No. 827,006. PATENTED JULY 24, 1906.

E. A. GATHMANN & W. S. HERMANY.

FLY PAPER GUARD AND HOLDER.

APPLICATION FILED JUNE 12, 1905.

5 SHEETS—SHEET 1.

Fig. 1

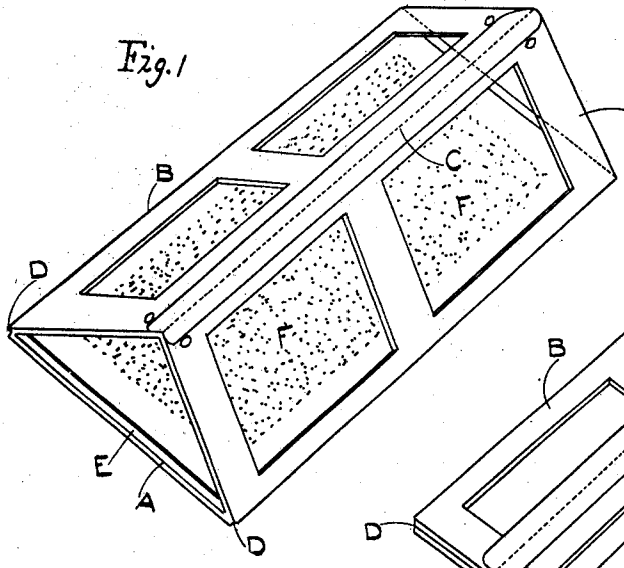

Fig. 2

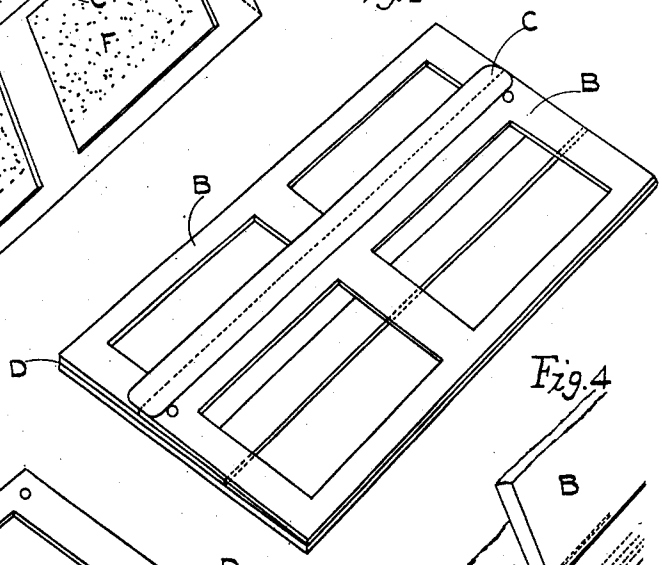

Fig. 4

Fig. 3

WITNESSES.

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Fig. 5.

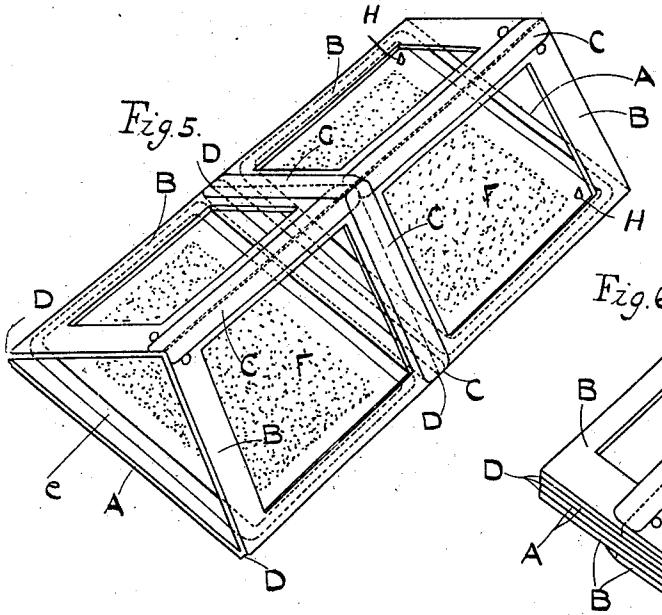


Fig. 6.

