

J. H. SCRIBNER.
 LOOSE LINK LADDER.
 APPLICATION FILED JULY 12, 1909.

950,731.

Patented Mar. 1, 1910.

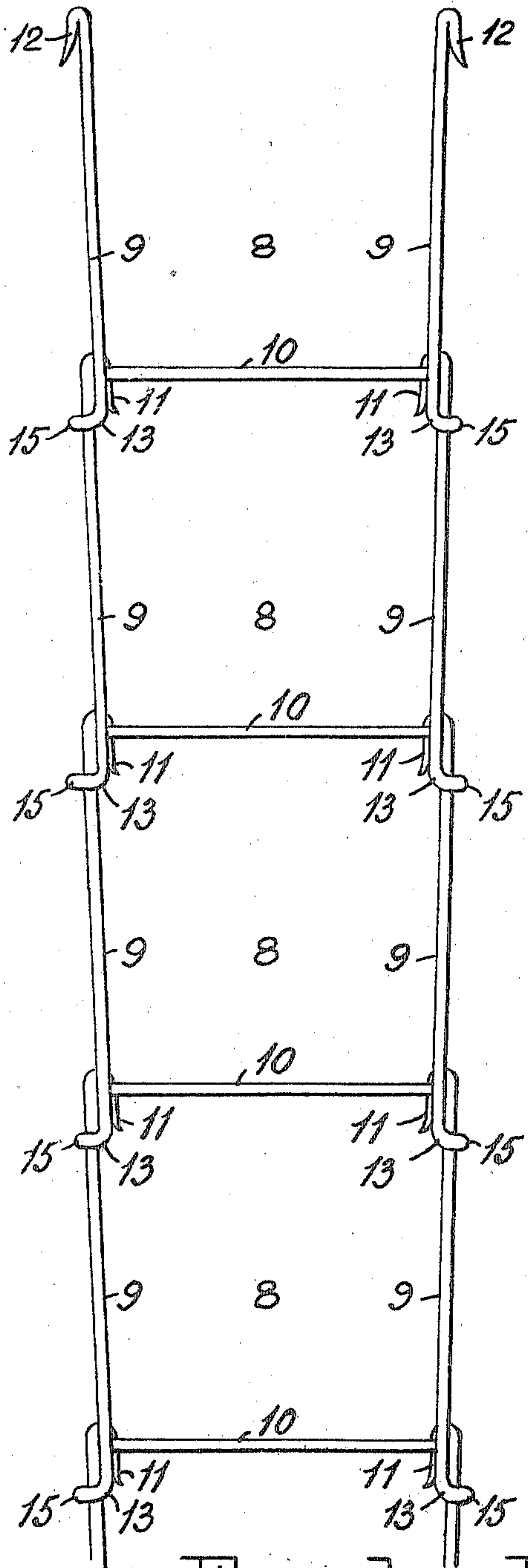


FIG. 1.

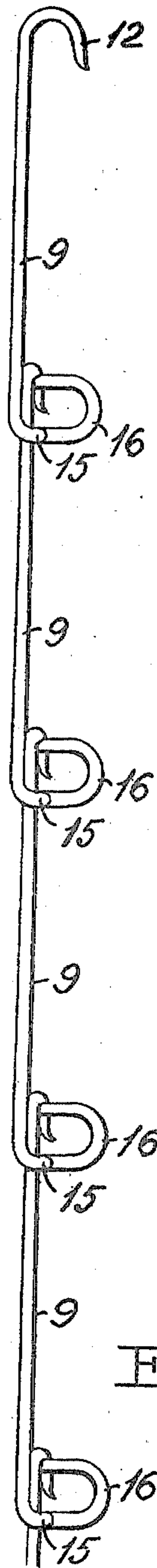


FIG. 2.

