

No. 706,762.

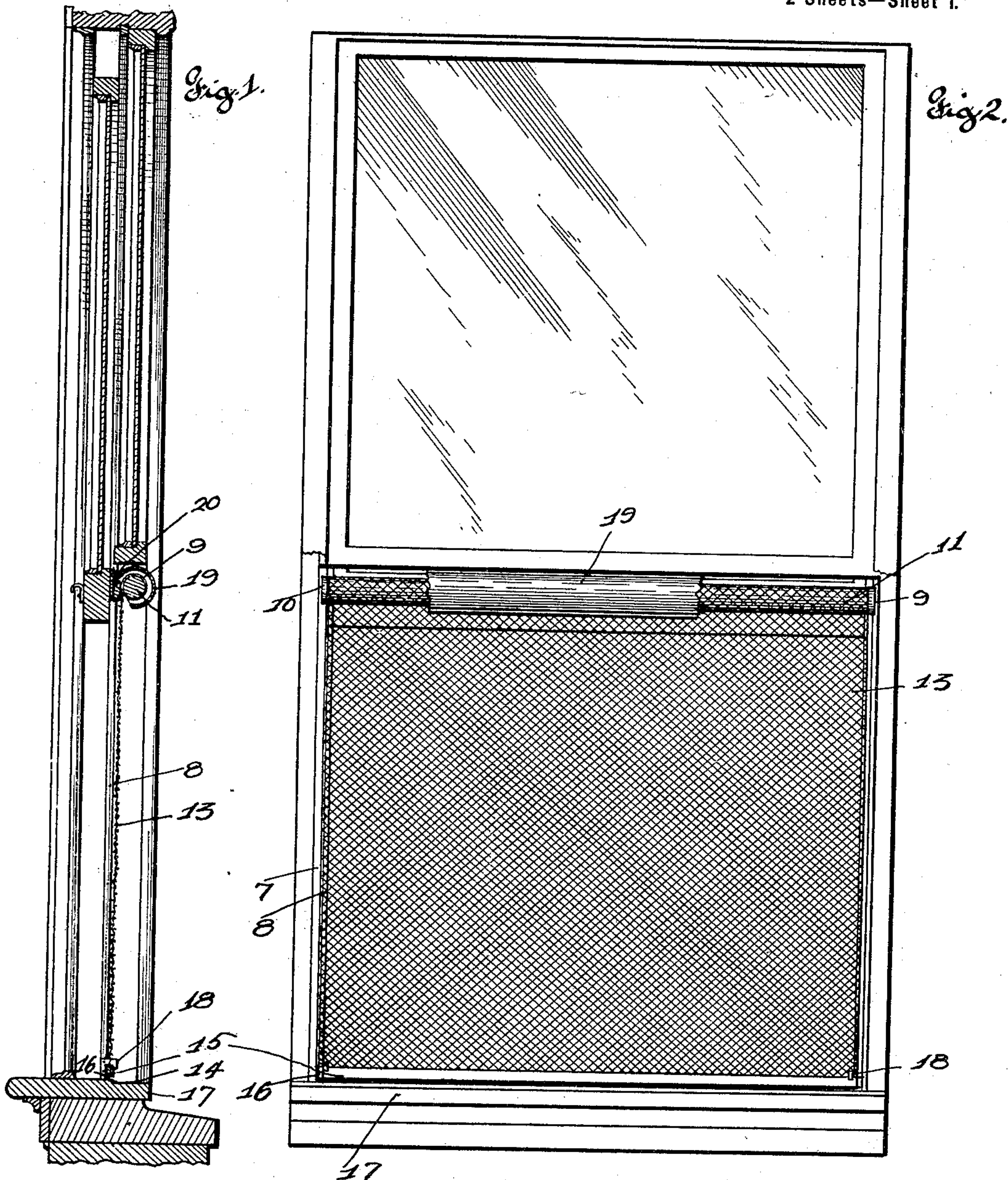
Patented Aug. 12, 1902.

M. KOLF.
WINDOW SCREEN.

(Application filed Apr. 15, 1902.)

2 Sheets—Sheet 1.

(No Model.)



Witnesses
Alfred E. Eicher
M. G. Liron

Inventor
Max Kolf.
by Sigmond & Lorgan Attys.

