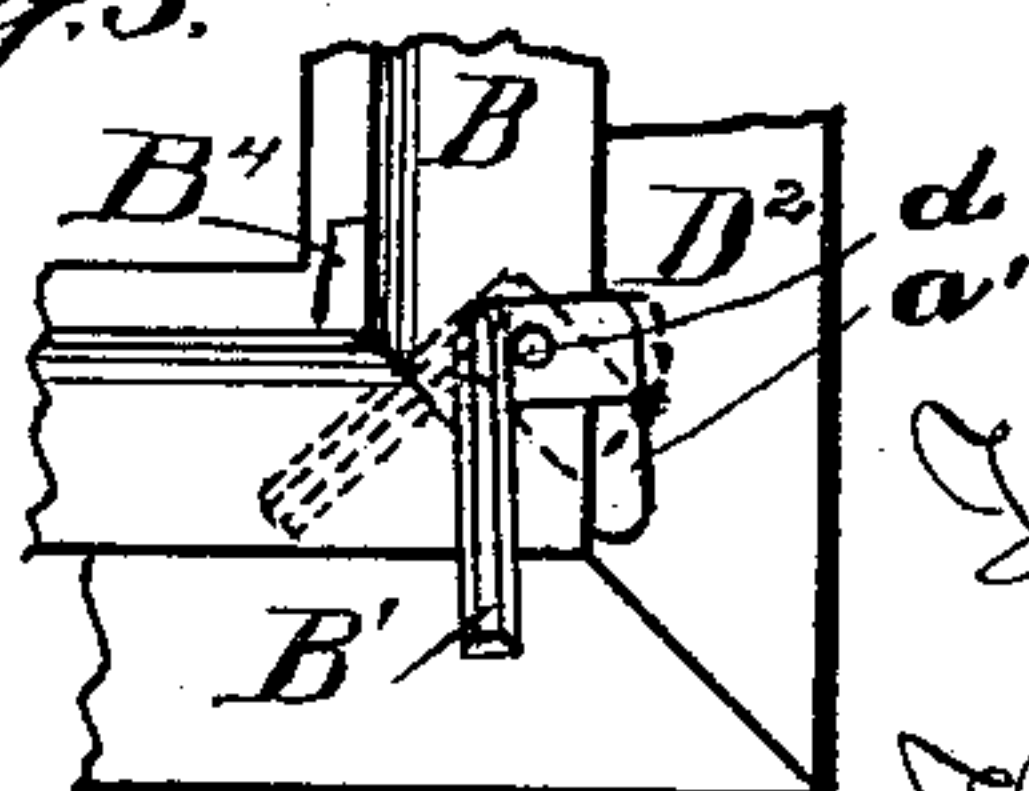


Fig. 5.



WITNESSES:

R. H. Newman.

M. F. Boyle

INVENTOR

Thomas S. Tripp

BY

Thomas S. Tripp

ATTORNEY.

No. 620,515.