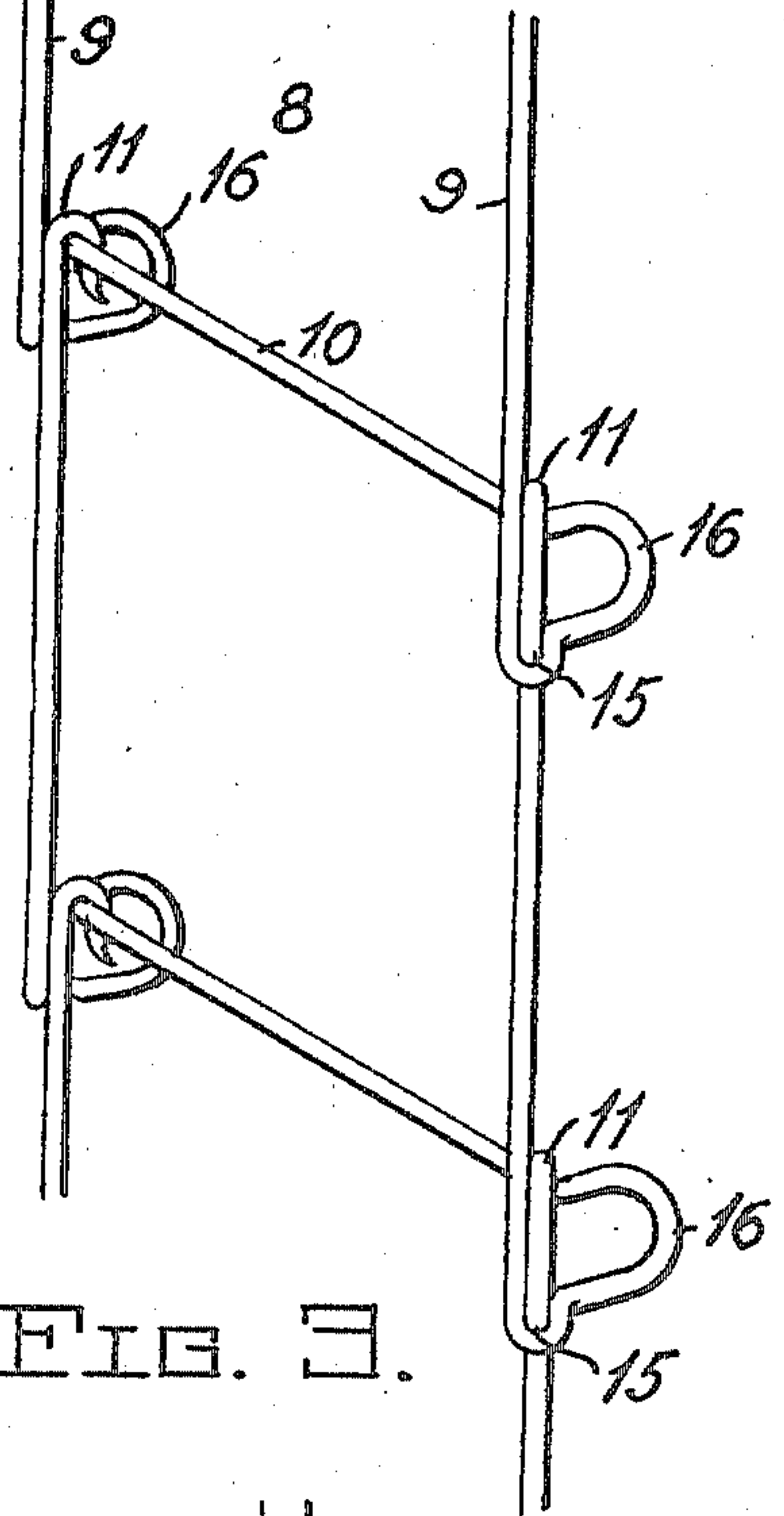


FIG. 3.