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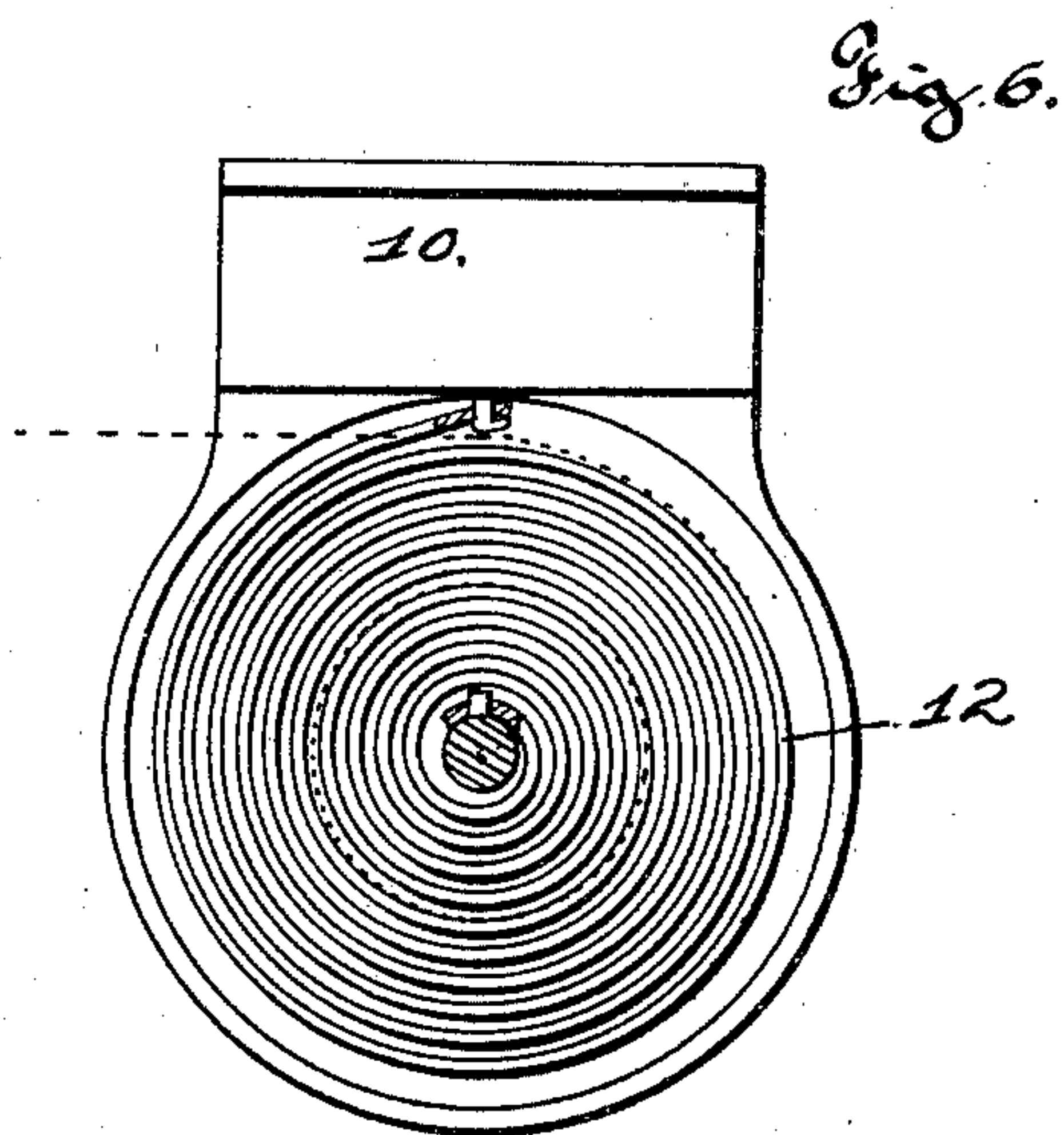
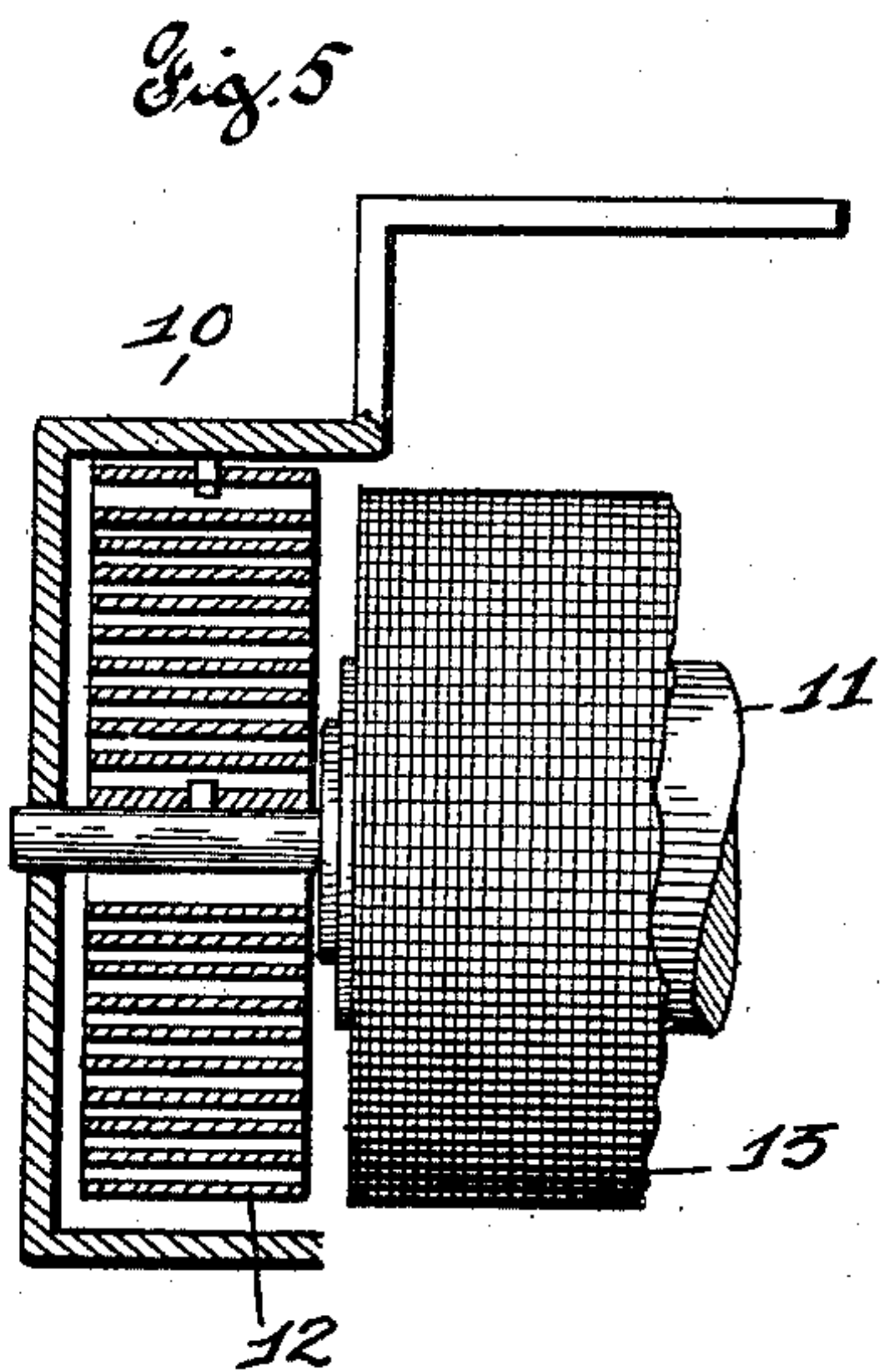
