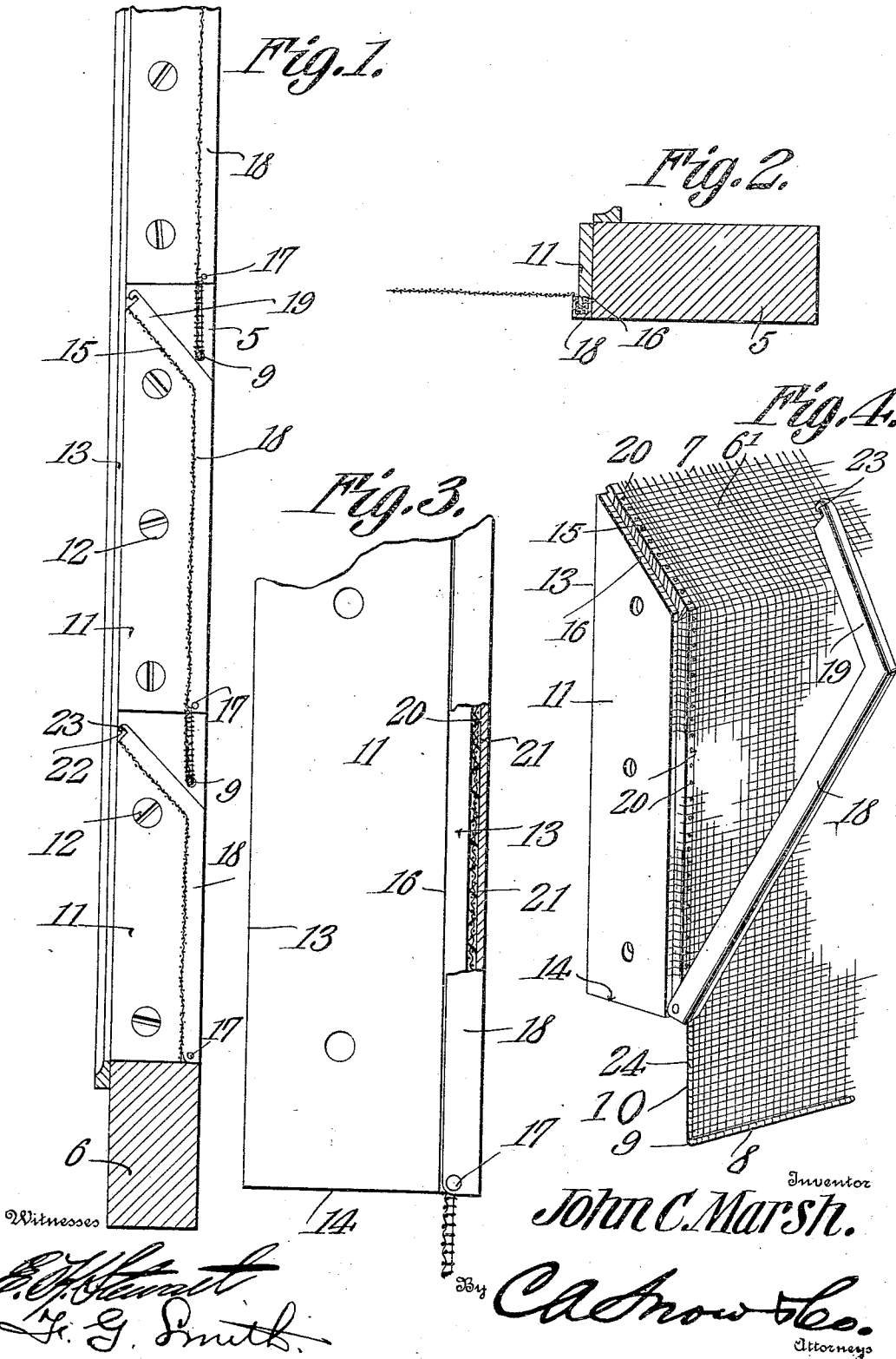


J. C. MARSH.
 FLY SCREEN.
 APPLICATION FILED MAY 8, 1909.

956,495.

Patented Apr. 26, 1910.



UNITED STATES PATENT OFFICE.

JOHN C. MARSH, OF REDFIELD, SOUTH DAKOTA.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN C. MARSH, a citizen of the United States, residing at Redfield, in the county of Spink and State of South Dakota, have invented a new and useful Fly-Screen, of which the following is a specification.

It is the object of the present invention to provide an improved construction of window screen and the invention aims, more particularly, to provide a screen of such construction as to permit of the exit of flies and other insects but to effectually prevent their entrance into a room in a window of which the screen is disposed.

The screen embodying the present invention is of that class of screens which are made up of a frame and a plurality of screen sections which are arranged in the frame with their edge portions in overlapped but spaced relation and which are based upon the principle that flies and other insects will crawl upwardly but not downwardly and will hence make their exit between the overlapped portions of the screen sections; and, the invention aims to provide a screen of this class of such construction that the screen sections may be readily removed and replaced by new ones when found necessary or when desirable.

More specifically, it is the object of the present invention to provide a frame having means carried by opposite members thereof for removably supporting screen sections therein in position with their edge portions in overlapped relation as above stated.

In the accompanying drawings, Figure 1 is a vertical sectional view through a portion of a screen constructed in accordance with the present invention and looking toward the inner edge of one of the vertical members or stiles of the frame thereof. Fig. 2 is a horizontal sectional view taken through one side of the screen. Fig. 3 is a view partly in side elevation and partly in section of one of the securing or supporting members for the screen sections of the screen. Fig. 4 is a perspective view in detail of one of the supporting members, and one end portion of the screen section supported thereby.