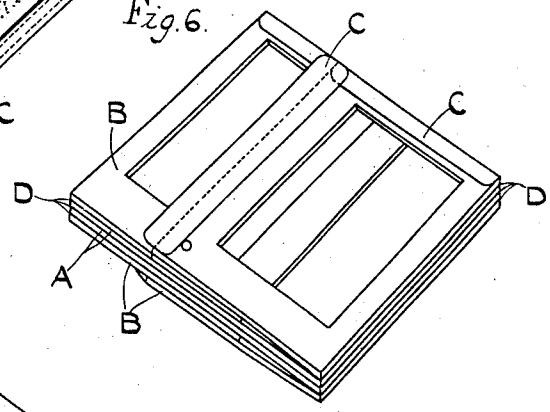
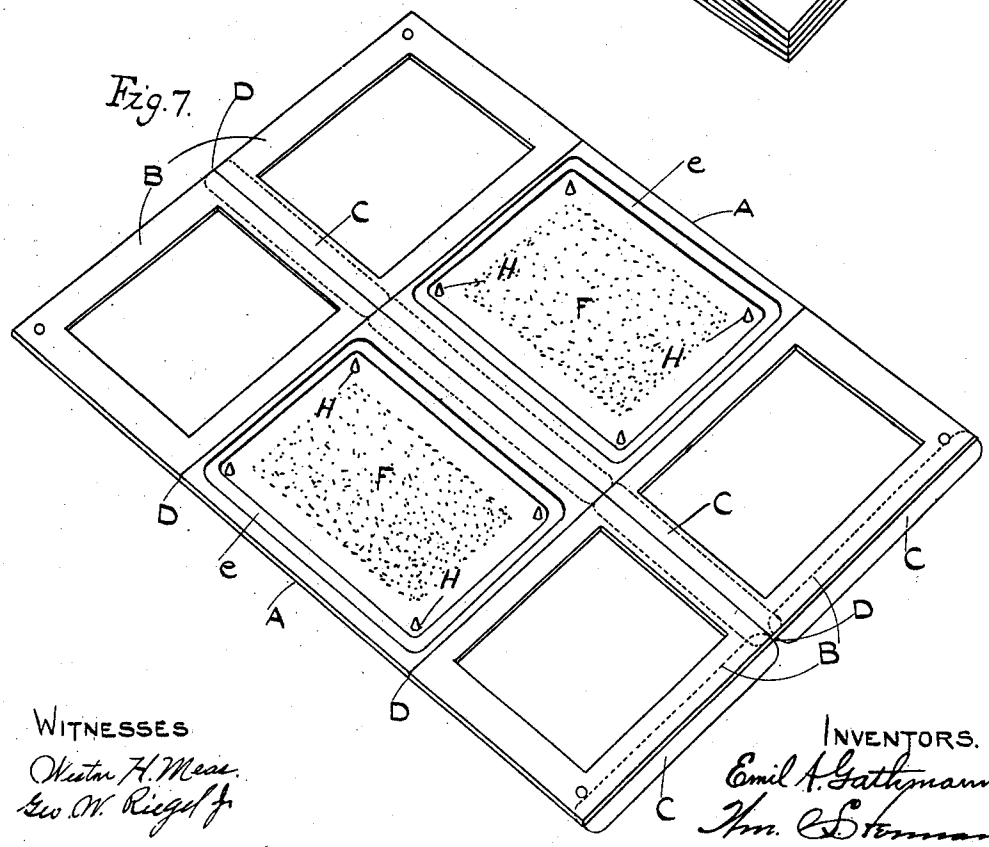


Fig. 7.



WITNESSES

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5 SHEETS—SHEET 3.

Fig. 8.

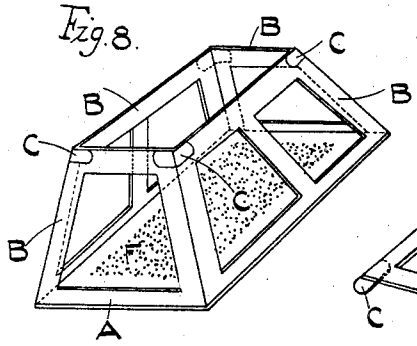


Fig. 9.