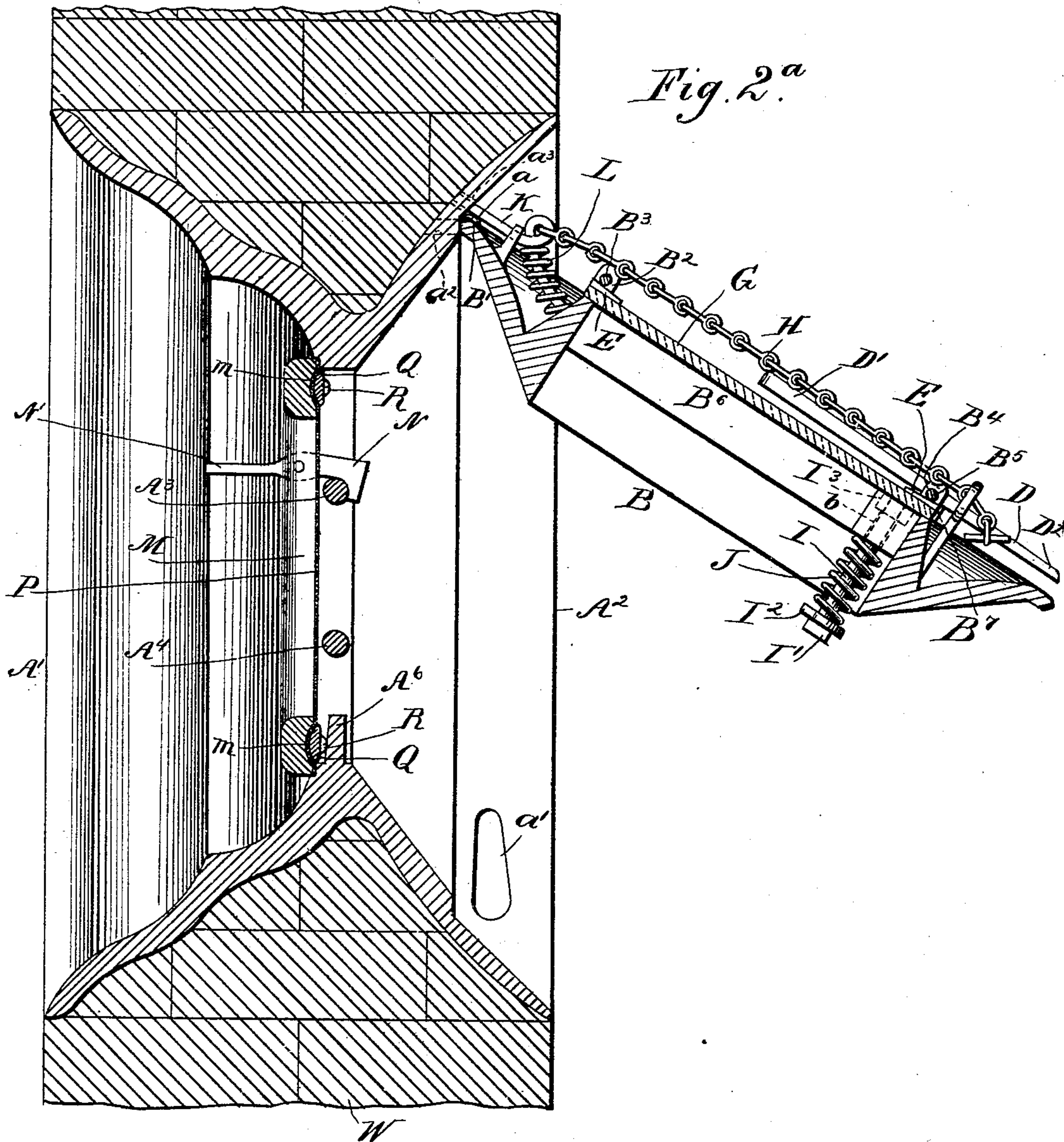
Patented Feb. 28, 1899.

T. S. TRIPP.
WINDOW.

(Application filed Mar. 14, 1898.)

(No Model.)

2 Sheets—Sheet 2.



WITNESSES:

O. C. Vinge.
J. B. Clautice

INVENTOR

Thomas S. Tripp

BY

Thomas Drew Stetson

ATTORNEY.

UNITED STATES PATENT OFFICE.

THOMAS S. TRIPP, OF WALTON, NEW YORK.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 620,515, dated February 28, 1899.

Application filed March 14, 1898. Serial No. 673,744. (No model.)

To all whom it may concern:

Be it known that I, THOMAS S. TRIPP, a citizen of the United States, residing at Walton, in the county of Delaware, in the State of New York, have invented a certain new and useful Improvement in Windows, of which the following is a specification.

The improvement is intended more particularly for shallow windows in basements and cellars, and I will describe it as thus applied.

I provide a rectangular frame or casing of proper size, flared both outwardly and inwardly, and mount the means for closing the window near the mid-thickness of such frame. The closing means are of three kinds—strong bars of iron or steel extending across the aperture in the mid-thickness, a window carrying glass and turning on an axis at the upper edge, and a removable screen, of wire-cloth or analogous material, applied on the exterior with provisions for easily engaging and removing it.

I have devised important improvements in the details.

The accompanying drawings form a part of this specification and represent what I consider the best means of carrying out the invention.

Figure 1 is a side elevation of my improved window with a section of the adjacent portion of a cellar-wall. Fig. 2 is a corresponding vertical section on the line 2 2 in Fig. 3. Fig. 2^a is a section corresponding to Fig. 2, on a larger scale, and showing the sash in the open position. Fig. 3 is a face view from the outside, and Fig. 4 a face view from the inside. Fig. 5 is a corresponding view of a portion, showing a modification.

Similar letters of reference indicate corresponding parts in all the figures where they appear.