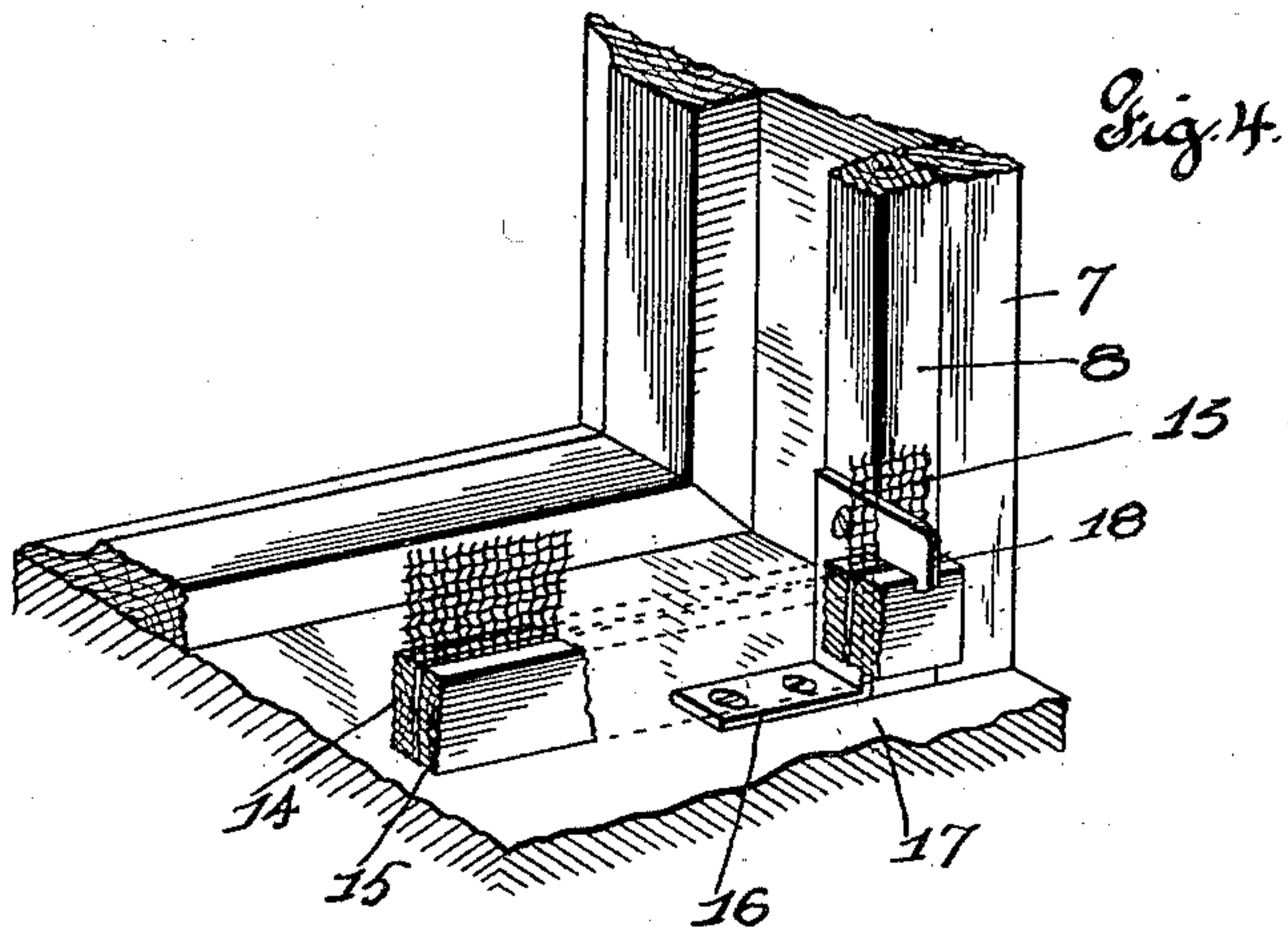
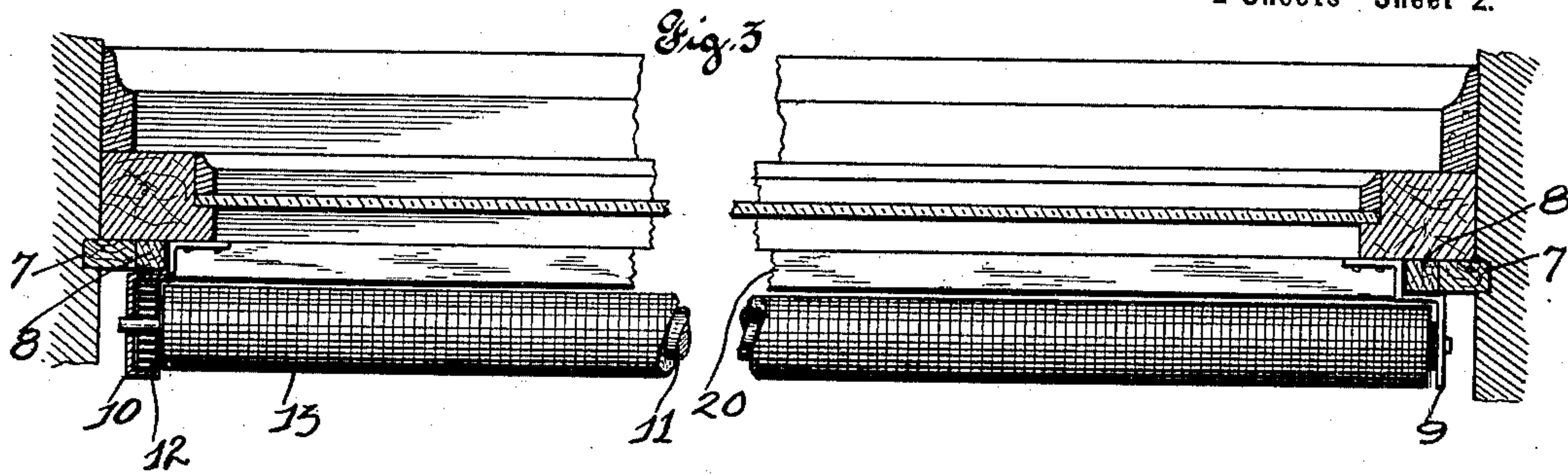
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M. KOLF.
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(Application filed Apr. 15, 1902.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses
Alfred A. Eick
M. Wilson

