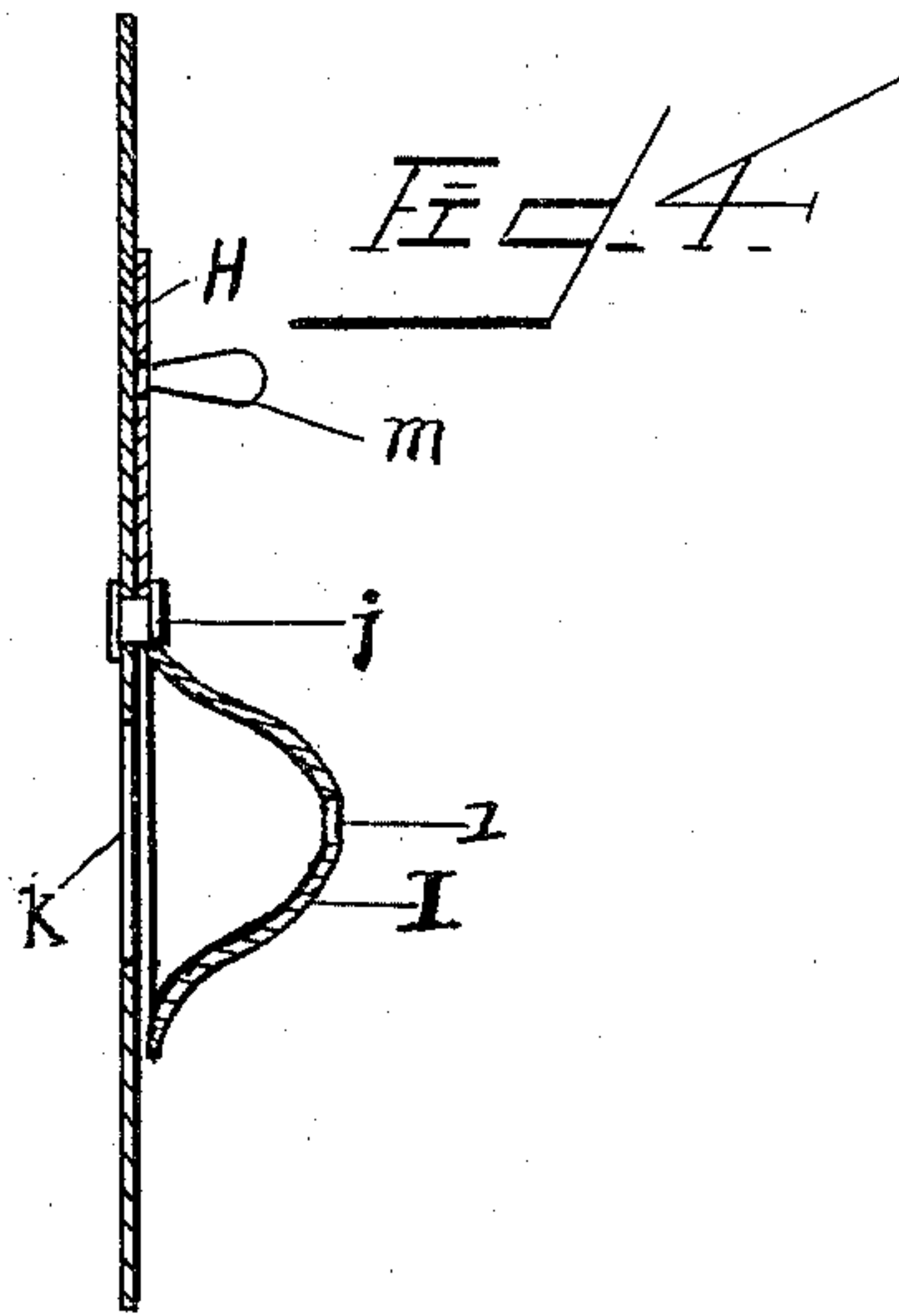
