F. W. TUERK & E. H. GOUDIE.

WINDOW SCREEN.

APPLICATION FILED SEPT. 8, 1909.

983,958. Patented Feb. 14, 1911.

Fig. 1.

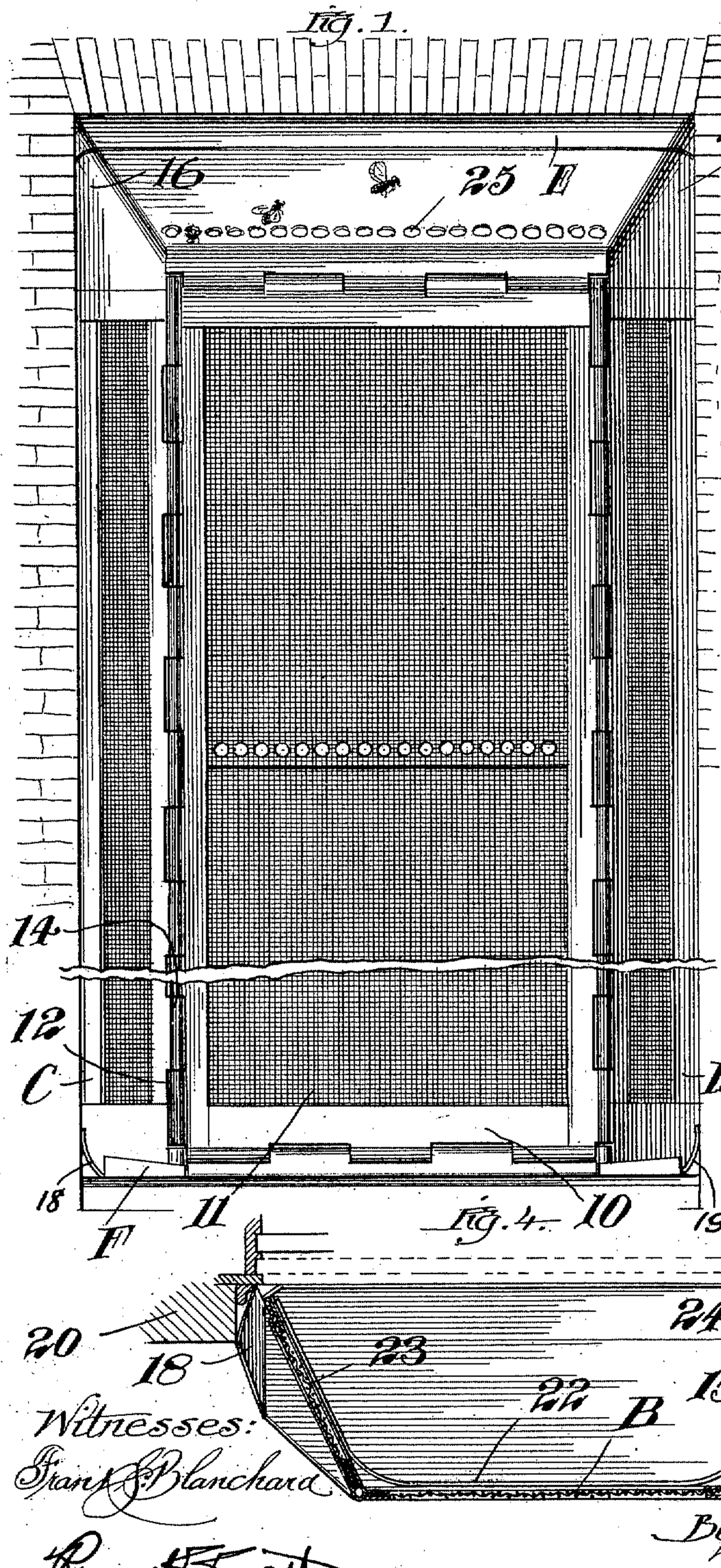


Fig. 2.

