

No. 692,455.

F. M. KEPLER.
SCREEN.

Patented Feb. 4, 1902.

(Application filed Sept. 20, 1901.)

(No Model.)

Fig. 1.

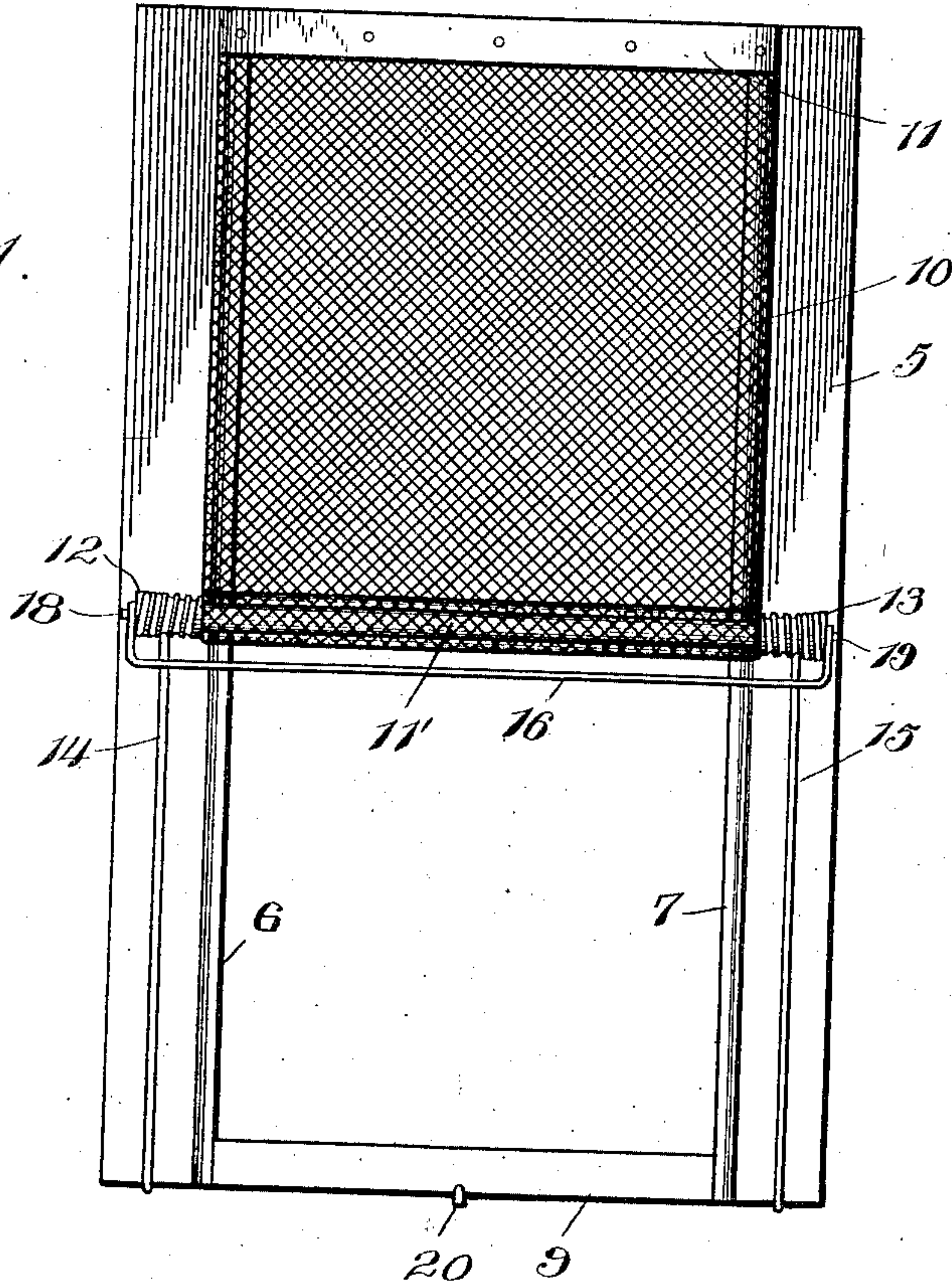
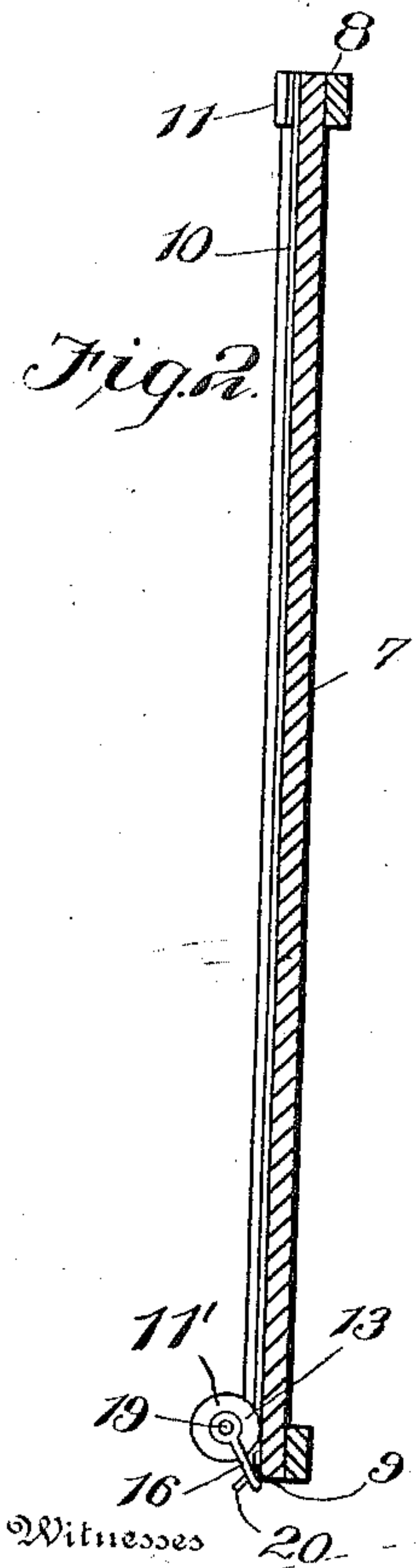


