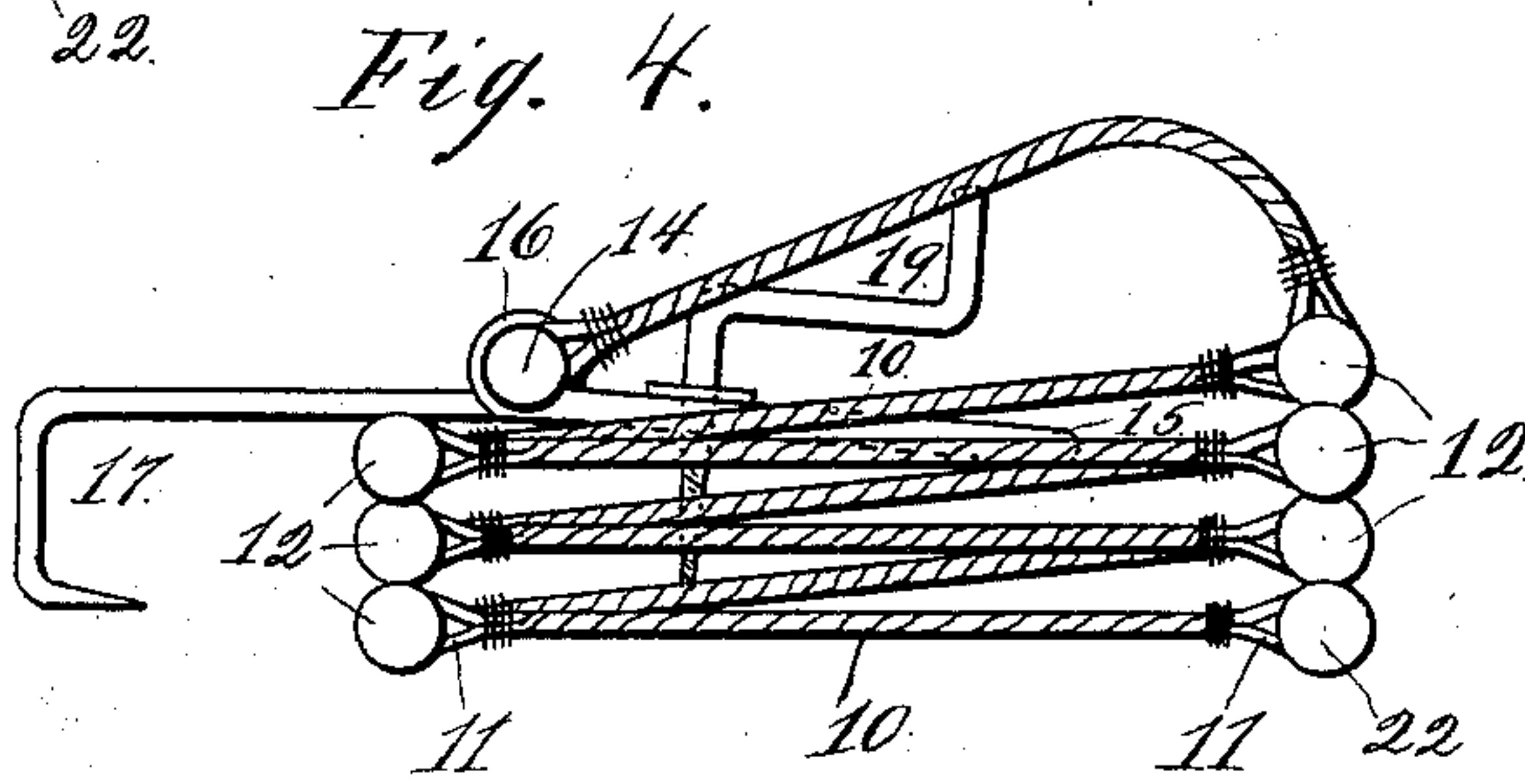
