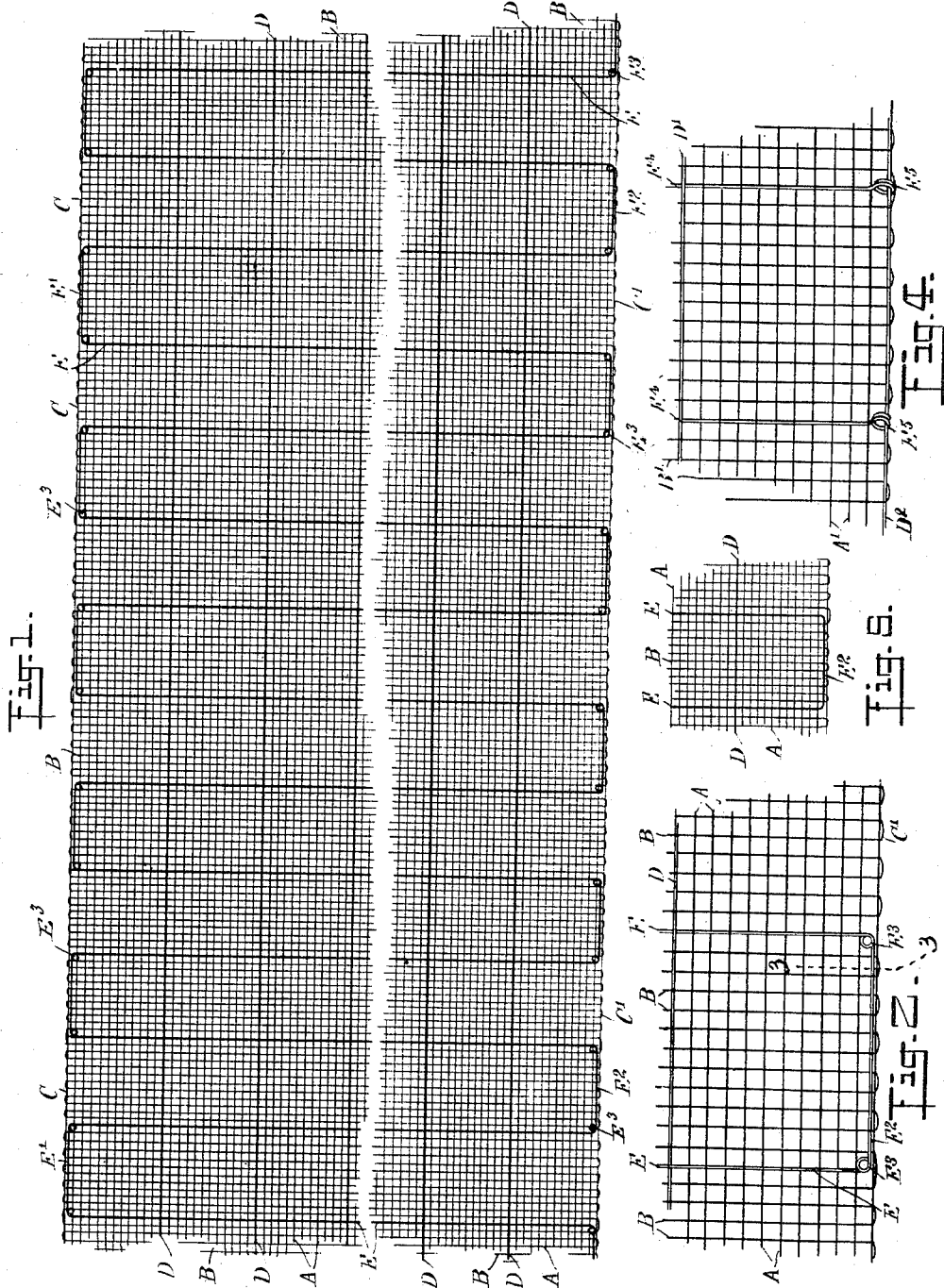


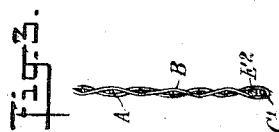
H. F. JACKSON.
SCREEN WIRE CLOTH.
APPLICATION FILED DEC. 2, 1910.

