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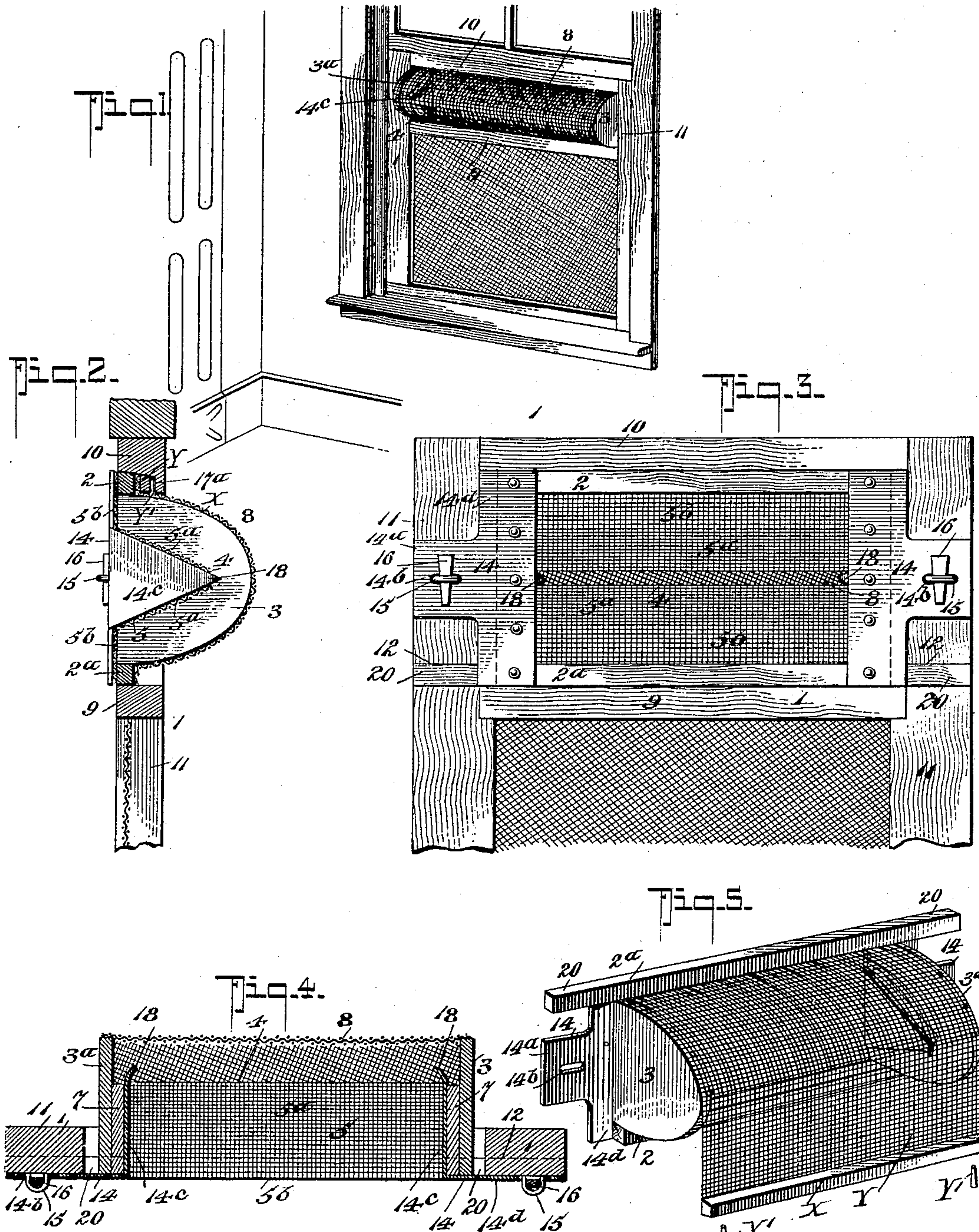
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M. E. MOYER.

TRAP ATTACHMENT FOR FLY SCREENS.

(Application filed Apr. 17, 1899.)

(No Model.)



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MILTON E. MOYER, OF BERRYSBURG, PENNSYLVANIA.

TRAP ATTACHMENT FOR FLY-SCREENS.

SPECIFICATION forming part of Letters Patent No. 640,685, dated January 2, 1900.

Application filed April 17, 1899. Serial No. 713,363. (No model.)

To all whom it may concern:

Be it known that I, MILTON E. MOYER, residing at Berrysburg, in the county of Dauphin and State of Pennsylvania, have invented a new and Improved Trap Attachment for Fly-Screens, of which the following is a specification.