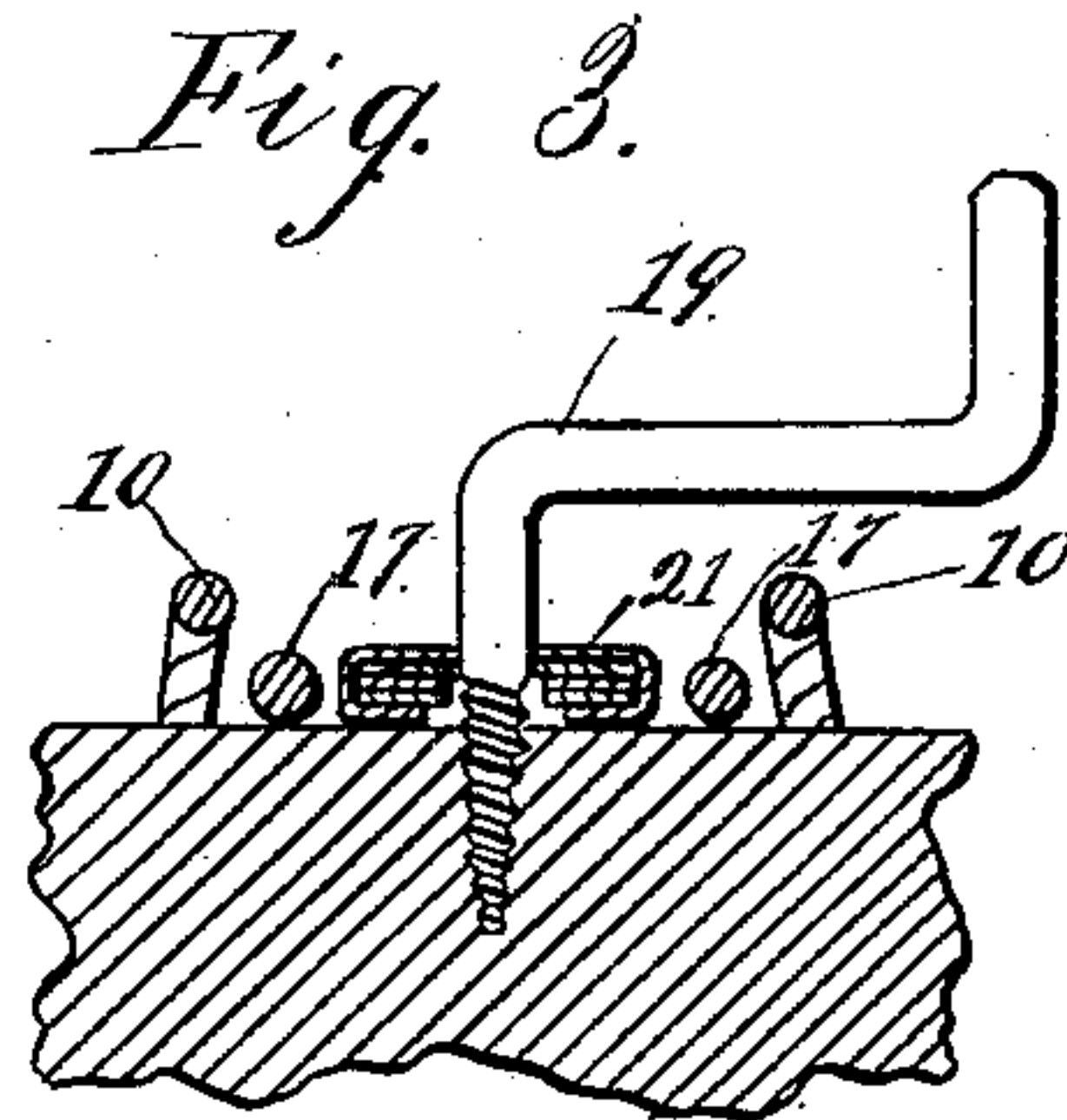
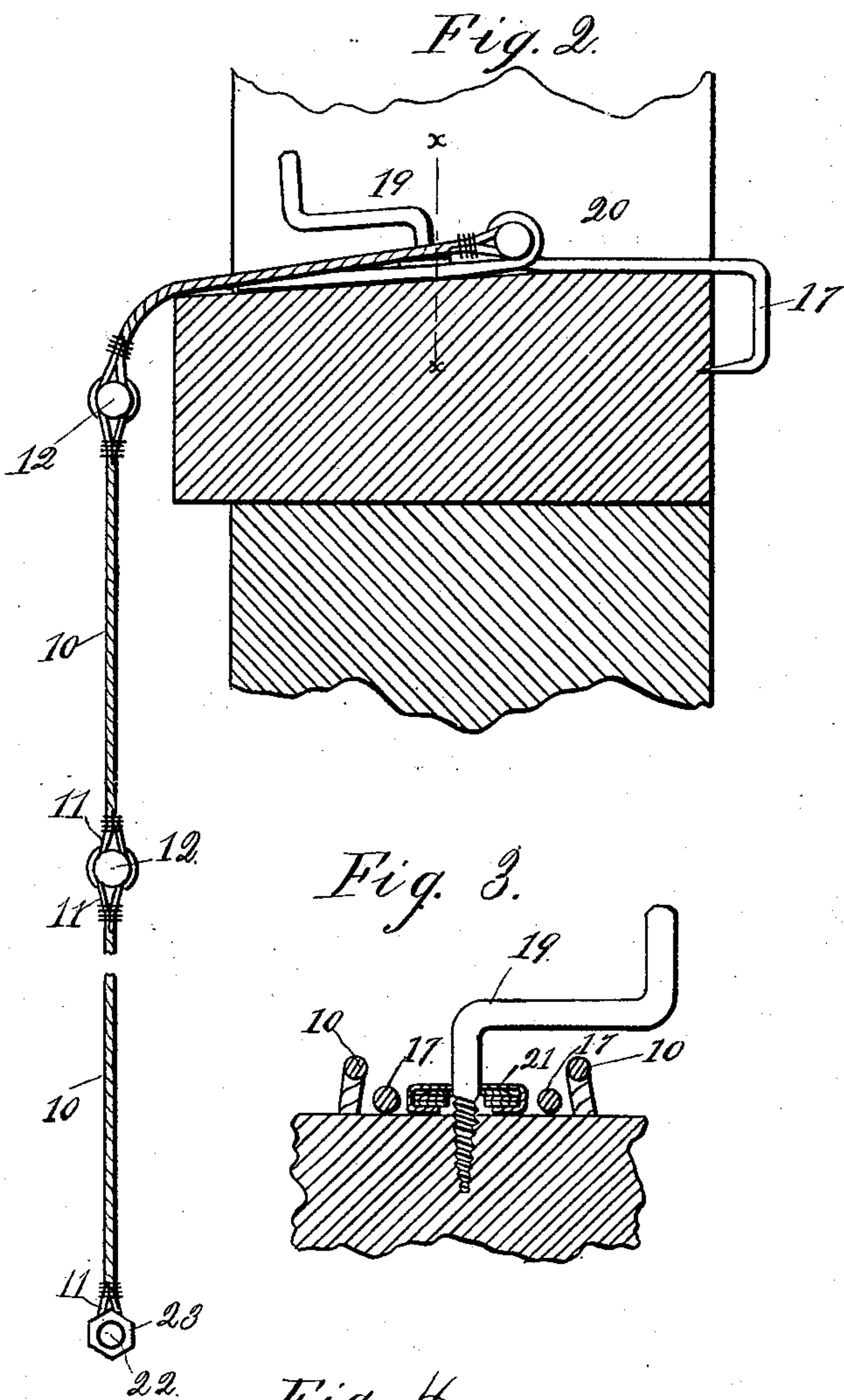