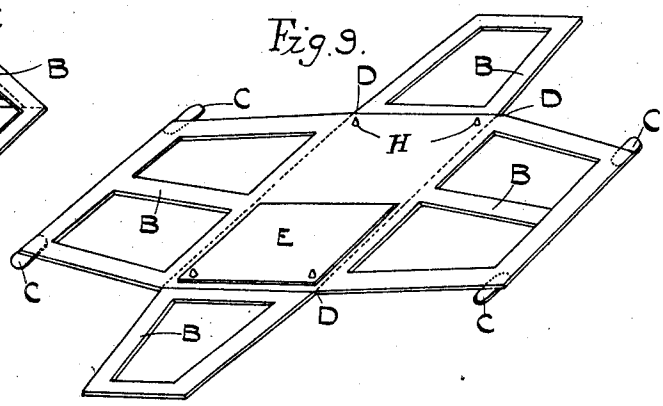


Fig. 10

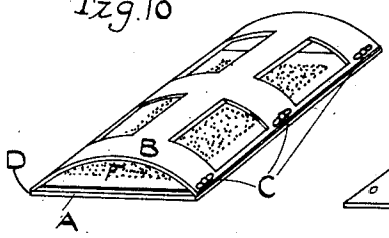


Fig 11

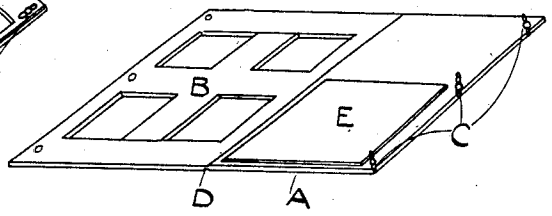


Fig. 12.

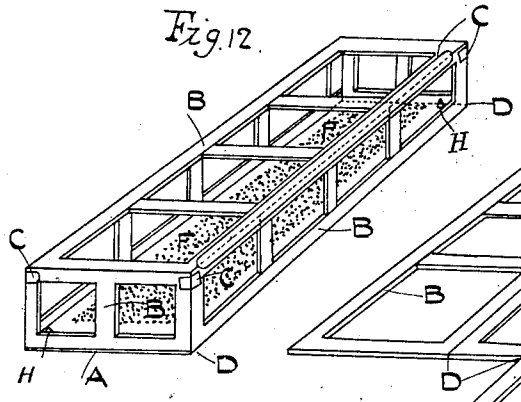
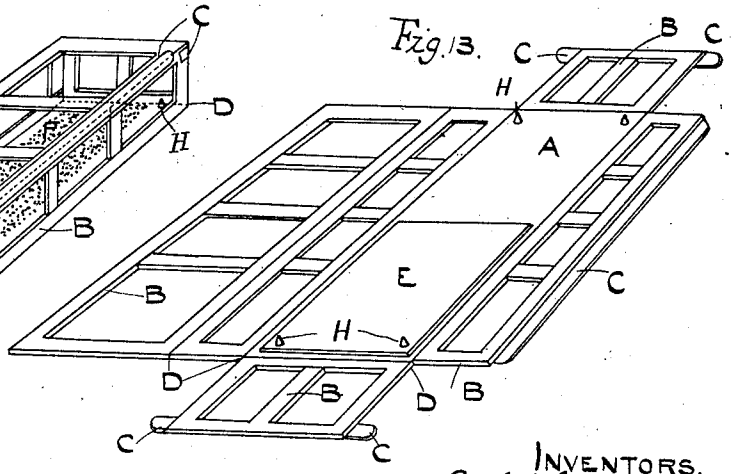


Fig. 13.



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5 SHEETS—SHEET 4.