This invention relates to improvements in door and window screens; and it seeks to provide a simple and economical attachment therefor in the nature of a fly-trap means, which means are adapted to be readily connected with the ordinary form of screen-frames without requiring any material change in their construction.

In the ordinary form of trap devices for fly-screens it is usual to make the same a fixed part of the screen. This has been found objectionable, as it requires a special construction of screen-frame, which not alone increases the cost of the screen-frame proper above that of the ordinary frame, but also, where the screens are already provided, necessitates the abandonment of their use or a reconstruction of the same.

My invention primarily seeks to provide an attachment for the purposes stated which is readily adapted for use with the ordinary forms of screen-frames, capable of being fitted to the ordinary screens, and which may be applied for use without the aid of a carpenter or other skilled laborer.

Another object of my invention is to provide a simple fly-trap attachment which will effectively serve for its intended purposes, will not retard a perfect air circulation, and not be unsightly in appearance.

The invention comprehends certain improvements in fly-screen attachments involving a novel combination and peculiar arrangement of parts, hereinafter first described in detail, and specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a window-screen equipped with my improvement. Fig. 2 is a transverse section of the trap portion of the same. Fig. 3 is a face view of a part of a screen with my attachments applied. Fig. 4 is a horizontal section of the same, and Fig. 5 is a detail perspective view of the attachment disconnected from the screen.

Referring now to the accompanying drawings, in which like letters and numerals indicate like parts in all the figures, 1 indicates the screen-frame proper, which may be of the ordinary construction when the same is to be applied to a door, or the same may have the well-known adjustable or extension ends, as illustrated in Fig. 4, whereby the same may be fitted to windows of different widths.

My improvements comprise, practically, a frame consisting of two parallel cleats, one of which, the upper, 2, is of somewhat less length than the lower, 2^a, the purpose of which will presently appear. These cleats are preferably made of wood, the upper one extending over the end piece 3 to the opposing end piece 3^a, which may also be formed of wood, and which have a semicircular or other trough-like shape in cross-section, as clearly shown in the drawings, whereby to form a receiving or collecting chamber for the flies, which enter the same through the throat 4, formed by the inner ends 5^a of the upper and lower screenways 5, which form a part of the outer screen-body 5^b, which has its ends secured upon the upper and lower pieces 2 2^a, and wedge-shaped end blocks 7, secured to the ends 3 3^a, as clearly shown in the drawings.

8 indicates the screen covering, forming the base of the receiving chamber or trough, which is secured at its upper and lower edges to the rear of the cross-pieces 2 2^a and at its ends made fast to the end pieces 3 3^a.

So far as described it will be observed that the trough-like members have a throatway for the entrance of the flies, and to provide for conveniently attaching the same to the ordinary screen-frame the extended portion of the lower member 2^a is rounded or beveled on its inner face, as shown.

In practice to fit my attachment to the ordinary screen-frame the upper part of the member 9 of the main screen is cut away and the cut end of the main-screen body is made fast to a cross-cleat 10, which can be nailed to the end bars 11 of the main-screen frame at a point just above the cleat 9. The end bars are formed with transverse recesses 12, which form bearings for the extensions 20 of the lower cross-bar 2^a, which by reason of its bearing-faces being made round or beveled will have rocker-bearings on the main-screen

frame to facilitate the applying of the same to the frame or detaching the same when necessary.

In the practical construction of my improvements it is intended that the trap attachments be made of standard size to suit the standard size of fly-screens, and to provide for applying my device to window-frames in which the side bars may be somewhat wider than the length of my attachment I provide a face-plate 14, of sheet metal, secured upon each end of the front of the attachment, and each of such plates has a vertical portion adapted to be nailed upon the face of the end pieces 3 3^a, and lateral extensions 14^a, having elongated slots 14^b, adapted to conveniently slip over staples 15, one in each end bar 11, as shown, it being understood that by providing the slotted end extensions with staples, as shown, and forming the lower end of the attachment with rocker-bearings the attachment can be quickly fitted in place, and by means of key-pieces 16 the attachment can be securely held upon the main-screen frame, and to provide for a perfect fitting of the attachment the upper cross-bar 10 of the main frame may be rabbeted, as shown at 17^a, to receive the upper cross member 2 of the attachment.