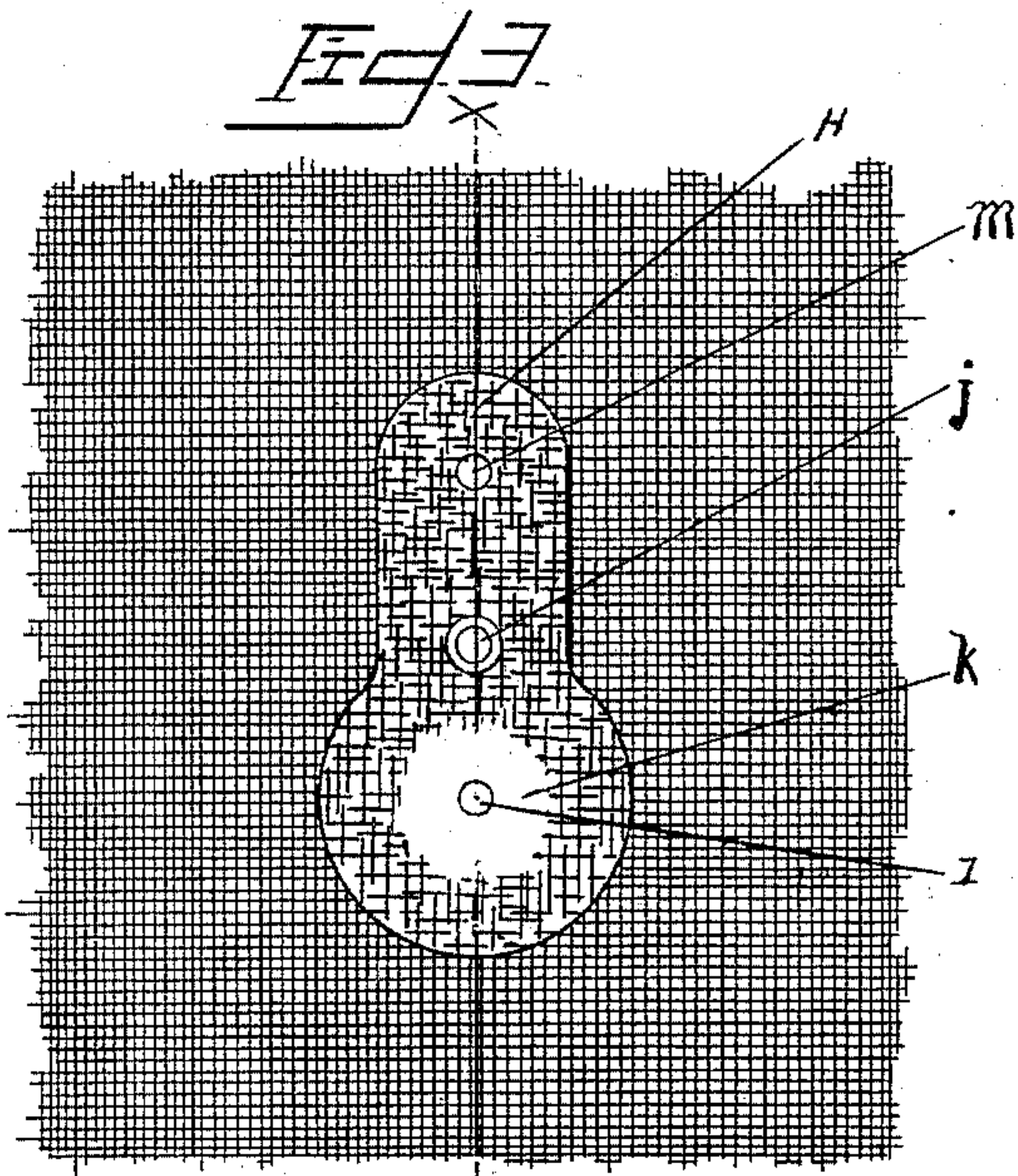