1,038,895.

Patented Sept. 17, 1912.



WITNESSES
Wm. H. H. H. H.
Rev. H. H. H.



UNITED STATES PATENT OFFICE.

HERBERT FARRAR JACKSON, OF INDIANAPOLIS, INDIANA.

SCREEN-WIRE CLOTH.

1,038,895.

Specification of Letters Patent.

Patented Sept. 17, 1912.

Application filed December 2, 1910. Serial No. 595,249.

To all whom it may concern:

Be it known that I, HERBERT F. JACKSON, a citizen of the United States, and a resident of Indianapolis, in the county of Marion and State of Indiana, have invented a new and Improved Screen-Wire Cloth, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved screen wire cloth for use on door and window screens or to cover the openings of buildings for the purpose of keeping out flies, mosquitos and other insects, the screen wire cloth being reinforced in the process of manufacture to render the screen wire cloth exceedingly strong and durable without unduly increasing the weight thereof, and to provide means for securely fastening the marginal edge of the screen wire cloth to the screen frame.

For the purpose mentioned, use is made of spaced reinforcing strands interwoven with the regular body strands, said reinforcing strands being of a heavier gage than the body strands. In order to increase the strength of the selvage of the screen wire cloth the crosswise or transverse reinforcing strands for a portion of their total length are bound in with the body strands along the selvage, and such selvage portions of the reinforcing strands are preferably formed with attaching loops for the passage of tacks, nails or other fastening devices employed to secure the screen wire cloth in place on the screen frame or on door and window frames. This method of strengthening the selvage of the screen wire cloth and affording suitable means of attaching the same in a reliable way to the screen frame may be varied however by using plain corners instead of loops where the crosswise or transverse reinforcing strands turn and run for a portion of their total length continuous with the selvage of the screen wire cloth, the intention being to use staples in preference to tacks or nails as a fastening device when the selvage of the screen wire cloth is so formed. Also that portion of the crosswise or transverse reinforcing strands, which is continuous with and interwoven with a portion of the selvage of the screen wire cloth may be omitted entirely in actual manufacture, and the said

crosswise or transverse reinforcing strands be each made a separate strand formed with attaching loops at the selvage ends for the passage of tacks or other fastening devices, the loops at the selvage ends of the said transverse reinforcing wires being interwoven with a lengthwise or longitudinal reinforcing wire placed right at the selvage of the screen wire cloth.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the screen wire cloth; Fig. 2 is an enlarged plan view of a portion of the screen wire cloth; Fig. 3 is a cross section of the same, on the line 3—3 of Fig. 2; Fig. 4 is an enlarged plan view of a portion of the screen wire cloth having transverse reinforcing strands terminating at the ends in attaching loops; and Fig. 5 is a plan view of the screen wire cloth having reinforcing weft strands with plain corners at the selvage.

The body of the screen wire cloth is formed of warp strands A and weft strands B of the ordinary gage and interwoven with each other in the usual manner to form a body of the desired mesh and also selvages C, C' at the sides of the screen wire cloth.

As illustrated in Figs. 1, 2 and 3, reinforcing warp strands D and a reinforcing weft strand E are interwoven with the body strands A and B, the said reinforcing strands D and E being of a heavier gage than the body strands A and B. Each of the reinforcing warp strands D is arranged between adjacent body warp strands A, and the reinforcing weft strand E is arranged between adjacent body weft strands B, as will be readily understood by reference to the drawings. The reinforcing weft strand E is continuous and portions E' and E² are interwoven with the selvages C, C' alternately on opposite sides of the screen wire cloth thus reinforcing the ordinary selvages C, C'. The selvage portions E' and E² of the reinforcing weft strand E are preferably formed with loops E³ for the passage of tacks, nails, staples or other fastening devices employed for securing

the screen wire cloth in position on the window or door screen frame, etc.