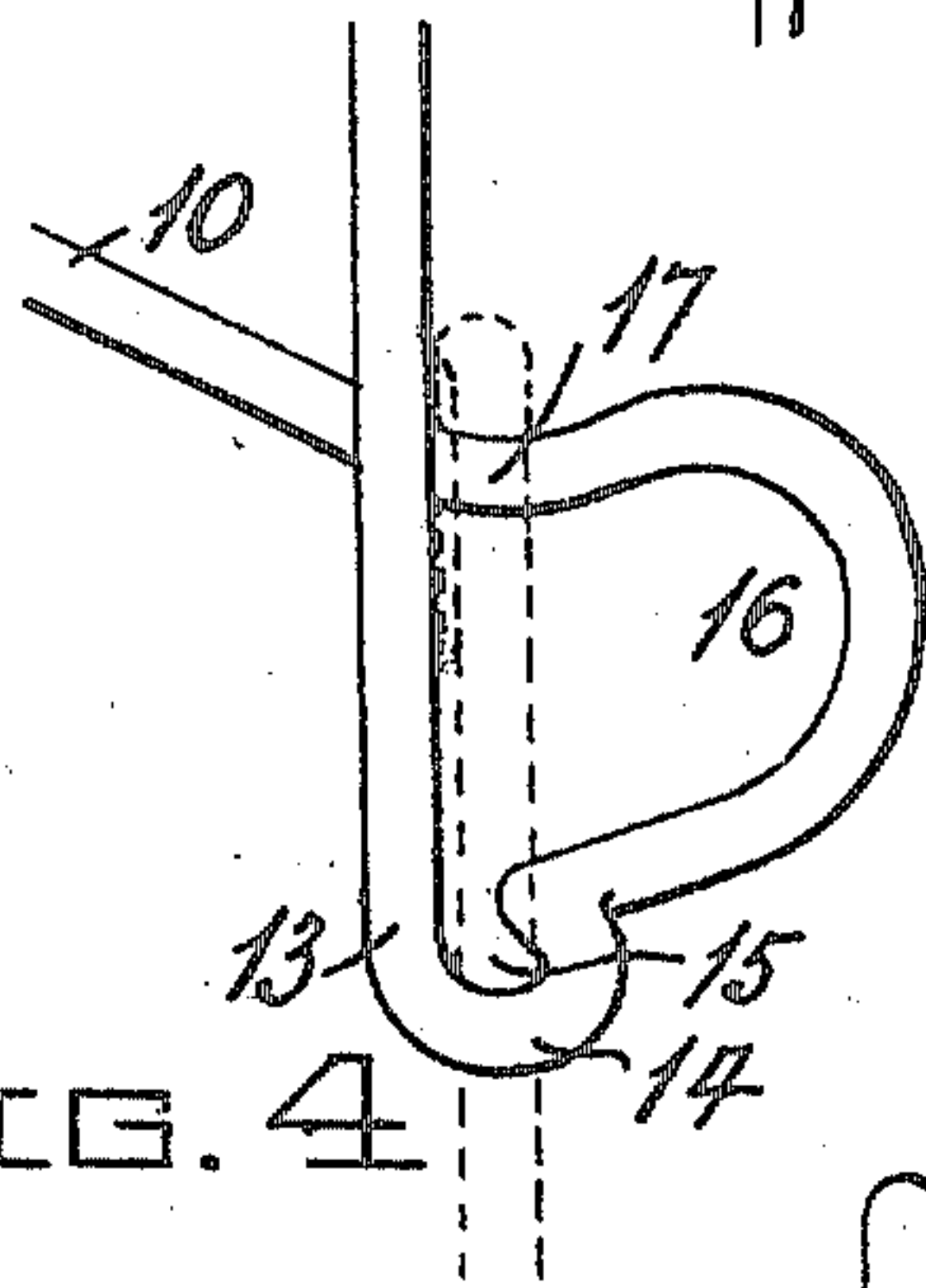


FIG. 4.