Fig. 14

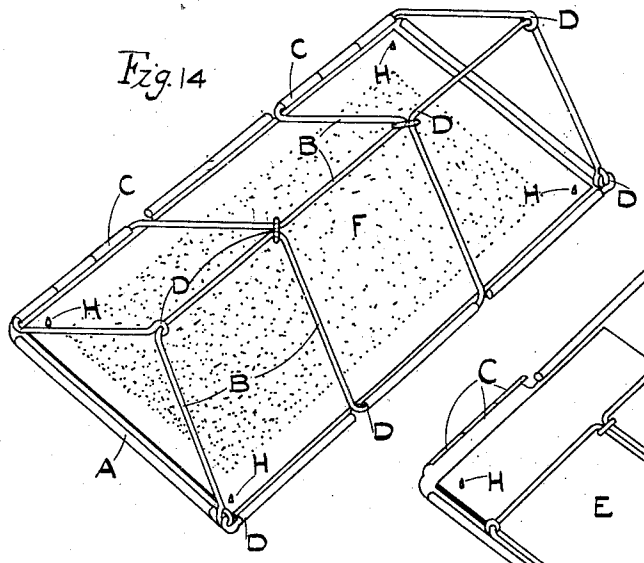


Fig. 15

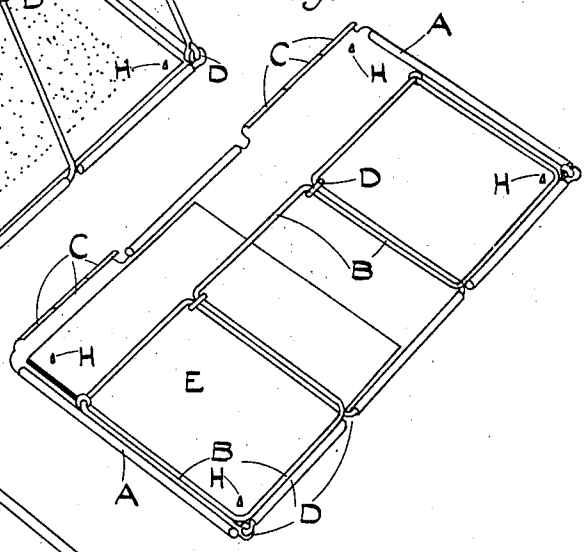
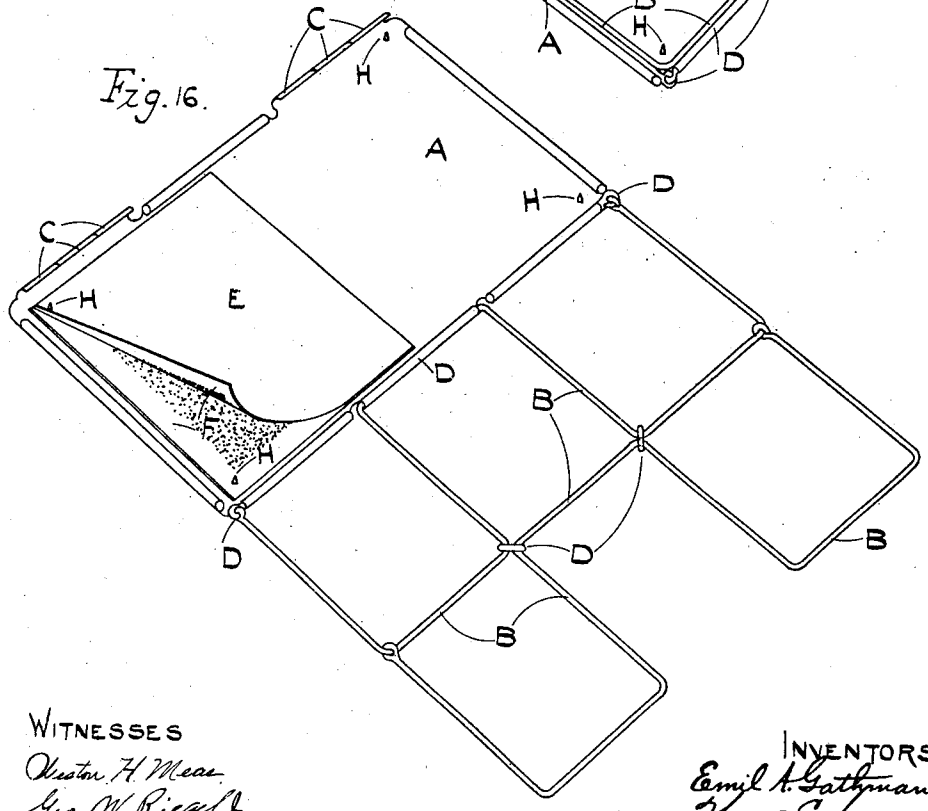


Fig. 16.