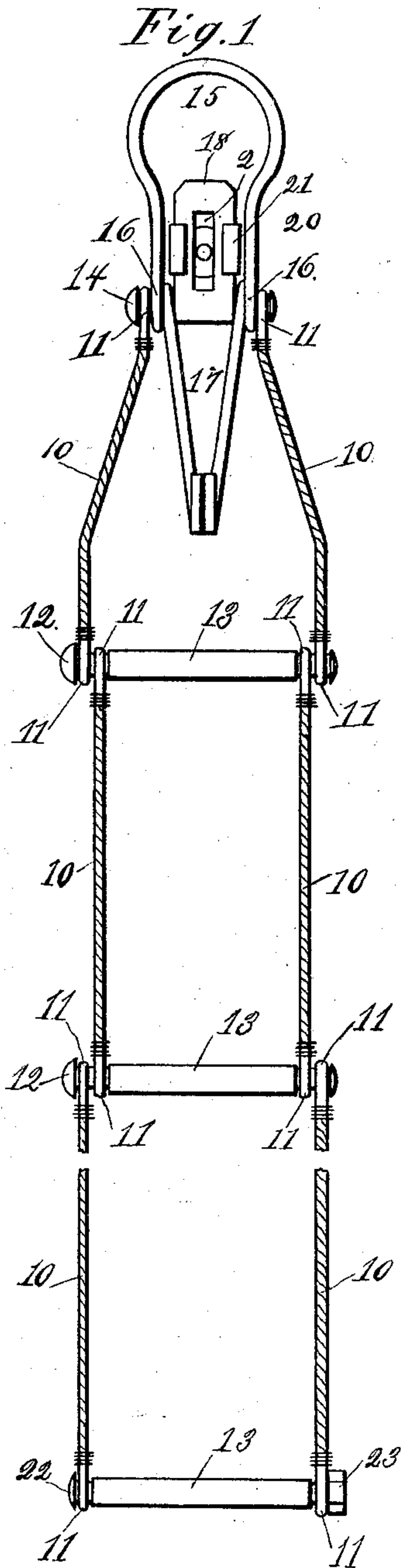