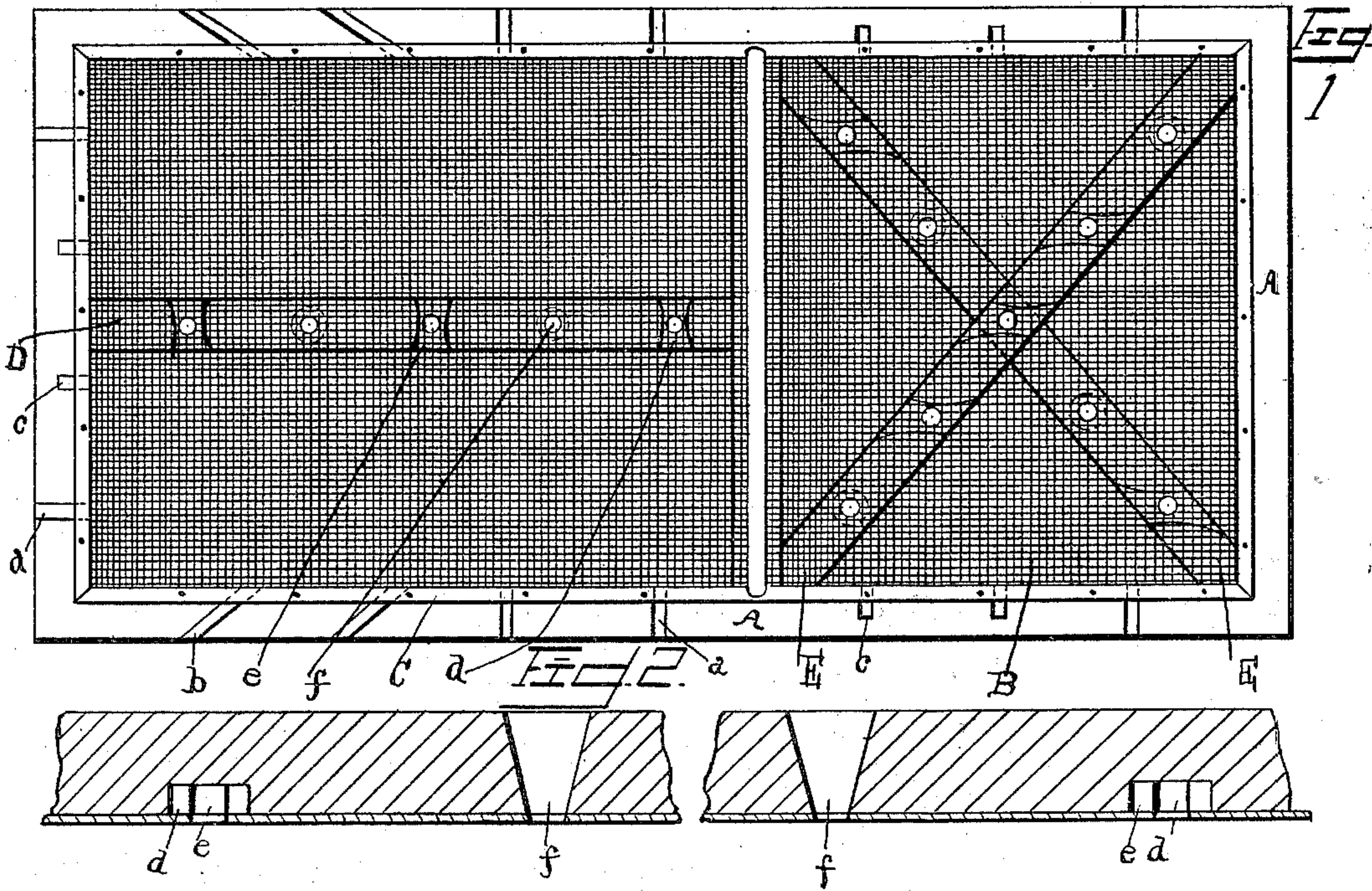