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5 SHEETS—SHEET 5.

Fig. 17.

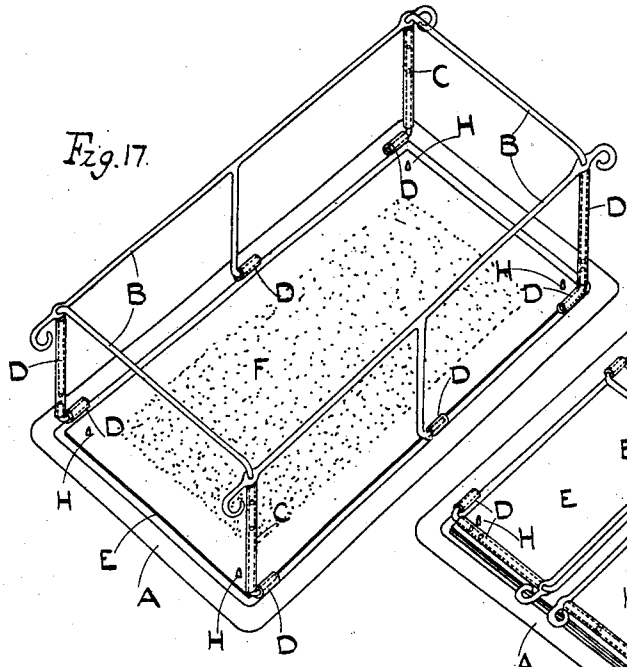


Fig. 18.

