No. 765,615. PATENTED JULY 19, 1904.

G. DU TEMPLE.

WINDOW SCREEN.

APPLICATION FILED APR. 23, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

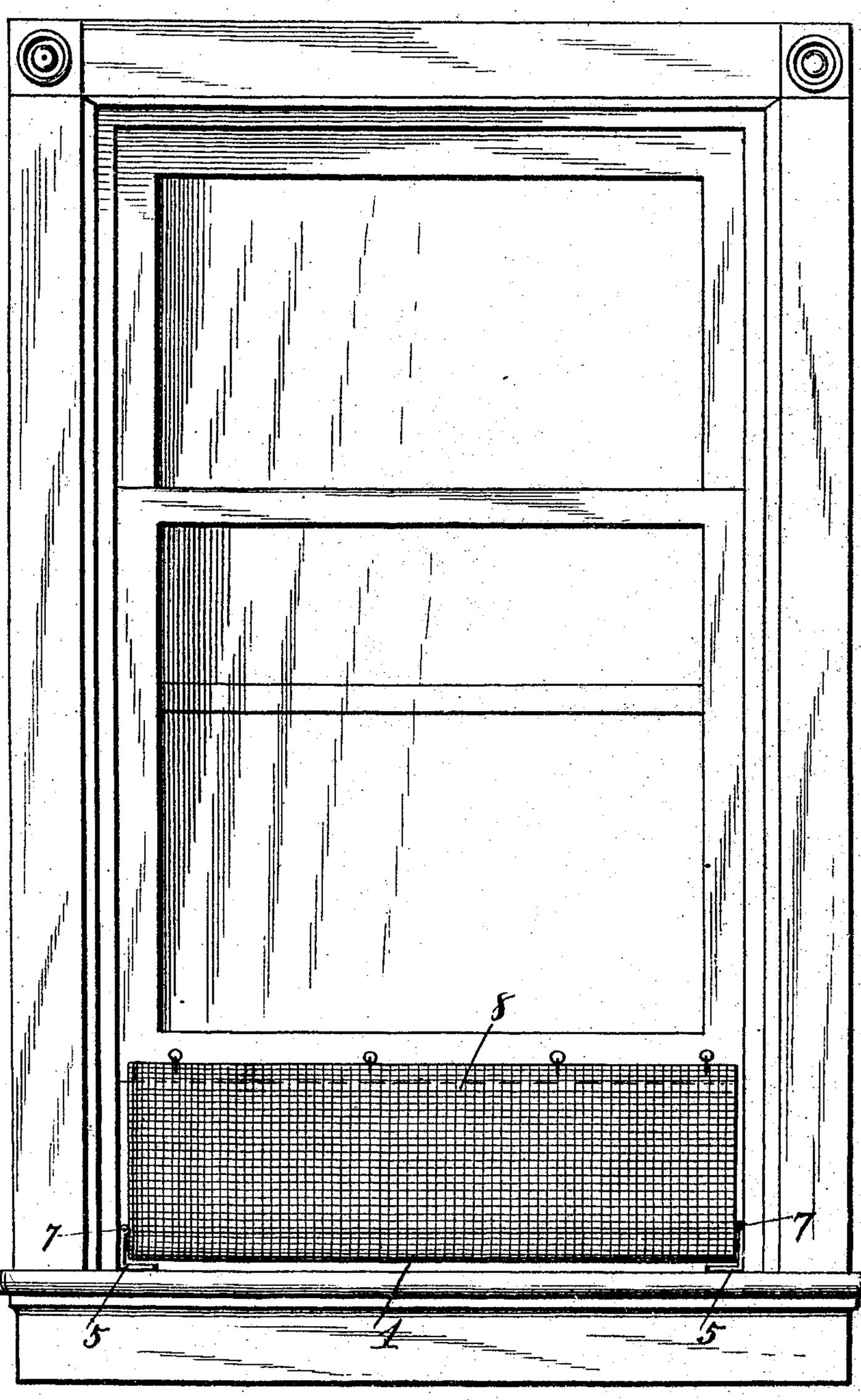


Fig. 1.