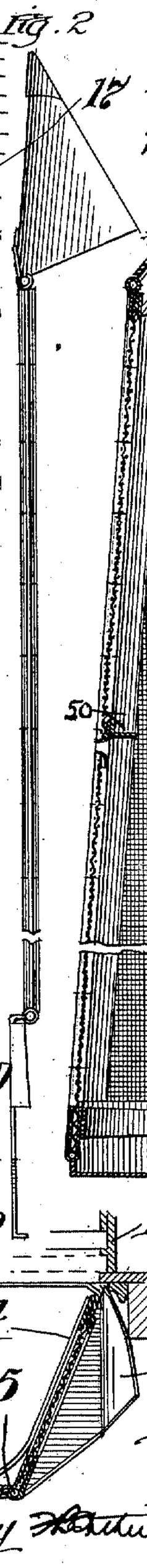
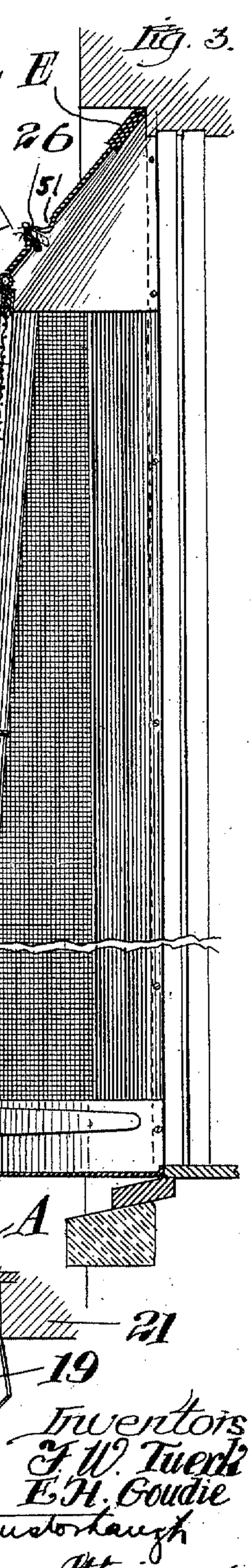


Fig. 3.



Witnesses:

Frank L. Blanchard

Russell E. Smith

Inventors

F. W. Tuerk

E. H. Goudie

By Thistlethwaite & Haugh

Attorney.

UNITED STATES PATENT OFFICE.

FREDERICK WILLIAM TUERK AND ELIZA HEWLETT GOUDIE, OF CHICAGO, ILLINOIS.

WINDOW-SCREEN.

983,958. Specification of Letters Patent. Patented Feb. 14, 1911.

Application filed September 8, 1909. Serial No. 516,774.

To all whom it may concern:

Be it known that we, FREDERICK WILLIAM TUERK and ELIZA HEWLETT GOUDIE, both of the city of Chicago, in the State of Illinois, United States of America, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification.

Our invention relates to improvements in window screens, and the objects of our invention are to provide a screen, which while affording maximum circulation of air therethrough, will yet permit the opening and closing of the window sash, and one which will permit a greater circulation of air current through the window than the form of flat screen at present almost universally employed; and it consists essentially of a screen formed with a central portion supported from the sides of the window frame by a plurality of sections hinged thereto, whereby, the whole screen will project forwardly from the window, and the bottom section will form a shelf on which various articles may be rested. The exit of insects from the interior, is permitted through a plurality of apertures having tapered sleeves formed around the same, and adapted to prevent the entrance of insects from the outside.

Referring to the drawings: Figure 1 is an elevation of the screen on the exterior. Fig. 2 is a side view of the screen in collapsed position. Fig. 3 is a vertical section through the screen. Fig. 4 is a horizontal section through the screen.

In the drawings, like letters of reference indicate corresponding parts in each figure.

Referring to the drawings, A represents the frame of the window of usual construction, and within which the sashes are held.

B represents the central portion of the screen which is formed of a frame 10 of sheet metal, folded on itself, and supporting the screen proper 11 of wire netting, gauze or like material, the frame being formed with a plurality of integral sleeves 12, by means of which the side sections are hinged thereto. The central portion is slightly inclined outwardly from the top to the bottom as shown, whereby, an increased space may be provided for the bottom section.

C and D represent the side sections, which are formed similarly to the central section and are provided with like integral sleeves 14, fitting between those on the central section and connected thereto by means of suitable pivoting rods 15. These side members are adapted to support the central section a distance outwardly removed from the face of the window, the inner edge of the said sections being attached in a suitable manner to the window frame.