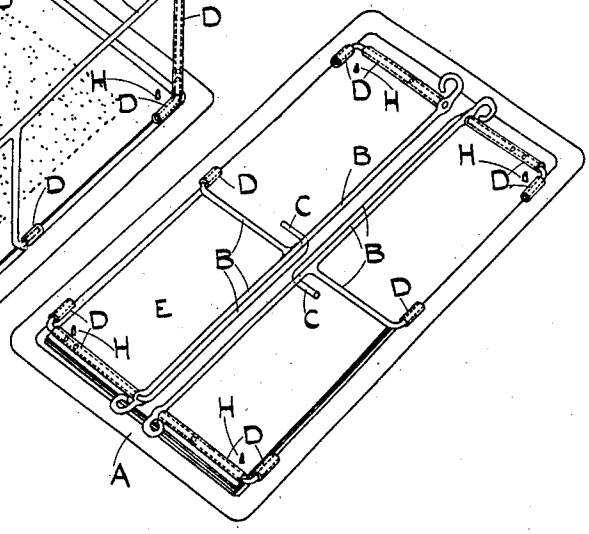


Fig. 19

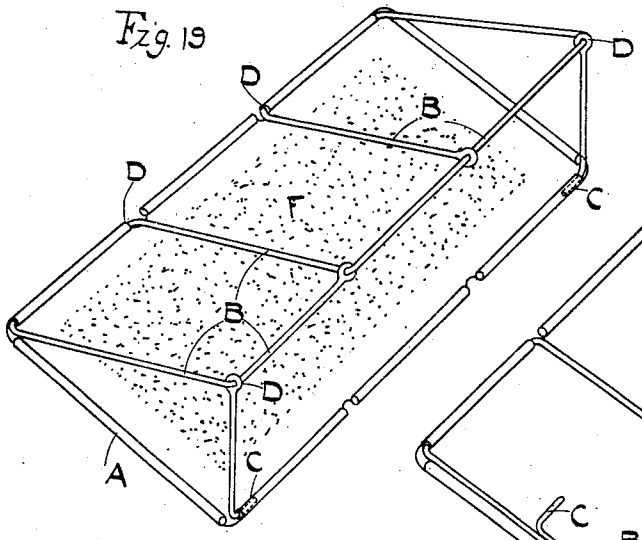
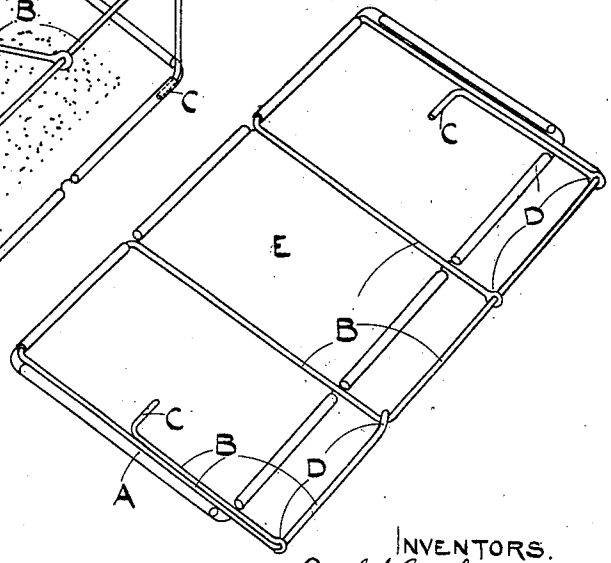


Fig. 20



WITNESSES.

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UNITED STATES PATENT OFFICE.

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FLY-PAPER GUARD AND HOLDER.

No. 827,006. Specification of Letters Patent. Patented July 24, 1906.

Application filed June 12, 1905. Serial No. 264,884.

To all whom it may concern:

Be it known that we, EMIL A. GATHMANN and WILLIAM S. HERMANY, citizens of the United States, residing at Bethlehem, Northampton county, State of Pennsylvania, have invented certain new and useful Improvements in Fly-Paper Guards and Holders, of which the following is a specification.

The objects of this invention are to provide a new and improved device for supporting and guarding sticky fly-paper, which can be collapsed or folded into compact form for shipment with said sticky fly-paper or otherwise transported or stored so as to occupy a comparatively small space and is susceptible of being erected to form a screen or guard about the sticky fly-paper or substance which is placed in the holder, the guard or screen preventing accidental contact of person, clothing, and other articles of like nature with the sticky substance in the holder, while permitting free access of the flies thereto.

The holder is preferably constructed so as to receive a sheet of sticky fly-paper; but we also show constructions wherein the sticky substance is placed directly on the holder.

The invention also has for its object to provide a fly-paper holder and guard which may be suspended or hung in a horizontal or other position by means of suitable cords or the like at any desired location—such, for instance, as the windows or chandeliers in a room.

Various forms of the invention are illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of one form of holder and guard assembled and ready for use. Fig. 2 is a similar view showing the same holder and guard folded for transportation or storage. Fig. 3 is a similar view of the same holder and guard open and ready for adjustment or placing of the fly-paper. Fig. 4 is an enlarged detail view showing a folding joint or hinge which may be used in connection with our invention. Fig. 5 is a perspective view of another form of guard and holder in assembled or erected form. Fig. 6 is a similar view showing the same in folded position. Fig. 7 shows the same open or unfolded and ready for assembling. Figs. 8, 10, and 12 show three additional forms of the invention. Figs. 9, 11, and 13 illustrate the blanks from which these forms are respectively erected. Figs. 14, 15, and 16 show another form of the invention, respectively, in erected, folded, and flat condition. Figs. 17 and 19 show still other forms in erected condition; and Figs. 18 and 20 show the same forms, respectively, collapsed.

In order to enable those skilled in the art to make and use our invention, we will now describe the same in detail, referring to the drawings, wherein the letter A indicates the bottom or base piece of the improved holder and guard, B indicating the guard-frames which form the sides and top of holder.

C is the uniting or tie piece used in binding the holder in assembled or erected position.

D indicates the joints or hinges connecting the base-piece of holder with the side and top guard-frames, *d* in Fig. 4 showing a reinforce-joint preferably employed in some constructions of holder.

E shows the sticky fly-paper, F the sticky substance, and H spurs or pins for engaging and holding the sticky paper in position within the holder and guard.