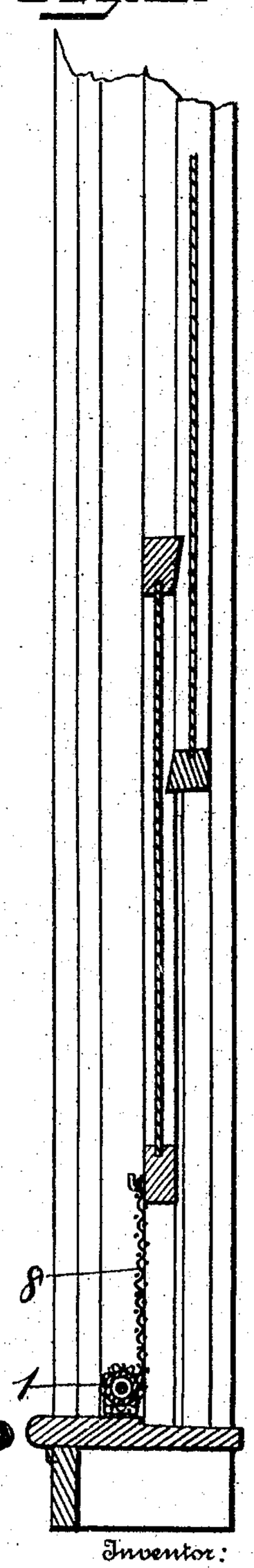


Fig. 2.

Witnesses:
J. Whistler
L. L. Burket.

Inventor:
Gideon Du Temple,
By Louis Bagger & Co.
Attorneys.

No. 765,615. PATENTED JULY 19, 1904.

G. DU TEMPLE.

WINDOW SCREEN.

APPLICATION FILED APR. 23, 1904.

NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.

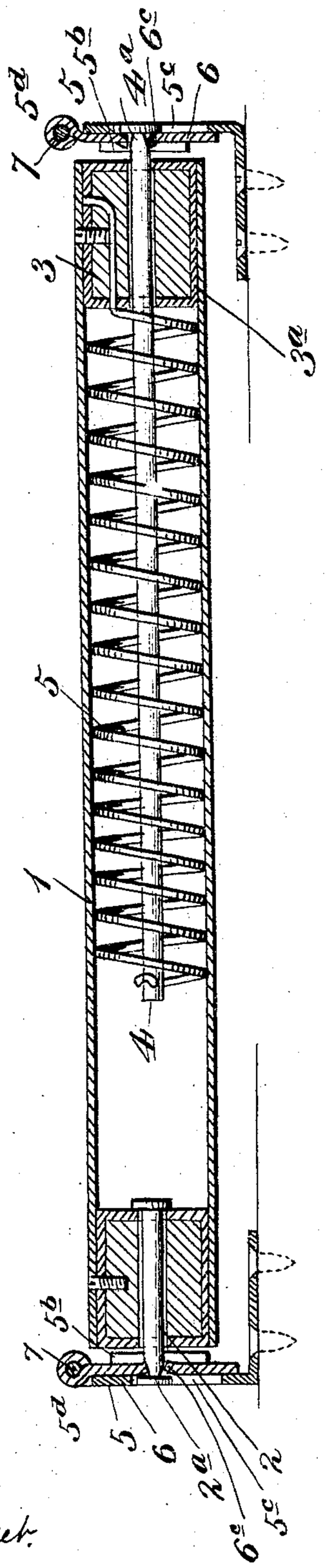
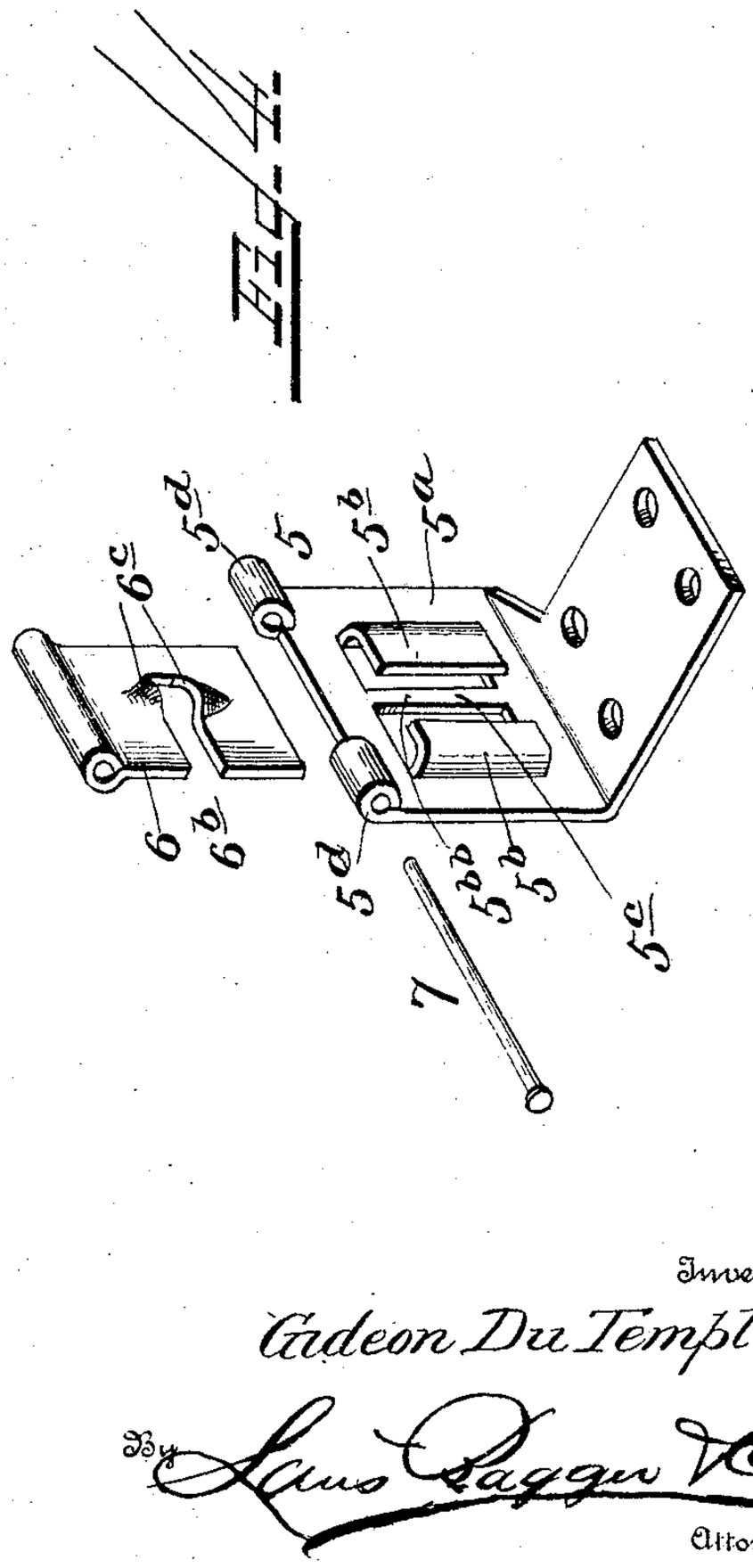