A is a rectangular casing of cast-iron in a single piece, A' being the outward flare and A² the inward flare. The form gives great strength with a small amount of metal and also takes hold very securely of the masonry or other material of the wall W.

A³ and A⁴ are sufficiently stout bars of iron or steel, set firmly in the frame-casting.

The entire window-frame may be of cast iron or steel in one or more pieces.

In the inner flare A², at the upper portion

on each side, are formed pockets *a*, each adapted to receive and hold a trunnion B' of the swinging frame or sash B. (See Fig. 4.) The sash is formed integrally of cast-iron, the inner edge being square and the outer edge being beveled uniformly outward on the face which is presented toward the exterior of the building, making the section apparently that of a right-angle triangle; but the opposite face is hollowed so as to approximately correspond. In the lower portion, at each side, is a pocket *a'*, adapted to receive the locking-levers D, which are pivoted on the sash B at *d*. These levers are bent, as shown. The upper portions or arms D' have sufficient weight to hold their respective levers by gravity in the opened or closed position when these arms are swung respectively inward or outward beyond the vertical line through their respective centers *d*. The lower arms D² are thin and engage snugly in the correspondingly thin pockets *a'* when it is required to hold the window closed.

A cross-bar B⁶ is formed integrally with the body B of the sash, the back face being plane and the front beveled, but of less depth than the main body. The lower portion of this is thicker and forms a boss, in which is bored a hole *b*, through which plays a horizontal slide I, having a head I', carrying a washer I², which receives the force of a helical spring J, abutting against the cross-bar B⁶ and having a sufficient head I³ at the other end for retaining the slide. When the sash is dropped from the open position into the closed, the head I' strikes a lug A⁶, provided on the frame A, and reduces the concussion. This slide and spring perform another function. The spring resists the last portion of the closing movement and requires to be overcome by a considerable force. When the sash has been thus forcibly closed and the lower arms D² of the locking-levers are properly engaged in the pockets *a'*, the spring maintains a sufficient pressure, such force tending to open the sash and avoids any looseness and rattling under any conditions. The force thus induced is also of advantage in preventing the locking-levers D from being turned into the open position by chance.

Cement is used under the glass and wedges

E, which may be simply of wood, are used between the bars B^3 and B^5 and the glass, said bars being cast in the bosses B^2 and B^4 , the glass being inserted from the top and resting on two small projections B^7 B^7 on the bottom of the sash.

I provide two or more holes a^2 a^3 , one above the other, in the back flare A^2 at the center of the top.

10 K is a sliding bolt carried in the sash at the top and capable of sliding outward and inward, driven outward by a coiled spring L. I attach a chain H, leading down from such bolt and loosely secured at the lower edge. By pulling the chain H the bolt is drawn inward, and after the sash has been raised fully or part way, as preferred in any case, the chain is slackened and the bolt K, thrust outward by the spring L, engages in the proper hole a^2 or a^3 and holds the sash up.

M is a frame applying from the outside, its central opening being a little shorter than that in the inner frame or sash B, thus affording space for a gravity-hook N on each side, pivoted in the frame M and adapted to engage over the stout cross-bar A^3 and hold the device in position. Each of the locking-hooks N has an arm N' reaching outward, by which it may be operated from the outside.

30 The inner face of the frame M, the edges of which apply against the corresponding surface in the front flare A' , may be plane. The opposite outer face is hollowed in cross-section, as indicated by m , and receives corresponding bars Q confined by screws R tapped into the frame M. A screen P, of sufficiently fine wire-cloth, is stretched across this frame, having holes previously formed for the several screws R and for the locking-hooks N. This screen is held by the pressure of the bars Q deflecting the corresponding portion of the cloth P into the hollows or grooves m . This construction allows of easy attachment of the wire-cloth, and the action of the bars Q in sinking gently into the corresponding grooves by the gradual tightening of the several screws R gently strains the wire-cloth, so that it is held in the required plane and taut condition. The material of the other part may be changed within wide limits.

Modifications may be made without departing from the principle or sacrificing the advantages of the invention. Instead of wire-cloth the screen may be perforated metal. 55 Parts of the invention can be used without the whole. The hooks N may be formed without the arms N' , in which case the removal of the screen will require simply two persons, one inside to lift the locks and another outside to receive and remove the screen. The spaces for the wall between the flares A' and A^2 may have the cross-section more nearly U-shaped or more nearly rectangular.