In the screen wire cloth shown in Fig. 4 the body is the same as above described in reference to Figs. 1, 2 and 3, that is, is formed of warp strands A' and weft strands B', and the body is reinforced by reinforcing warp strands D' and reinforcing weft strands E⁴, which latter are, however, not continuous but are formed of single reinforcing weft strands E⁴, each terminating in an attaching loop E⁵. Through the loop E⁵ on each side of the screen wire cloth extends a selvage reinforcing warp strand D². Fig. 5 shows the form of the screen wire cloth with the loops E³ eliminated and the weft reinforcing strands or wires E merely turning with a plain corner at the selvages instead of being formed into loops as described above and shown in Fig. 1.

From the foregoing it will be seen that the screen wire cloth is strongly reinforced in both a longitudinal and transverse direction without unduly increasing the weight of the screen wire cloth or forming undue obstructions of the meshes of the screen wire cloth.

Screen wire cloth arranged as described can be readily stretched on the window or door screen frame and fastened to the same so as to remain at all times in the proper position without danger of sagging or bending or being torn loose along the edges as is so frequently the case with the ordinary non-reinforced screen wire cloth now in general use.

The screen wire cloth is woven on a suitable loom, and, in manufacturing the screen wire cloth, the reinforcing warp strands D are spaced apart an inch or so, and the reinforcing weft strands E are similarly spaced apart, and hence the desired flexibility of the screen wire cloth is maintained, at the same time the reinforcing strands hold the screen wire cloth against distortion. The spacing of the reinforcing warp strands or the reinforcing weft strands, however, may vary according to the grade or quality of screen wire cloth manufactured for a given purpose, it being intended, for instance, to make a screen wire cloth wherein the reinforcing wires are of heavier gage and more closely spaced for use in the lower panels of door screen frames and to cover cellar window openings than for the upper panels of screen doors or window screens.

As the question of securing the cut ends or sides of reinforced screen wire cloth as compared with the selvage may arise, be it sufficient to state that the use of staples driven over the heavier reinforcing strands into the screen frame will accomplish the purpose, although the use of two tacks or nails as a fastening device or the bending of the ends of the reinforcing strands around a tack or

nail so as to form a loop will accomplish the same thing.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In screen wire cloth, the combination with the body of the cloth consisting of interwoven longitudinal and transverse body strands of the ordinary gage and spaced apart the usual distance in both directions, of spaced reinforcing strands of heavier gage than the said body strands, the said reinforcing strands extending longitudinally and transversely of the body of the fabric and parallel with the body strands and interwoven with the latter during the process of manufacture, the said reinforcing strands being spaced apart and of sufficient gage to prevent distortion of the wire cloth while maintaining its flexibility.

2. As a new article of manufacture, a screen wire cloth, consisting of interwoven transverse and longitudinal body strands of usual gage, and spaced the usual distance apart in both directions, and spaced reinforcing strands of a heavier gage than the said body strands and interwoven with the latter, the said reinforcing strands extending longitudinally and transversely of the body of the fabric and having portions extending along the selvage of the cloth and interwoven with the body strands forming the selvage.

3. As a new article of manufacture, a screen wire cloth, consisting of body warp strands, body weft strands interwoven with the said body warp strands, both body warp and body weft strands being of ordinary gage, and spaced the usual distance apart in both directions, reinforcing warp strands spaced apart and arranged between adjacent body warp strands, and a reinforcing weft strand arranged between adjacent body weft strands and interwoven with the said warp strands, the said reinforcing weft strand being continuous and being interwoven with the selvage of the screen wire cloth alternately at opposite sides thereof, the said reinforcing warp and weft strands being of heavier gage than the said body warp and weft strands.

4. As a new article of manufacture, a screen wire cloth, consisting of body warp strands, body weft strands interwoven with the said body warp strands to form a body of the desired mesh and also selvages at the sides of the screen wire cloth, both body warp and body weft strands being of ordinary gage, and spaced uniformly apart, reinforcing warp strands spaced apart and ranging parallel with the said body warp strands, and a continuous reinforcing weft strand interwoven with the said warp strands and having portions interwoven with the selvage of the screen wire cloth al-

ternately at opposite sides thereof, the said reinforcing warp and weft strands being of heavier gage than the said body warp and weft strands, and the selvage portions of the reinforcing weft strand having plain corners at the selvage.

5 In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

HERBERT FARRAR JACKSON.

Witnesses:

DELLA PARK,

ANNA J. JACKSON.