Fig. 1.



Witnesses:
J. Whester
L. L. Burket.

Inventor:
Gideon Du Temple,
By Laus Pagger & Co.
Attorneys.

No. 765,615. Patented July 19, 1904.

UNITED STATES PATENT OFFICE.

GIDEON DU TEMPLE, OF WATERBURY, CONNECTICUT.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 765,615, dated July 19, 1904.

Application filed April 23, 1904. Serial No. 204,607. (No model.)

To all whom it may concern:

Be it known that I, GIDEON DU TEMPLE, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented new and useful Improvements in Window-Screens, of which the following is a specification.

My invention relates to improvements in window-screens, particularly that class termed "rolling" screens. It has for its object to provide for the ready unrolling and rolling up of the screen as the window is raised and lowered as required to screen the window when raised or open and to house said screen when lowered or closed, also to facilitate the hanging or placing in position or removing the screen-roll, with its attached screen, when desired, also to otherwise promote convenience and simplify construction.

Said invention consists of certain structural features, including the combination and arrangement of parts, substantially as hereinafter fully disclosed, and particularly pointed out by the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a front elevation thereof. Fig. 2 is a broken vertical section of the same. Fig. 3 is a longitudinal section produced through the screen-roll and its hangers or brackets. Fig. 4 represents views showing the respective members or parts of one of the screen-roll hangers or brackets.

In the carrying out of my invention I provide a hollow or chambered roll 1, having rotatively held in one end thereof a stub axis or journal 2, while within its opposite end is suitably arranged a plug or core 3, with an inclosing tube or sleeve 3^a fixed thereto and to said roll. Loosely through said plug 3 passes a journal or rod 4, extending some distance within said roll and having connected thereto at a suitable point one end of a preferably coiled steel-wire spring 5, whose opposite end is extended through to the sleeve 3^a, being passed within said sleeve and plug and secured therein by a set-screw as one way of effecting said connection. The projecting end portions of the journals 2 and 4 are laterally notched, as at 2^a 4^a, respectively, to aid the retention of said journals in their hangers or brackets from axial movement or turning when the spring is under tension, as will presently more fully appear.