65 Instead of the form of the levers D' D^2 shown, in which the center of gravity is above the pivot, I can use a widely-different form having the center of gravity below the

pivot. Fig. 5 shows such form. Both have the gravity urging them into engagement in the apertures a' .

I claim as my invention—

1. In a window the metal frame A having the cross-bars A^3 , A^4 , and provided with the pockets a , a swinging sash journaled in said pockets, and bolt devices arranged to engage with other openings in the frame to hold the sash in an open position, substantially as herein specified.

2. In a window, the metal frame A having the cross-bars A^3 , A^4 , a front removable screen-frame provided with a hook detachably engaging one of said cross-bars, a swinging sash journaled in pockets at the rear of the metal frame, and bolt devices arranged to engage with other openings in the metal frame to hold the sash in an open position, substantially as herein specified.

3. In a window the metal frame A having an outward flare A' , an inward flare A^2 , and cross-bars A^3 , A^4 , adapted to serve in the wall W of a building, and provided with pockets a adapted to receive and allow the removal of a swinging sash, and pockets a' adapted to receive removable locking parts to hold such sash closed when required, and spring provisions for unseating the sash when the locking parts are disengaged, substantially as herein specified.

4. In a window, the sash B turning on trunnions B' at the top, in combination with levers D pivoted to such sash having upper and lower arms D' , D^2 with their centers of gravity above their pivots, and with a frame A provided with pockets a adapted to engage and release such trunnions and pockets a' adapted to engage and release the lower arms D^2 of such levers, and spring provisions for unseating the sash when the locking parts are disengaged, as herein specified.

5. In a window, the sash B turning on trunnions B' at the top, in combination with a metal frame A, having cross-bars A^3 , A^4 , and provided with pockets a and a spring J adapted to perform the double function of softening the concussion when the sash is allowed to drop freely, and of maintaining a strain on the fastenings after the sash has been secured, all arranged for joint operation substantially as herein specified.

6. In a window, the sash B turning on trunnions B' at the top, in combination with pockets a adapted to receive such trunnions and to allow the applying and removal of the sash at will, and with a spring J adapted to perform the double function of softening the concussion when the sash is allowed to drop freely and of maintaining a strain on the fastenings after the sash has been secured, and with the glass G and parallel bars B^3 , B^5 , set in the bosses B^2 , B^4 , and suitable wedges E, to hold and release such glass, all arranged for joint operation substantially as herein specified.

7. In a window, the sash B turning on trunnions B' at the top, in combination with a metal

frame A having pockets *a* adapted to receive such trunnions and to allow the applying and removal of the sash at will, and provided with holes *a*², *a*³, and with a spring J adapted to perform the double function of softening the concussion when the sash is allowed to drop freely, and of maintaining a strain on the fastenings after the sash has been secured, and with the glass G and parallel bars B³, B⁵, set in the bosses B², B⁴, and suitable wedges E to hold and release such glass, and with the bolt K, spring L, and operating connections H adapted to serve in holding up and releasing the sash, all substantially as herein specified.

8. In a window the metal frame A having an outward flare A' and an inward flare A², and cross-bars A³, A⁴, adapted to serve in the wall W of a building, in combination with a removable frame M and locking-hooks N at about the level of the cross-bar A³, to allow its ready engagement and release, as herein specified.

9. In a window, the metal frame A having an outward flare A' and an inward flare A², and cross-bars A³, A⁴, adapted to serve in the wall W of a building, in combination with a removable frame M and locking-hooks N at about the level of the cross-bar A³, to allow its ready engagement and release, the said hooks having arms N' allowing them to be

operated from the outside of the building, all substantially as herein specified.

10. In a window, the combination with a removable frame M and locking-hooks N at about the level of a cross-bar A³, to allow its ready engagement and release, the said hooks having arms N' allowing them to be operated from the outside of the building, and with the flexible foraminous screen P, bars Q and screws R arranged to force the material of the screen into the groove *m* in the frame M, all arranged for joint operation substantially as herein specified.

11. The combination with a wall W, of a metal frame A having an outward flare A', an inward flare A², and cross-bars A³, A⁴, a removable frame M and locking-hooks N engaging and disengaging from a cross-bar A⁴, the said hooks having arms N', to be operated from the outside of the building, and with the flexible foraminous screen P in the frame M, all arranged for joint operation substantially as herein specified.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

THOMAS S. TRIPP.

Witnesses:

WM. H. PATTUNJELL,
B. A. SUGURTHA.