Inventor
Max Kolf.
by Higdon & Longan Attys.

UNITED STATES PATENT OFFICE.

MAX KOLF, OF ST. LOUIS, MISSOURI, ASSIGNOR TO EMIL J. DIENST AND
JOHN A. BADENDIECK, OF ST. LOUIS, MISSOURI.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 706,762, dated August 12, 1902.

Application filed April 15, 1902. Serial No. 103,056. (No model.)

To all whom it may concern:

Be it known that I, MAX KOLF, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Window-Screens, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to window-screens; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

My object is to construct an improved window-screen; and my invention consists of extended parting-strips between the window-sashes, brackets attached to the lower corners of the window-sash and extending outwardly and laterally to points in front of the parting-strips, a roller mounted in said brackets, a spring connecting one of the brackets to the roller, a fly-screen wound upon the roller, stiffening-bars secured to the lower edge of the screen, brackets attached to the window-casing, and hooks extending from the brackets through the screen and engaging said stiffening-bars to hold the lower edge of the screen securely in position, all arranged so that as the window-sash is raised and lowered the screen will wind and unwind upon the roller, and a casing attached to the window-sash in position to cover the screen when it is wound upon the roller.

The essentials are a spring-roller, a screen adapted to wind upon the roller, said screen and roller forming a connection between the window-sash and the window-frame, so that as the window is raised or lowered the screen winds and unwinds upon the roller to cover the window-opening.

Figure 1 is a vertical section through a window, showing my improved screen applied thereto. Fig. 2 is an outside elevation of the window. Fig. 3 is a horizontal section. Fig. 4 is a detail perspective, parts being broken away to show the construction. Fig. 5 is a horizontal section through one of the brackets to show the spring connecting the roller to the bracket. Fig. 6 is a cross-section showing the spring in elevation.

Referring to the drawings in detail, the

parting-strips 7 between the window-sashes are extended by the addition of the extension-pieces 8, and the brackets 9 and 10 are attached to the lower corners of the window-sash and extend outwardly and laterally to points in front of the extension parting-strips 7. The roller 11 is mounted in the brackets, and the clock-spring 12 connects the roller 11 to one of the brackets, as shown in Fig. 5. The woven-wire fly-screen 13 is attached to the roller and adapted to be wound thereon, and the stiffening-bars 14 and 15 are attached to the lower edge of the screen, one on each side thereof, as shown in detail in Fig. 4. The brackets 16 are attached to the window-casing 17, and the hooks 18 extend outwardly from the brackets through the screen and engage the bars 14 and 15 to hold the lower edge of the screen securely in place against the window-casing.

The roller is preferably secured to the lower bar of the lower outer sash, so that when the sash is raised the screen is drawn from the roller to close the opening between the sash and the window-casing, and when the sash is lowered the tension of the spring winds the screen upon the roller.

It is obvious that the arrangement might be reversed, the roller being attached to the window-casing and the stiffening-bars attached to the window-sash; but I prefer the construction shown.

A sheet-metal casing 19 is attached to the window-sash in position to cover the screen when it is wound upon the roller, as shown in Fig. 1. As the screen unwinds from the roller the side edges will lie against the outer faces of the parting-strips 7. A bar 20 is inserted between the roller and the front face of the lower bar of the sash to prevent the flies from passing downwardly between the roller and the sash, as shown in Figs. 1 and 3.

I claim—

In a window-screen, the combination with the parting-strips 7; of the extension-pieces 8; the brackets 9 and 10 attached to the lower corners of the window-sash and extending outwardly and laterally to points in front of the extension parting-strips 8; the roller 11 mounted in the brackets; the clock-spring 12

connecting the roller to one of the brackets;
the fly-screen 13 attached to the roller and
adapted to be wound thereon; the stiffening-
bars 14 and 15 attached to the lower edge of
5 the fly-screen, one on each side thereof;
brackets 17 attached to the window-casing;
and hooks 18 extending outwardly from the
brackets through the screen, and rigidly en-

gaging the bars 14 and 15; substantially as
specified. 10

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

MAX KOLF.

Witnesses:

JOHN A. BADENDIECK,

E. J. DIENST.