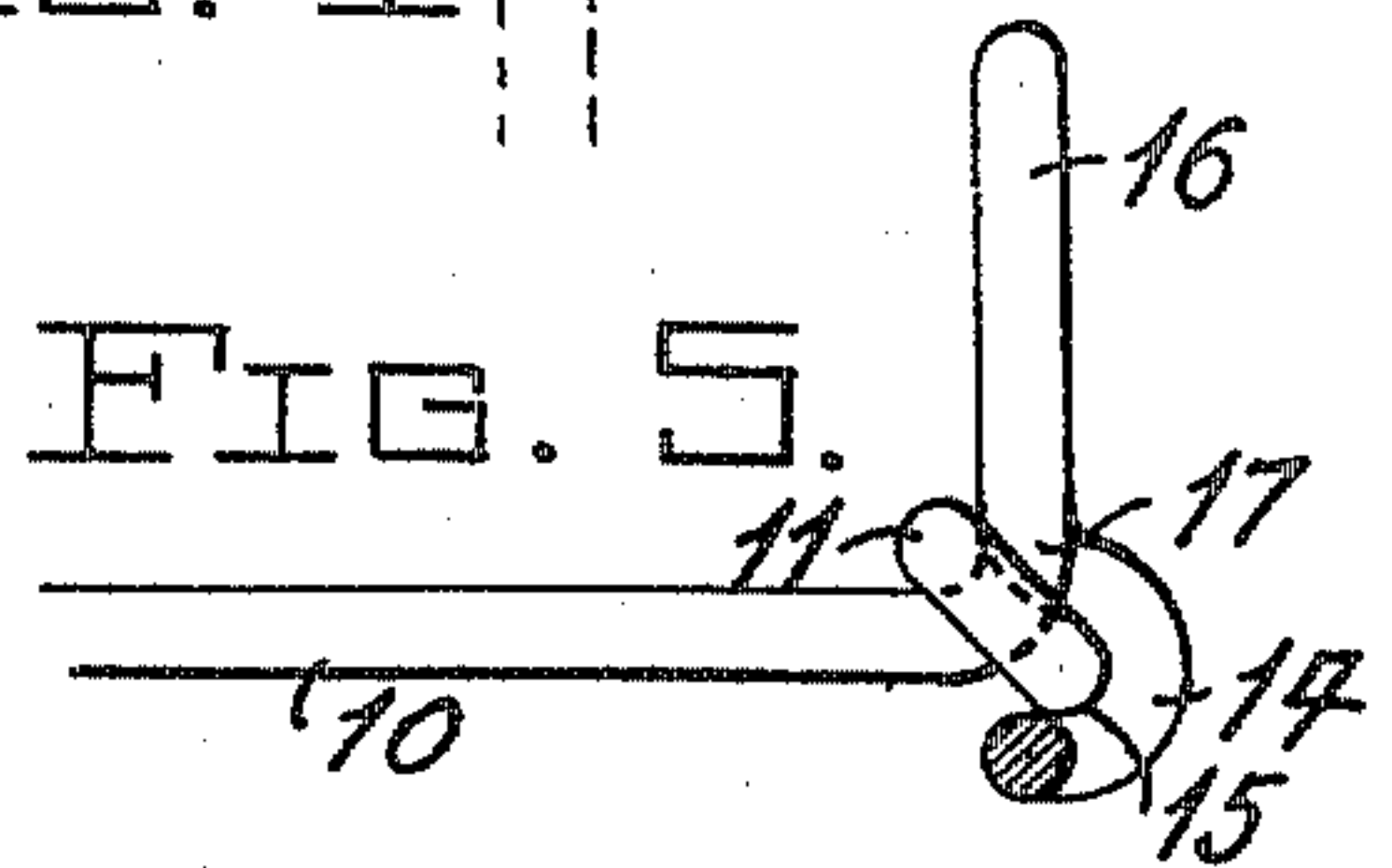


FIG. 5.

WITNESSES

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LOOSE-LINK LADDER.

950,731.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed July 12, 1909. Serial No. 507,236.