In Fig. 1 of the drawings, there is shown as heretofore stated, a portion of the screen embodying the present invention and of the screen frame, one of the stiles being indi-

cated by the numeral 5 and the lower rail by the numeral 6, it being understood that there are two such stiles and two such rails forming a rectangular screen frame. As heretofore stated, there are mounted removably in the frame of the screen a number of screen sections which have their edges located or arranged in substantially overlapped relation but spaced apart, and each of these sections is shown as of rectangular form and is indicated by the numeral 6', each section having an upper edge 7, a lower edge 8 which is reinforced by means of a reinforcing wire or rod 9 supported thereat, and side edges 10 which may be provided with a suitable binding if it is desired.

As heretofore stated, means are provided for removably supporting the screen sections in the relation above stated, within the frame of the screen and these means are embodied, preferably, in clamping devices which are secured upon the inner or opposed edges of opposite members of the screen frame, here shown as the stiles 5 of the said frame and it is to be understood that the end edges 10 of the said screen sections are to be clamped by corresponding opposite ones of the clamp securing devices whereby the screen sections may be removably supported in position within the frame. In the accompanying drawings, the preferred form of such clamping or screen section securing devices is shown and each device is comprised, in part, of a plate 11 secured by means of screws or other suitable fastening devices 12 to the stiles 5 of the screen frame and each of these plates has parallel side edges 13, a lower end edge 14 which is preferably extended at right angles to the parallel side edges 13, and an upper edge 15 which inclines downwardly and inwardly as is clearly shown in Fig. 4 of the drawings. The inner side edge 13 and the upper end edge 15 of each of the plates 11 are formed with a continuous rabbet 16 and pivoted at the lower inner corner of each plate, as at 17, is a clamping member which is indicated by the numeral 18 and is of channel formation, the member being provided with an angularly extending end portion 19 which extends at an angle with respect to the body portion of the member to the same degree as the edge 15 of the plate 11 with respect to its inner side edge 13 whereby when the member is swung to position to coöperate

with the said inner side edge 13 and end edge 15 of the plate, it will receive the said edge, one wall of the channel of the said clamping member seating in the rabbet 16 as will be readily understood. As is clearly shown in the drawings, and particularly in Figs. 3 and 4 thereof, the plate 11 is formed along its inner side edge 13 and its oblique or inclined edge 15 with a plurality of spurs or serrations 20 and in the bottom of the channel of the clamping member 18 and its extension 19, there are formed similar spurs 21 the spurs upon the clamping member alternating with those upon the said edges of the plate when the clamping member is swung to position to receive the edge of the plate. As shown in Fig. 4 of the drawings, and also in Fig. 3, the oblique edge 15 of the plate 11 is formed, at a point adjacent the outer side edge of the plate or in other words adjacent the upper outer corner of the plate, with a notch 22 in which seats a lug 23 formed at the free end of the clamping member 18 it being understood that when one end edge of one of the screen sections 6 is inserted between the inner side edge 13 of the plate 11 and the said clamping member 18, the member at such time being open, and when the member is closed down to receive the said edge 13 of the plate and thereby clamp the end edge of the screen, the lug 23 will seat in the notch 22 and this engagement of the lug in the notch will serve to lock the clamping member in clamping relation with respect to the plate. It will further be observed from an inspection of Fig. 4 of the drawings that each end edge of the screen section 6 is cut away adjacent the lower edge thereof as at 24 whereby to clear the hinge or pivot for the clamping member 18 and that the lower edge portion of the said screen section depends freely from the body portion thereof it being however reinforced by the rod or wire 9 as heretofore stated and it will be observed from Fig. 1 that the said lower edge portions of the screen sections are in a vertical plane with the body portions of the said screen sections, but their upper edges, extending between the oblique edges 15 of the plate 11 and the angular portions 19 of the clamping members 18, lie at an angle to the body portion of the respective screen sections and in substantially overlapped relation with respect to the depending lower edge portion of the screen section next above. By reason of this construction, flies or other insects lighting upon the screen will crawl upwardly and along the upper edge portion of one or the other of the screen sections and through the screen whereas, inasmuch as insects do not usually crawl down the screen,

entrance of the insects through the screen is obviated.

What is claimed is:—

1. In a device of the class described, a frame, screen sections, and means for supporting the screen sections in the frame comprising a plurality of devices each consisting of hinged sections, the said devices being carried by opposite members of the frame and receiving between their hinged sections the side edges of the screen sections.

2. In a device of the class described, a frame, plates carried upon opposite members of the frame, a clamping member hinged to each plate and cooperating with one edge thereof, screen sections received at their side edges between the said hinged member and the edge of the plate with which it cooperates, and means for holding the member in locked relation with respect to the plate.

3. In a device of the class described, a frame, plates carried upon opposite members of the frame, a clamping member hinged to each plate and cooperating with one edge thereof, screen sections received at their side edges between the said hinged member and the edge of the plate with which it cooperates.

4. In a device of the class described, a frame, plates carried upon opposite members of the frame, a clamping member hinged to each plate and cooperating with one edge thereof, screen sections each received at each side edge between one of the said hinged members and the edge of the plate with which it cooperates, and means for holding the clamping members in locked relation with respect to the plate, said means comprising a lug upon the clamping member engageable in a notch in the plate.

5. In a device of the class described, a frame, plates carried upon opposite members of the frame, the plate being formed each with a vertical edge and inclined edge, a clamping member hinged to each plate and having angularly disposed portions cooperating with said edges of the plate, screen sections each received at each side edge between one of the said hinged clamping members and the said edge of the plate with which it cooperates, and means for holding the clamping member in locked relation with respect to the plate.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN C. MARSH.

Witnesses:

J. I. O'CONNELL,
G. F. SWARTZ.