Referring more particularly to Figs. 1 to 4, it will be noted that the blank comprises three panels, the middle panel or base A being preferably solid, while the side panels, which form the guard B, are each formed with openings through which the flies can pass. When erected, as illustrated in Fig. 1, the ends are also opened. The framework around the various openings forms a guard proper to prevent the clothing, &c., from coming in contact with the sticky upper surface of or on the base.

Referring to Figs. 5 to 7, inclusive, it will be noted that the structure is similar to that shown in Figs. 1 to 3, with the exception that the several panels are split transversely through the middle, which permits the blank to be folded into smaller compass, as illustrated in Fig. 6.

The blank illustrated in Fig. 9 forms a rectangular holder and guard having two sides and two ends, each provided with one or more openings, as illustrated in Fig. 8, the top layer being opened but sufficiently above the sticky surface to prevent any large article from coming in contact with said surface.

In Figs. 10 and 11 is shown a two-part holder and guard, the upper panel being hinged to the lower and being wider, so that when the edges are made to register the up-

per panel is bowed to form a guard. The tension of the upper panel tends to hold the lower panel stretched flat.

In Figs. 12 and 13 is shown a form of the invention which is substantially like that shown in Figs. 8 and 9, excepting that it is provided with an additional panel forming a top, the several lateral members and the top being provided with openings or windows to permit the entrance of the flies or insects.

In Figs. 14 to 16, inclusive, is illustrated a form of the invention in which the bottom panel is formed of thin sheet metal, such as tin, and the sides are formed of wire, one of the side panels being hinged to the bottom panel and the other side panel being hinged to the first and adapted to engage flanges on the opposite side of the bottom panel.

In Fig. 17 is shown a construction comprising a bottom panel of suitable material and two side guard members constructed of wire and suitably hinged to the side edges of the bottom panel. The side members are preferably vertical and connected at their upper edges by transverse members.

In Figs. 19 and 20 is shown another form of guard comprising a bottom panel with an inclined lateral member hinged to one edge and props connecting the upper edge of said lateral member with the other side edge of the base.

The details of construction of the forms shown in Figs. 14 to 20, inclusive, are clearly illustrated in the drawings, and as they may be varied largely it is not even essential to describe them more particularly.

In practice our holders are preferably made of paper, cardboard, or a similar material which can be creased or scored to form the joints or hinges. However, we wish to have it understood that any suitable material may be employed in the construction of any of the forms of our guard and holder. Our constructions are very simple, efficient, and economical and being preferably made of an inflammable material can be readily destroyed by burning in stove or otherwise when it is desired to discontinue use on acconut of being soiled, filled with flies, or for any other reason.

When our holder or guard is assembled and the sheet of sticky fly-paper or substance exposed on the inner side of base or bottom thereof, the said sticky paper or substance is protected from contact with hats, coats, newspapers, or the like articles which may be carelessly thrown upon it, the openings or mesh being spaced so as to give desired protection and still permit freest possible access of the flies or other insects to the paper or sticky substance. The holder and guard also effectually retains the paper and sticky substance in proper position and is not liable to blow or turn over. We thus obviate the vexatious and troublesome sticking of fly-paper on those articles to which it should not stick, without hindering in any material degree the ease with which flies or other insects can be stuck.

In several forms of holder or guard illustrated in the drawings—such as, for instance, Figs. 8 and 12—the lower part of holder will have the appearance of a shallow box or pan the edges of which stand upright in practice about five-sixteenths of an inch, more or less. This inclosure of base of holder prevents the sticking material from spreading or running from the paper and also serves as an obstruction or bar to flies endeavoring to crawl over the edge portion of the sticky field. It will be understood that any of our forms of holder may be constructed either with or without this feature of box or pan like bottom. We may also use cardboard or other material provided with stiffening-ribs formed in any desired manner, such as depressing certain portions of the cardboard and obtaining resistance against bending or buckling thereby. This feature is shown in Figs. 5, 6, and 7, being indicated by the letter *e*.

