G. B. KEPLINGER.

FLY KILLING IMPLEMENT.

APPLICATION FILED JAN. 25, 1919.

1,331,266.

Patented Feb. 17, 1920.

Fig. 1.

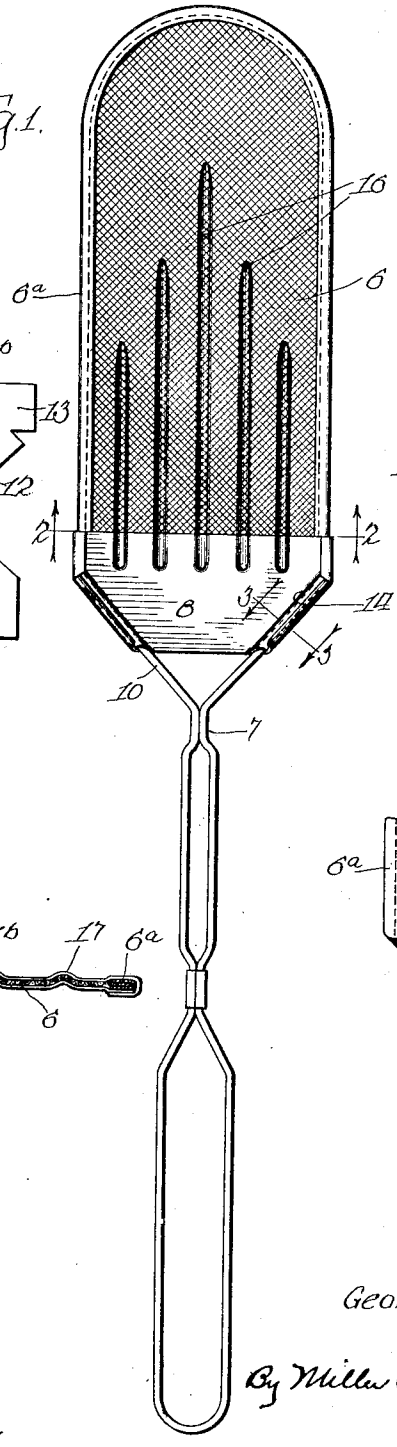


Fig. 5.

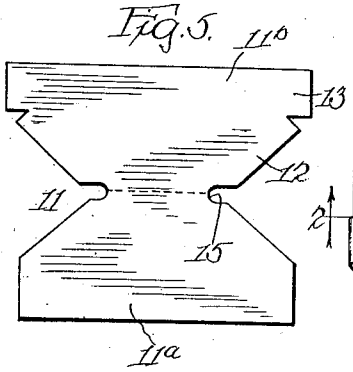


Fig. 3.

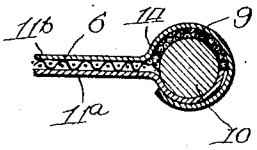


Fig. 2.

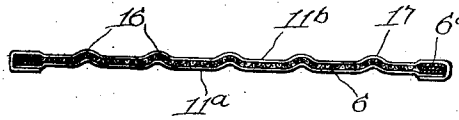
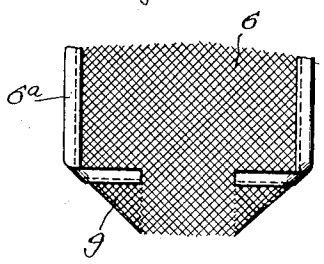


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

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FLY-KILLING IMPLEMENT.

1,331,266. Specification of Letters Patent. **Patented Feb. 17, 1920.**

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To all whom it may concern:

Be it known that I, GEORGE B. KEPLINGER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fly-Killing Implements, of which the following is a specification.

The invention has reference to insect destroying implements of the type commonly called fly-swatters, and the general object thereof is to provide such an implement of improved construction and of maximum efficiency.

A further and more specific object of the invention is to provide an improved method of mounting the flexible striking member of the device so that it will not, under severe usage, pull away from its support.

In the use of fly-killing devices embodying flexible striking members, an objectionable feature in a great many instances is that the efficiency of the device is seriously impaired by reason of the fact that the member is so flexible as to be flexed relative to its handle or support in the operation of striking a blow, owing to the inertia of the member. This is true with reference to fly-killers having striking members made of wire screen, as is common in the art, and the difficulty in this instance is that no satisfactory means has been devised for overcoming the extreme flexibility without making the member too rigid, a limited amount of flexibility being of course desirable. A further and important object of this invention, therefore, is to provide means of a practical character for effectively overcoming the difficulty indicated, with the result that the blow may be struck more rapidly and with greater force.