Fig. 2.



Witnesses
J. P. Britt

Harry E. Chandler

Fig. 4.

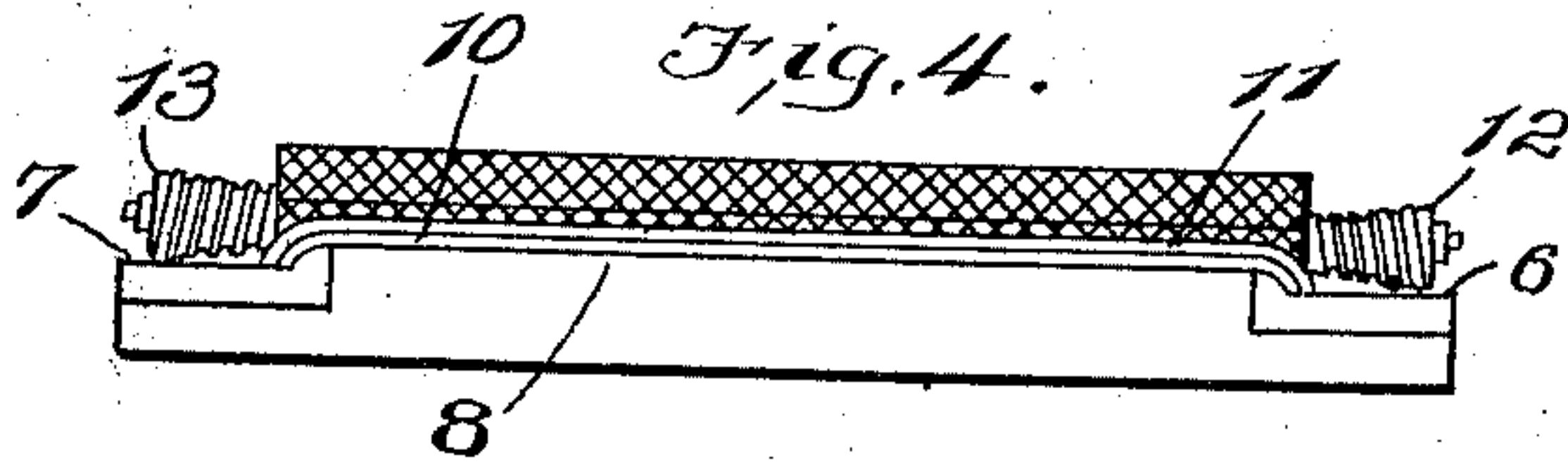
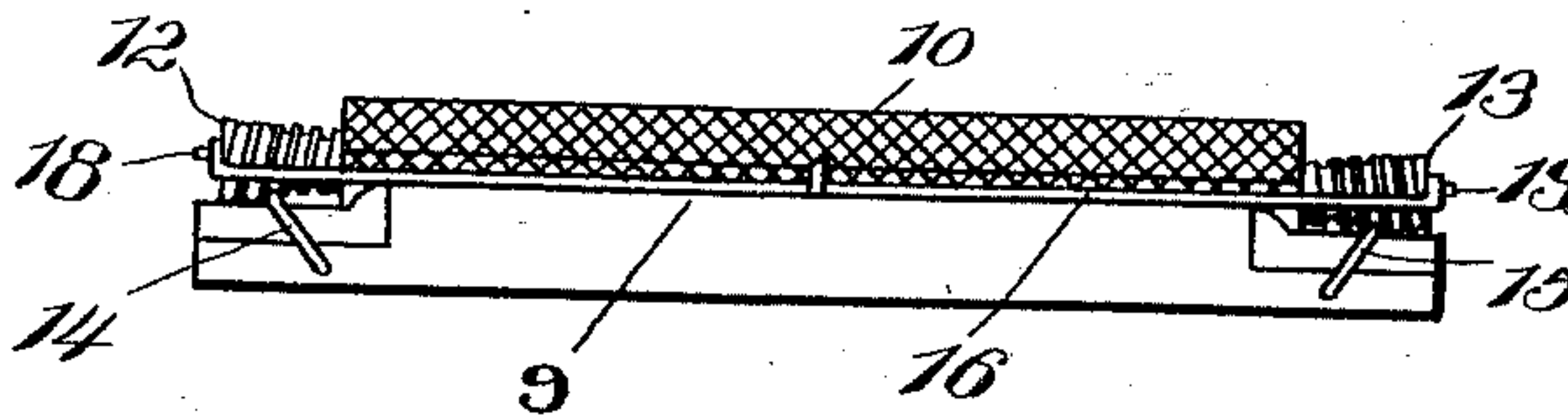


Fig. 3.



Inventor
F. M. Kepler;
Attorneys

UNITED STATES PATENT OFFICE.

FRANCIS M. KEPLER, OF HANNA CITY, ILLINOIS.

SCREEN.

SPECIFICATION forming part of Letters Patent No. 692,455, dated February 4, 1902.

Application filed September 20, 1901. Serial No. 75,679. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS M. KEPLER, a citizen of the United States, residing at Hanna City, in the county of Peoria, State of Illinois, have invented certain new and useful Improvements in Screens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to window-screens; and it has for its object to provide a construction which may be rolled upon a roller when not in use and which may be unrolled into position when it is to be used, a further object of the invention being to provide a construction wherein a close fit of the screen into position will be insured, so that all insects will be excluded.

An additional object of the invention is to provide means for holding the roller in position when the screen is unrolled, other objects and advantages being understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a front elevation showing a window-casing with the screen partly unrolled. Fig. 2 is a section taken vertically through the casing at one side of the screen and showing the latter with its roller in elevation, the screen being unrolled and the roller fastened. Fig. 3 is an end view of the casing and showing the arrangement and shape of the bottom of the screen-supporting frame to insure close fitting of the screen. Fig. 4 is a view looking at the opposite end of the casing from Fig. 3 and showing the manner in which the screen fabric is taken downwardly over the beveled strips.