(No Model.)

I. B. STILLMAN.
FOLDING FIRE ESCAPE.

No. 376,216.

Patented Jan. 10, 1888.



WITNESSES:

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UNITED STATES PATENT OFFICE.

IRA B. STILLMAN, OF WELLSVILLE, NEW YORK.

FOLDING FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 376,216, dated January 10, 1888.

Application filed May 24, 1887. Serial No. 232,229. (No model.)

To all whom it may concern:

Be it known that I, IRA B. STILLMAN, of Wellsville, in the county of Allegany and State of New York, have invented a new and Improved Folding Fire-Escape, of which the following is a full, clear, and exact description.

This invention relates to fire-escapes, the object of the invention being to provide a light, strong, and portable fire-escape which may be quickly and readily secured to the window of an apartment in case of fire, and which may be packed in an exceedingly small space for transportation; and to these ends the invention consists, essentially, of a sectional folding ladder wherein the side lengths are made of short lengths of wire cord that are connected by rivets, which rivets constitute the rounds of the ladder, the upper section of the ladder being provided with a means for connection with the building, while the lower round is preferably formed from a bolt, all as will be hereinafter more fully described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a face view of a portion of the ladder. Fig. 2 is a side view of the same, representing the ladder as it appears when connected to a window-sill. Fig. 3 is a cross-sectional view taken on a line corresponding approximately with the line *xx* of Fig. 2, and Fig. 4 is a side view of the ladder as it appears when partially folded.

In constructing such a ladder as the one illustrated in the drawings above referred to I take a number of lengths of wire cord or rope 10 and form loops 11 at the ends of each section, through which eyes or loops I pass rivets 12, which carry sleeves 13, said sleeves being made of metal or of wood or paper-pulp that has been treated so that it is rendered fire-proof. The upper rivet, 14, is preferably somewhat shorter than the other rivets, and upon this rivet there is mounted an attaching device, 20, which attaching device consists, preferably, of a single length of wire bent to form a loop, 15, eyes 16, and hooked ends 17, the rivet 14 being passed through the eyes 16, the loops 11 of the upper lengths, 10, being arranged outside of the eyes 16. A

plate, 18, is connected to the rivet 14 between the eyes 16, and this plate is formed with a longitudinal slot, 2, through which slot there is passed a crank-armed set-screw, 19, said set-screw passing through a central aperture that is formed in a slide, 21. Through the lower loops, 11, there is passed a bolt, 22, which carries one of the sleeves 13, and is held to place by a nut, 23, this arrangement being adopted in order that the ladder may be lengthened by the addition of other sections, should such lengthening be required.

In using the ladder above described the hooks 17 may be caught in the window-casing, as illustrated, and the set-screw 19 turned so as to engage with the window-sill, as illustrated in Fig. 3. Then as the weight upon the ladder draws the hooks 17 into the window the slide 21 will permit of a slight movement of the supporting attachment upon the set-screw. If the ladder is to become a permanent fixture in the room, a hook should be provided upon which the loop 15 could be caught when it was desired to use the ladder.

This ladder is particularly suited to the requirements of travelers, as it may be folded so as to occupy an exceedingly small space, and the lengths 10 should be so proportioned that when folded the ladder will fit in an ordinary-sized valise.

If the sleeves 13 be formed of pulp or wood, they are less liable to blister the hands of those descending the ladder, and it will be seen from an inspection of Fig. 1 that these sleeves act as spacers for the side lengths, 10.

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

1. The combination, with a folding ladder, of a supporting attachment provided with a loop, hooks, a slotted plate, and a set-screw passing through said plate, substantially as described.

2. In a sectional folding ladder, the combination, with side lengths formed with loops 11, of rivets 12, sleeves 13, and a bolt, 22, arranged in connection with the lower loops of the lower lengths, substantially as described.

IRA B. STILLMAN.

Witnesses:

D. O. BATTERSON,
FRANK MACKEN.