(No Model.)

E. GOFF.  
DOOR OR WINDOW SCREEN.

No. 493,703.

Patented Mar. 21, 1893.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

EDWARD GOFF, OF FRANKLIN COUNTY, INDIANA.

## DOOR OR WINDOW SCREEN.

SPECIFICATION forming part of Letters Patent No. 493,703, dated March 21, 1893.

Application filed April 29, 1892. Serial No. 431,108. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD GOFF, of Franklin county, Indiana, have invented certain new and useful Improvements in Door or Window Screens, of which the following is a specification.

My invention relates to improvements in door or window screens to exclude flies or other like insects from a room: and the object of my improvements is to provide means convenient for the egress, but inconvenient for the ingress of the flies, that they may easily leave a room and be prevented from entering. This object is obtained in the following described manner as illustrated by the accompanying drawings in which

Figure 1 represents a front elevation of a door screen; Fig. 2 an enlarged transverse vertical section of the vertical central batten of Fig. 1; Fig. 3, a front elevation of a portion of screen wire showing a metal egress chamber pivoted thereon; Fig. 4, a transverse sectional view of Fig. 3 on the line  $x-x$ .

In the drawings, A represents the stiles and rails composing a screen door frame, B, wire cloth attached thereto, C, strips of wood secured to said frame over the edges of the wire cloth, D a central vertical batten, E diagonal battens that act as braces for the frame.

$a$  represents transverse grooves or gains in the face of the stiles and rails of the frame, sufficiently wide and deep for the easy passage of a fly,  $b$  grooves similar to  $a$ , cut in the stiles at such an angle that the outer end terminates higher up on the stile than the inner end,  $c$  grooves similar to grooves  $a$  that extend outwardly beyond the edge of the wire cloth or the strip only far enough to provide easy exit for the flies that may pass through,  $d$  transverse grooves in the face of the battens, with the sides thereof diverging outwardly from the center each way,  $e$  a small perforation through the wire cloth over the center of each of the grooves  $d$  sufficient for the exit or egress of the flies,  $f$  circular perforations like  $e$  through the wire cloth and located over circular rearwardly divergent openings through the center of the battens.

H shows a guard formed by a metal plate pivoted at  $j$  to the outside surface of the

screen wire over opening  $k$  therein, said plate extends outwardly in a cone or cup shaped projection I, its apex being perforated at  $l$ , for the egress of the flies that may enter at opening  $k$ . The entire surface of said plate may be perforated for the admission of light.  $m$  represents a small handle by which to turn said plate until the plain portion thereof to which the handle is attached may cover the opening  $k$  through the screen and until the base of the conical projection is covered by the screen wire.

The operation of this invention is based on the principle that flies and other like insects seek to reach the light, and in attempting to penetrate the screen outwardly they find the passage ways herein described convenient for egress but inconvenient in form and situation for ingress.

The exterior openings of the grooves  $a$ ,  $b$ , or  $c$  in the frame and the perforations  $e$  in the screen wire are respectively obscured from light within the room by the frame and battens. The convergence of the inside of the cone projections and the divergent circular openings through the battens facilitate their use for egress and not ingress. The upward and outward slant of grooves  $b$  panders to the upper tendency of flies in their attempt to pass outward. The smaller exterior termination of grooves  $c$  makes them inconvenient to be used as entrances. The omission of the strip either entirely or only that portion over the grooves in the frame permits the light to illuminate the grooves through the screen wire.

The edges of the perforation through the projection of the metal plate may be left ragged, as also may be those of the wire projections if desired.

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

1. The combination, with a frame having a batten or brace therein, said brace being provided with a rearwardly diverging opening, and with recesses transversely across one face, said perforations and recesses alternating with each other, and a perforated wire screen secured to said frame and brace, the perfora-

tions of the screen registering with the openings and the recesses of the brace, substantially as set forth.

2. The combination with a wire screen, having perforations of a larger area than its mesh of a guard, pivotally secured to said screen over each perforation, said guard having a conical portion on one side of the pivot with an opening at its apex, and having the por-

tion on the opposite side of the pivot substantially continuous and adapted to close the opening in the screen when turned on the pivot, substantially as set forth.

EDWARD GOFF.

In presence of—

G. C. WELLNER,

T. L. SMITH.