In order to draw or attract the flies or other insects toward the holder and guard containing the sticky fly-paper or substance, we in some cases impregnate or dip the cardboard or material from which holder and guard is constructed in a liquid solution of sweetened wintergreen, sassafras, or other substance whose odor attracts the flies or other insects, the holder or guard then being allowed to dry and retaining the odor with which it has been treated.

The simplicity of our improved combined holder and guard and the economy with which it can be manufactured render it possible to sell same for a very low price, and the construction of holder is such that it can be folded into a small space, and thus be effectually shipped, transported, or stored in bulk with the fly-paper or otherwise, as may be desired. If a separate sheet of sticky fly-paper is used in our holder and guard, it may be removed at any time when desired and a fresh sheet of paper inserted. By our invention we provide a holder and guard that can be readily collapsed or folded for convenience of shipment, storage, and delivery and also conveniently and readily extended or assembled for the exposure of the sticky fly-paper or surface to small insects, such as flies and the like, while guarding against contact of articles that should not touch said field.

It will be understood that with each of the forms of the invention illustrated and described a "layer of sticky material" is to be used, either spread directly upon the guard or holder or upon a sheet of paper to be supported upon or attached to the guard or holder. In the following claims we shall use the term "layer of sticky material" in a sense

broad enough to include such material either on a separate sheet of paper or spread directly on the holder or guard.

Having thus described our invention, what we claim is—

1. A device of the class described and for the purpose set forth comprising a base-plate and a plurality of panels movably connected to said base-plate and adapted to be erected into a guard or cage over said base-plate and also to assume a knockdown or flat condition for shipment or storage.

2. A device of the class described and for the purpose set forth comprising a base-plate and a plurality of panels having openings therein, said panels being hinged to the base-plate and adapted to be erected into a guard or cage over said base-plate and also to assume a knockdown or flat condition for shipment or storage.

3. A device of the class described and for the purpose set forth comprising a plurality of panels of cardboard or like material suitably hinged together, one of said panels constituting a base and the other panels being adapted to be erected into a guard or cage over said base and also to assume a knockdown or flat condition for shipment or storage.

4. A device of the class described and for the purpose set forth comprising a plurality of panels of cardboard or like material connected by hinged joints, one of said panels being solid and constituting a base and the other panels being provided with openings and adapted to be erected into a guard or cage over the said base, for the purpose set forth.

5. A device of the class described and for the purpose set forth comprising a plurality of panels of cardboard or similar material, one of said panels forming a base and the other panels being provided with suitable openings and being hinged to said base and provided with means for connecting their upper edges to form a guard or cage over said base.

6. A device of the class described and for the purpose set forth constructed of cardboard or like material and comprising a base, and a guard or cage hinged to said base and provided with suitable openings, said guard or cage being adapted to assume a knockdown or flat condition for convenient shipment or storage.

7. As an improved article of manufacture, a fly-paper holder and guard consisting of a flexible jointed frame, collapsible into a substantially flat condition, in combination with a base or bottom having raised ends and sides.

8. As a new article of manufacture, a fly-paper holder and guard consisting of side and bottom panels jointed so as to be susceptible of folding on each other, for the purpose specified.

9. As a new article of manufacture, a cardboard holder and guard for sticky fly-paper, consisting of a bottom piece A and connected collapsible frames B.

10. A device of the kind described and for the purpose set forth, comprising a bottom having raised edges and a collapsible frame connected to said bottom, for the purpose described and specified.

11. As a new article of manufacture, a holder and guard, consisting of a bottom piece and collapsible guards, the material of which holder and guard is impregnated or treated with a substance which will attract flies or other insects.

12. A fly-paper holder and guard, comprising a base-piece A and collapsible guard members B, said members being formed of a cardboard or similar material and provided with openings or perforations, for the purpose set forth.

13. A fly-paper holder and guard, comprising a base-piece A, collapsible guard members, and means for fastening the fly-paper to the base-piece.

14. A collapsible fly-paper holder and guard, comprising a base-piece A, collapsible guard members B, and spurs or points of metal projecting from upper face of base-piece to support and fasten a sheet of fly-paper in desired position, for the purpose specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

EMIL A. GATHMANN.
WM. S. HERMANY.

Witnesses:
W. F. HARTMANN,
E. B. HOFFMAN.