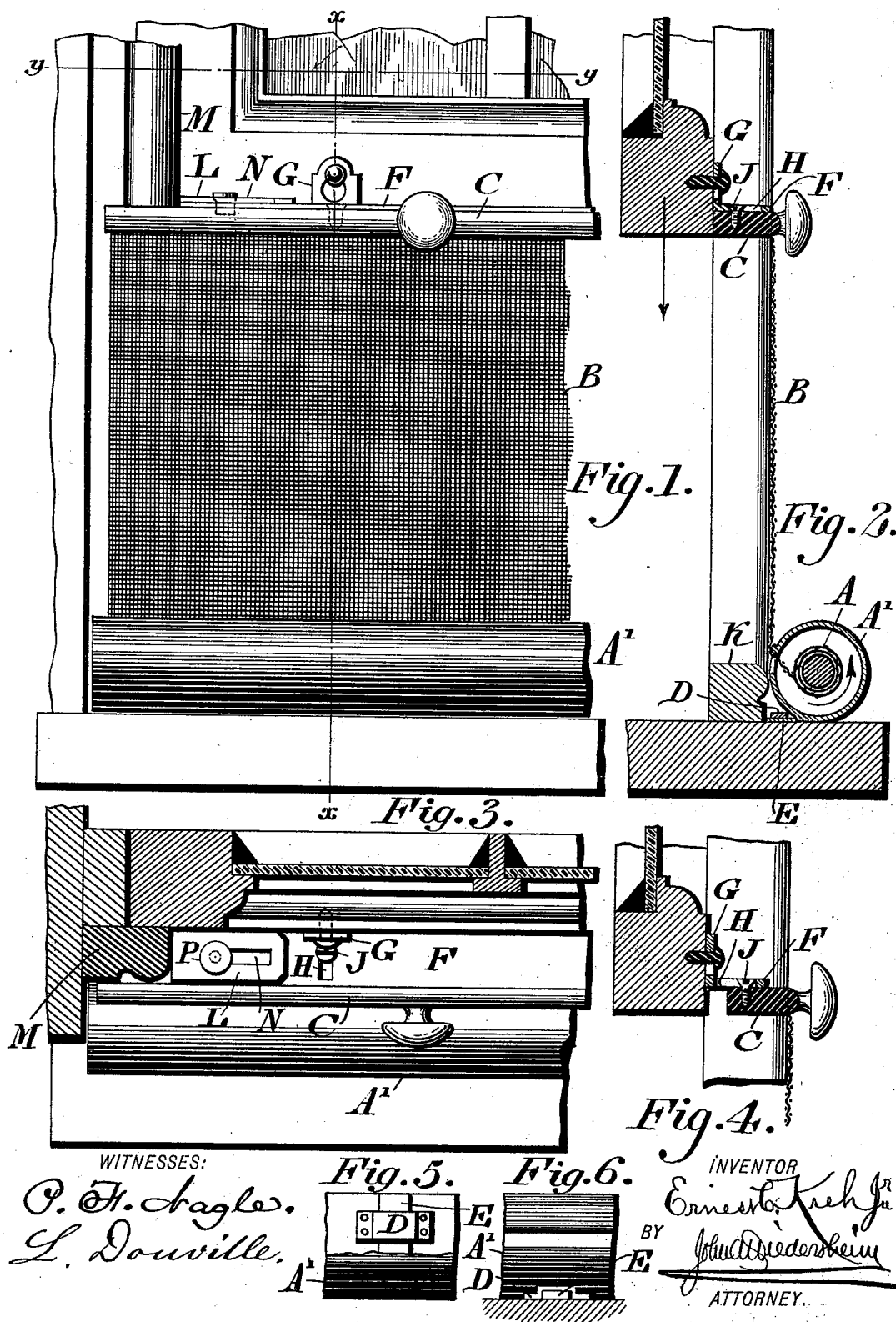


(No Model.)

E. C. KREH, Jr.
WINDOW AND INSECT SCREEN.

No. 518,069.

Patented Apr. 10, 1894.



UNITED STATES PATENT OFFICE.

ERNEST C. KREH, JR., OF PHILADELPHIA, PENNSYLVANIA.

WINDOW AND INSECT SCREEN.

SPECIFICATION forming part of Letters Patent No. 518,069, dated April 10, 1894.

Application filed June 29, 1893. Serial No. 479,115. (No model.)

To all whom it may concern:

Be it known that I, ERNEST C. KREH, Jr., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Window and Insect Screens, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an insect screen formed of netting, and a roller for winding the same thereon, means for connecting the upper end of the netting with a sash frame, means for attaching the casing of the roller with a window sill and guards for preventing insects from entering an apartment between the top piece and the side stiles of the window frame.

Figure 1 represents a front view of an insect screen embodying my invention. Fig. 2 represents a vertical section on line *x, x*, Fig. 1. Fig. 3 represents a horizontal section on line *y, y*, Fig. 1. Fig. 4 represents a vertical section of a detached portion. Figs. 5 and 6 represent views of details.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings: A designates a spring roller with which is connected one end of the netting B, whose other end is attached to the top strip C. Secured to and projecting inwardly from the base of the casing A', on which the roller A is mounted are tongues E, which enter the staples or keepers D on the window sill.

Connected with the strip C is a plate F from which rise the ears G, which latter are adapted to be secured to the bottom stile of the sash frame, said plate being formed with slots H, which extend horizontally and transversely, and receive the screws J, by which said plate is secured to the strip C, said slot and screws being also adapted to permit the strip to be moved in or out, or in other words, nearer to or farther from the bottom stile, so as to adjust the netting B and roller A to irregularities or different projections of the molding or bead K of the window sill, so that the netting may be kept perpendicular.

Secured to the plate F, or to the strip C when said plate is not employed, are guards L, which are located horizontally on the ends of said plate or strip, and project therefrom

toward the side stiles M of the window frame, so as to guard and close any space otherwise existing between the ends of the plates and said stiles. In order to adjust the guards to inequalities in the width of the window frame, they are formed with slots N which extend in the direction of the length of the plate F, and receive screws P which connect them with said plate, and permit the guards to be moved to and from the stiles M, and when tightened, to hold the same firmly in position, it being evident that the guards rise and fall with the top of the screen, and ride along the stiles M in said movements.

It is evident that when the sash is raised, the netting B is unrolled, and so closes the space of the open window, and when the sash is lowered, said netting is wound on the roller, as usual in screens of the class.

It is evident that the ears may be disconnected from the sash frame and the casing from the sill, and thus the screen is removed from position.

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

1. An insect screen consisting of a casing having tongues thereon, a spring roller mounted in said casing, a netting secured at one of its ends to said roller, a strip secured to the other end of the netting, and an adjustable plate secured to said strip and having ears for connecting it to a sash, said parts being combined substantially as described.

2. An insect screen having a netting with a spring roller at one end, and provided at the other with a strip having a slotted plate secured thereto, and ears connected with said plate, said parts being combined substantially as described.

3. An insect screen having a netting with a strip at one end, means substantially as described for securing the said end to a sash, and adjustable slotted guards secured to said strip and fitting closely against a sash and the side stiles of the frame on which said sash moves, said parts being combined substantially as described.

ERNEST C. KREH, JR.

Witnesses:

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