Brackets or hangers 5 are provided for suitably supporting in position the screen-roll 1. Each hanger or bracket consists of a preferably right-angled casting or plate 5^a, one arm thereof having openings therethrough to receive screws or fastenings for securing the same to the window frame or casing, as in applying the device for use, while its other arm is stamped or struck up with duplicate offset flanges or wings 5^b, with their horizontal edges opposite to and removed a short interval from each other, thus providing therebetween a slot or opening 5^{bb}, this arrangement being duplicated for each bracket to permit of the passage therethrough of the journals 2 and 4 of the screen-roll. Said latter arm of bracket has, as a result of thus stamping up said flanges or wings, produced thereon a horizontal bar 5^c, standing, however, in the plane of said arm, consequently out of the plane of said flanges or wings, the duplicate bars thus provided being arranged in alinement with said journals and serving as stops as against longitudinal movement of the latter. Said arm of bracket has also formed upon its vertical edges coincident or registering eyes 5^d, standing somewhat beyond the general plane of said edges for a purpose presently made apparent. Each of said brackets or hangers has also arranged in connection therewith a removable plate or bearing 6, adapted to be slid under the offset flanges or wings 5^b of the bracket, through which eyes and socket is inserted a headed pin or pintle 7, thus providing for holding said plate or bearing in position upon said bracket and so as to be readily removable, as is obvious. Each plate or bearing has a laterally-opening slot 6^b, with its open end adapted to be closed by the upper one of the flanges 5^b, while the walls of said slot are flared or diverged toward the screen-roll, as at 6^c, the slots of the two plates or bearings receiving the notched portions 2^a of the journals 2 4 and said flared portions 6^c accommodating the corresponding surfaces produced by so notching said journals, thus economizing space

for the reception of the heads upon the outer ends of said journals, between the bearing-plates 6 and the stops or bars 5^c of the brackets 5.

The screen 8 of any preferred mesh or construction is suitably attached to the roll 1 at its lower edge and at its upper edge to the bottom rail of the lower window-sash, the appliance now being ready for use for guarding the open window, as when the lower sash is raised. The journals of the screen being, as will be observed from the foregoing, held fixedly, the spring will be put under tension as the screen is unrolled in raising said sash. Consequently when the latter is lowered, as in closing the window, said screen will be automatically rolled up out of the way, as required.

By simply removing the pintles or pins 7 the bearing-plates 6 may be withdrawn with the screen-roll journals from the brackets, and when so removed said journals are free to be slipped out through the slots 5^{bb} of said bearing-plates, when the plates 6 may be returned and secured to said brackets and the screen-roll with the screen, consequently, after detaching the opposite or upper edge of the screen from the window-sash, be wholly removed from the window and stored away, as when not required for use, as will be readily appreciated.

Latitude is allowed as to details herein, which may be changed as circumstances suggest without departing from the spirit of my invention and the latter still be protected.

I claim—

1. A window-screen comprising a spring, a roll connected to the screen and housing said spring, journals for said roll one connected to said spring, said spring also being connected to said roll, and brackets supporting said journals fixedly in position and each comprising an angular plate, one arm of which has offset spaced-apart flanges or wings, and a bearing-plate adapted to slide under said flanges and having an open-ended slot to receive one of said journals, said bearing-plate adapted to be retained under said flanges.

2. A window-screen comprising a roll having a plug with a surrounding sleeve secured to and within said roll, journals having laterally-notched outer ends and arranged partially within, and independent of, said roll, a spring housed within said roll and connected to one of said journals and to said sleeve, and brackets or hangers adapted to support said journals fixedly in position and each comprising an angular plate, one arm of which has offset spaced-apart flanges or wings, and a bearing-plate adapted to slide under said flanges and having an open-ended slot to receive one of said journals, said bearing-plate adapted to be retained under said flanges.

3. In a window-screen, the combination, with the screen-roll and its journals, of brackets each consisting of an angular plate, one arm of which has offset spaced-apart flanges or wings, and a bearing-plate adapted to slide under said flanges and having an open-ended slot to receive one of said journals, said bearing-plate adapted to be retained in position under said flanges.

4. In a window-screen, the combination of a screen-roll having journals provided with laterally-notched outer ends, and brackets or hangers, each comprising an angular plate or casting having laterally-offset spaced-apart flanges, and intermediately of the plane of said flanges, a horizontal bar or stop, a bearing-plate provided with an open-ended slot adapted to be closed at its end by one of said flanges, the walls of said slot being flared and said angular plate and bearing-plate having alined eyes or sockets and a pin or pintle inserted through said eyes.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GIDEON DU TEMPLE.

Witnesses:

JOHN F. MCGRATH,

GEORGE O. BOOTH.