E and F represent the top and bottom sections, respectively, the top section being provided at its end with inturned flanges 16 and 17, adapted to fit over the said sections and closely conform to the surface thereof when the section is in position. It will be observed that the top section E, has an inclined outer surface which will shed the water at the outermost side of the screen. The line of bend of the flanges 16 and 17 extends obliquely across the top section E and the lower edge of said flanges is adapted to rest in substantially the same horizontal plane, whereby, they may afford an effective protection to the upper end of the side section.

The bottom section F is provided at its side with upturned flanges 18 and 19, adapted to bear against the sides 20 and 21 of the window opening, and so give greater steadiness against lateral movement. This bottom section extends substantially in the same plane as the lower member of the window frame and forms a convenient shelf on which flower pots or other articles may be placed. In hot weather it will also be a most convenient place to rest a small child, as it is perfectly secure and free from flies and other insects, while at the same time, the cool breezes can blow through the netting in the side sections.

To assist in holding the sections in extended position and prevent rattling thereof, a flat spring 22 is provided secured to the central section having the ends 23 and 24 abutting the inner side of the side sections. The function of the spring 22 is to force the side sections into contact with the sides of the window.

To permit of the escape of the insects from the interior of the room through the screen, a plurality of apertures 25 are provided, disposed at suitable points in any desired manner, and to prevent the entrance of the insects through the same apertures, integrally tapered sleeves 26 are formed in the metal around the apertures. It will be found that insects, such as flies, will readily force themselves from the larger to smaller

diameter of the sleeve, but will not enter at the smaller end which is on the exterior. In order to guide the insects to the apertures, a ridge is preferably provided extending adjacent thereto. In the embodiment illustrated, a transversely extending flange 50 is provided on the row of perforations near the center of the window and a molding 51 is provided adjacent to the perforations in the upper part of the window.

Owing to the manner of hinging the sections of the screen together, the same may be packed in a small space for shipping purposes, as shown in Fig. 2. If desired the flanges 16 and 17 may be bent perfectly flat, and this will still further facilitate the nesting or packing of a number of screens together.

As the screen projects outwardly from the face of the window, all the lateral air currents on the exterior of the building will pass through the side sections into the room, and thus it is believed a greater amount of ventilation will be secured than with the ordinary screen.

As many changes could be made in the above construction, and many apparently widely different embodiments of our invention within the scope of the claims, could be made without departing from the spirit or scope thereof, it is intended that all matter contained in the accompanying specifications and drawings shall be interpreted as illustrative and not in a limiting sense.

What we claim as our invention is:

1. A window screen formed with a central screen portion, side sections hinged thereto and having screens therein, a top section adapted to extend obliquely to the front section and having flanges at opposite ends turned substantially vertical and adapted to abut and hold the outer surface of the side sections, and a bottom section also hinged to the central screen portion and having upturned flanges extending over the side sections.

2. A window screen formed with a central screen portion, side sections hinged thereto and having screens therein ,a top section adapted to extend obliquely to the front section and having flanges at opposite ends turned substantially vertical and adapted to abut and hold the outer surface of the side sections, a bottom section also hinged to the central screen portion and having upturned flanges extending over the side sections, and a flat spring secured to the central portion and bearing against the side sections and forcing them into contact with the sides of the window opening.

3. A window screen formed with a central screen portion, said central screen portion being slightly inclined outwardly from the top to the bottom, side sections hinged thereto and having screens therein, a top section adapted to extend obliquely to the front section and having flanges at opposite ends turned substantially vertical and adapted to abut and hold the outer surface of the side section, and a bottom section also hinged to the central screen portion and having upturned flanges extending over the side sections.

4. A window screen formed with a central screen portion, side sections hinged thereto and having screens therein, a top section hinged to the central screen portion and adapted when in position to extend obliquely thereto, said screen section being formed at each extremity with downwardly turned flanges adapted to extend substantially vertical, the bending line of said flanges extending obliquely across the top section, and the lower edges of said flanges extending in the same horizontal plane, and adapted to abut and hold the outer surface of the side sections, and a bottom section also hinged to the central screen portion and having upwardly turned flanges extending over the side sections.

In witness whereof we have hereunto set our hands in the presence of two witnesses.

FREDERICK WILLIAM TUERK.
ELIZA HEWLETT GOUDIE.

Witnesses:
HENRY BEAMESDERFER,
FREMONT ARNOLD.