The objects of the invention thus generally stated, together with other and ancillary advantages, are attained by the construction and arrangement illustrated in the accompanying drawings, wherein Figure 1 is a side elevation of a fly-killing device embodying the features of my invention. Fig. 2 is a sectional view, on an enlarged scale, taken on line 2—2 of Fig. 1. Fig. 3 is a similar view taken on line 3—3 of Fig. 1. Fig. 4 is a fragmentary view of the lower portion of the wire screen comprising the flexible member of the device. Fig. 5 is a plan view of the blank from which is formed the means for clamping the flexible member and handle together.

In the drawings 6 is a wire screen suitably shaped and having the usual binder 6^a at its top and side edges. The bound screen forms the flexible striking member of the device. 7 indicates generally the handle to which the striking member is fastened by means of a clamping member 8.

As shown in Fig. 4, the wire screen 6 is folded in at its lower corners to form a pair of folded portions 9, and in order to provide means to which these folded portions may be clamped, the handle has a pair of laterally or transversely diverging arms 10.

The clamping member 8, for securing the striking member of the device to the handle, is preferably formed from an integral piece of sheet metal 11 (Fig. 5), doubled upon itself to form two opposite side plates 11^a and 11^b adapted to be pressed together by means of a suitable tool so as to clamp the folded portions 9 of the screen firmly against the arms 10. The plate 11^a of the clamping member is made of a length substantially equal to the width of the striking member while the plate 11^b is made somewhat longer to form end portions 12 and 13. The end portions 12 are adapted to be bent around the arms 10 and lapped over the ends of the plate 11^a, and the portions 13 are adapted to be folded into clamping engagement with the binder 6^a of the flexible member, above the arms 10. Said portions 12 and the underlying portions of the plate 11^a, when bent around the arms 10, are shaped as at 14, to clamp the folded portions of the striking member snugly against said arms 10.

In order to receive the arms 10, the blank sheet of metal 11 is cut away as at 15, at opposite ends of the sheet, so as to form, when folded, openings for receiving the arms.

For the purpose of rendering the striking member less flexible, I form therein, in any suitable way, a plurality of ribs 16 extending longitudinally of the member. These ribs may be arranged as desired, herein being shown in parallel relation with the central rib of the greatest length and the remainder gradually decreasing in length toward the edges of the member. Preferably the ribs terminate at their lower ends between the plates 11^a and 11^b of the clamping member 8, said plates being correspond-

ingly shaped as at 17. By this arrangement the ribs serve to stiffen the striking member at its point of entrance between the plates so as to prevent an easy bending or flexing of the member along the edges of the plates.

It will be apparent that I have provided a fly killing implement of a very practical character. The clamping member is firmly secured to the handle and the striking member is secured to the clamping member as well as to the handle itself. Moreover a very simple and efficient means have been provided for stiffening the striking member but only to such extent as is desirable.

I claim as my invention:

1. A device of the character described having, in combination, a handle having a pair of laterally divergent arms, a striking member having folded lower corners, and means for securing the striking member to said handle comprising a pair of plates having portions bent around the arms with the portions of the opposite plates overlapping and shaped so as to clamp the folded portions of the striking member into holding engagement with the arms.

2. A device of the character described having, in combination, a handle having a pair of laterally divergent arms, a striking member having folded lower corners, and means for securing the striking member to said handle comprising a pair of plates having portions bent around the arms and shaped so as to clamp the folded portions of the striking member into holding engagement with the arms, said plates also having portions folded into binding engagement with said striking member above the arms.

3. A device of the character described having, in combination, a handle, a flexible striking member formed of wire screen, and means for securing said member to the handle including a pair of plates adapted to engage opposite sides of the member, said member having a plurality of ribs formed in the wire screen and extending downwardly between said plates, whereby to make said member less flexible.

4. A device of the character described having, in combination, a handle, a flexible striking member formed of wire screen and secured to the handle, the screen of said member having formed therein a plurality of elongated depressions forming ribs whereby to render the member less flexible.

In testimony whereof, I have hereunto set my hand.

GEORGE B. KEPLINGER.