To all whom it may concern:

Be it known that I, JOHN HENRY SCRIBNER, of the city of St. John, in the Province of New Brunswick and Dominion of Canada, have invented certain new and useful Improvements in Loose-Link Ladders, and do hereby declare that the following is a full, clear, and exact description of same.

This invention relates to new and useful improvements in ladders and the main object is to provide an inexpensive but very durable and efficient ladder which will be particularly adapted for use in connection with building construction, roofing, fire escapes, and the like.

A further object is to provide a ladder consisting of a series of links which can be readily attached or detached so that the ladder may be made of any desired length, said links when placed in position being held rigid so that the ladder will have, for all practical purposes, the rigidity and firmness of the ordinary one piece ladder.

In the drawings which illustrate my invention:—Figure 1 is a front view of the ladder. Fig. 2 is a side view of same. Fig. 3 is a perspective view of a link. Fig. 4 is an enlarged perspective view of the joint. Fig. 5 is a cross sectional view through one of the side members looking down upon the hook.

In the above defined figures, 8 designates a plurality of sections or three sided links, each having substantially parallel side members 9, and a horizontal cross member 10 uniting the same at the lower ends. The upper or free ends of the links are formed into hooks 11, adapted to engage the preceding link, said hooks being at an angle of approximately 45° to the plane of the ladder, as seen in Fig. 5. The top link of the ladder may be provided with hooks 12, or any other suitable means for securing the ladder in place. The lower end of each side member is turned outwardly at 13, and then inwardly and rearwardly at 14, so as to form a small horizontal loop 15. The material is then turned rearwardly, then upwardly and forwardly to form a large vertical loop 16, and then transversely at 17 to form the step or cross member 10. At the other end of the step 10 the material is similarly bent so as to form corresponding loops. The

hooks 11 on the upper corners of the next link are hooked over the step 10 at the corners 17, the side members 9 of the link occupying the loops 15, and are prevented from swinging forward thereby. The loops 15 also prevent any side swing. The hooks 11 are prevented from slipping by being located at the corners 17.

To assemble the links, the side members of one are slightly sprung together so as to be slipped between the lower ends of the sides 9 of the other link, and into the loops 15, the large loops 16 springing sufficiently to allow the entry. The link is now pulled downwardly so that the hooks 11, which are formed at the proper angle, will engage the corners 17. The operation of separating the links is the reverse of the operation just described.

The loops 15 and hooks 11 engaging the corners 17 maintain the links rigid under all conditions, while the large loops 16 hold the ladder away from the wall, to allow sufficient room on the steps for the climber's feet.

Having thus described my invention, what I claim is:—

1. In a ladder composed of a plurality of one-piece links, hooks in the upper corners of said links, and open steadying loops in the lower corners thereof adapted to hold the links laterally rigid with respect to one another.

2. In a ladder composed of a plurality of one-piece links having approximately parallel sides and a transverse connecting tread, inwardly turned hooks at the extremities of said sides, open horizontal steadying loops at the ends of said tread adapted to engage the parallel sides of the links, and means for keeping the ladder spaced from a wall.

3. In a one-piece link for ladders, a pair of approximately parallel sides, a transverse step portion, horizontal outwardly turned loops at the lower ends of said sides and vertical rearwardly extending loops between said horizontal loops and the ends of the step, and hooks on the upper ends of said sides lying out of the plane of the link and adapted to engage the corners between the vertical loops and the ends of the steps.

4. In a one-piece link for ladders, a pair of approximately parallel sides, a transverse

step portion, horizontal outwardly turned loops at the lower ends of said sides adapted to embrace the sides of the next section below, vertical rearwardly extending loops between said horizontal loops and the ends of the step, and hooks on the upper ends of said sides lying out of the plane of the link and adapted to engage in the corners be-

tween the vertical loops and the ends of the step.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

JOHN HENRY SCRIBNER.

Witnesses:

JOHN WILLIAM RICHARDSON,
JAMES FREDERICK DOUGLAS.