Referring now to the drawings, there is shown a window-casing 5, from the inner face of which projects the frame, including the sides 6 and 7 and the ends 8 and 9, and which sides are beveled, so that they slant from the face of the casing to the inclosure of the frame, and the bevels are continued throughout the lengths of the sides.

The screen proper is shown at 10 and is in the form of a netting of wire or other suit-

able material, one end of which is disposed upon the end 8 of the frame, the said netting at this end being taken rearwardly over the beveled faces of the sides 6 and 7, in which position the netting is held by the metal strap or band 11, which is secured upon the netting by tacking into the end and beveled side faces of the frame, the ends of the strap or band being bent rearwardly over the bevels, as shown. The opposite end of the screen is attached securely to a roller 11', which is disposed transversely of the frame and projects therebeyond at both ends, the roller having terminal grooved drums 12 and 13, and wound upon these drums are the cords 14 and 15, the lower ends of which are taken over the ends of the casing and secured thereto. The ends of the cords being fixed, if the roller is moved in one direction it will be rotated by the cords to wind up the screen, and if the roller be rotated in the opposite direction, as by moving it in an opposite direction, the screen will be unwound. By reason of the side edges of the screen at the end thereof being taken rearwardly over the bevels of the frame the side edges assume lines leading from the face of the casing to the rear side of the roller, and when the screen is unrolled the side edges of the screen are thus held rearwardly beyond the front face of the frame, so that insects are prevented from passing between the screen and the frame.

To facilitate manipulation of the roller, a handle or bail 16 is provided, the ends of which are pivotally engaged with trunnions 18 and 19 at the ends of the roller, and when the roller is to be moved this bail is grasped and operated.

To hold the roller lowered with the screen in position, a pin 20 is provided at the lower end of the casing and over which the bail is adapted to engage, as shown in Fig. 2 of the drawings, the bail having sufficient elasticity, coupled with the elasticity of the screen, to permit of engagement of the bail with the pin. When the screen is rolled up, the roller is prevented from rotation to unroll the screen by swinging the bail into the position shown in Fig. 1, at which time the web of the bail lies against the cords, and if the roller be then rolled downwardly the tendency would be to

wind the cords over the bail, which would be prevented by the tension of the cords and the netting.

It will be understood that in practice modifications of the specific construction shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

10 What is claimed is—

1. The combination with a casing, of a screen attached at one end to the upper end of the casing, a roller with which the opposite end of the screen is connected, cords wound upon 5 the ends of the roller and attached to the lower end of the casing, and a bail for the roller pivoted to the ends thereof and having its web portion parallel with the axis of the roller, to wedge between the roller and the cords 10 to hold the roller against rotation in one direction.

2. The combination with a window-casing having raised portions at the sides of the window-opening and extending throughout the 5 height of the latter, of a fabric having one end stretched across the window-opening and having its sides extending beyond the raised portions and taken rearwardly thereover and

secured in the rear of the front faces of the raised portions, and means connected with 30 the opposite end of the fabric for holding it with its side edges under tension and in the rear of the front faces of the raised portions.

3. The combination with a window-casing having a frame surrounding the window-open- 35 ing and having its edges beveled to the face of the casing, of a fabric attached at one end to an end of the frame and having its side edges taken downwardly over the bevels to the face of the casing, a roller disposed trans- 40 versely of the frame to run thereon and to which the opposite end of the fabric is attached, said roller having terminal drums, cords wound upon the drums and having their ends attached to the casing to rotate the 45 roller when it is raised or lowered, a bail having its ends pivoted to the ends of the roller and a pin for engagement by the bail to hold it with the roller at one limit of its movement.

In testimony whereof I affix my signature 50 in presence of two witnesses.

FRANCIS M. KEPLER.

Witnesses:

SAMUEL A. LESLIE,
MATTIE YINGER.