To provide against leaving a space between the ends of the attachment and the side bars 11 of the main-screen frame in case the side bars should be separated somewhat more than the length of the collecting-chamber, I provide the plate members 14 with extensions 14^d, which project laterally beyond the ends 3 3^a and close the spaces which may occur between the ends of the attachment and the side bars 11, it being understood that the lateral extensions 14^a also assist to form a closure for the purpose stated.

To keep the flies from accidentally coming out at the extreme edges of the throat, I provide inwardly-deflected members in the nature of tapering metallic surfaces 18, formed on the end of the V-shaped extensions 14^c of the plates 14, which are bent inward and nailed against the inner face of the triangular portion of the ends 3 3^a.

To provide for quickly removing dead flies from the trap, one end of the screen forming the outer covering of the trap is detachably secured by a cleat-piece X, which extends the full length of the trap and is held to bear against the upper cross-piece 2 to clamp the end Y of the screen against the rear face of said cross-piece 2, the same being securely clamped in position to hold the screen covering with its free end closed upon the upper surface of the end members 3 3^a by means of pins Y', as clearly shown in Fig. 5.

By securing the free end of the screen covering, as stated, it is obvious that when it is desired to remove the flies it is only necessary to withdraw the pins and remove the piece X, whereby to permit the free end of the screen

covering being pulled back to provide an opening extending the full length of the trap, from which to discharge the flies contained therein.

From the foregoing description, taken in connection with the accompanying drawings, it is thought the advantages of my invention will be readily understood. I am aware that it is not new to provide a trap having inwardly-projecting ways in the nature of converging members terminating in a throat, and I am also aware that it is not new to provide a fly-collecting chamber having means for discharging the collected flies at one end. I therefore make no claim for such construction; but

What I do claim, and desire to secure by Letters Patent, is—

1. A trap attachment for fly-screens; comprising a screen-chamber having its inlet formed of converging ways terminating in a throat; a frame supporting the screen-chamber, said frame having bearing members adapted to engage the screen-frame; lateral closure members adapted to lie flat upon the side members of the screen-frame and means for detachably locking the said closing members against the said side members as specified.

2. In a fly-screen; the combination with the main frame, the side members of which have alining transverse seats 12, and staples on the side members; of a removable trap portion having lateral extensions 20 adapted to engage the aforesaid transverse seats in the side members of the screen-frame, slotted extensions 14 14^a forming a part of the trap-frame, and adapted to fit over the staples on the main frame, and the wedge-keys, all being arranged substantially as shown and for the purposes described.

3. An attachment for fly-screens; comprising a rectangular frame, formed of parallel top and bottom strips, the bottom strip having lateral extensions; the end members, said end members being extended rearward to form the ends of the collecting-chamber; the outer screen-bodies secured to the ends and the parallel members, said end members having angle-pieces on their inner sides; the converging screenways secured to the angle-pieces; the sheet-metal pieces fitted on the end members and extended laterally therefrom, and means for securing the attachment to the screen-frame, all being arranged substantially as shown and described.

4. As an improvement in fly-screens; the combination with the main-screen body, having an opening extending from one side member to the other, and having the cross member forming the upper wall of said opening provided with a seat extending lengthwise thereof and adjacent the opening; the side members of the said main screen having transverse seats and having staples in line with the aforesaid screen-opening; the trap at-

tachment, consisting of upper and lower parallel members, the upper one of which is adapted to fit the seat in the top of the cross member on the main-screen body, the lower parallel member having at each end a lateral extension adapted to seat in the transverse seats of the side members of the main-screen body, the screen portion of the trap having converging ways terminating in a throat, and
10 metallic end plates secured to the ends of the trap-frame, said plates having portions extending laterally the full height of the trap-body and having supplemental slot portions adapted to fit over the staples of the main
15 frame, and the wedge-keys, all being arranged substantially as shown and for the purposes described.

5. In a trap attachment for fly-screens, having converging entrance-ways terminating in
20 a throat; of metallic end members for the converging entrance-ways, said members extending to the throat and having inwardly-bent

pointed tapering ends, for the purposes specified.

6. A trap attachment for fly-screens, comprising a rectangular frame consisting of the
25 top and bottom strips, the end strips, the converging screenways connected to the top and bottom strips and projected into the holding-chamber, a screen covering for the holding-
30 chamber fixedly secured at the lower end of the lower front member of the screen-frame, the upper end of the said screen covering being extended to engage the rear face of the
35 front cross member of the frame; the cleat-piece for clamping the said end against the aforesaid front cross member, and means for detachably holding the said cleat-piece clamped in position.

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Witnesses:

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