

(No Model.)

N. GOLDBERG.
FOLDING STEP LADDER.

No. 438,883.

Patented Oct. 21, 1890.

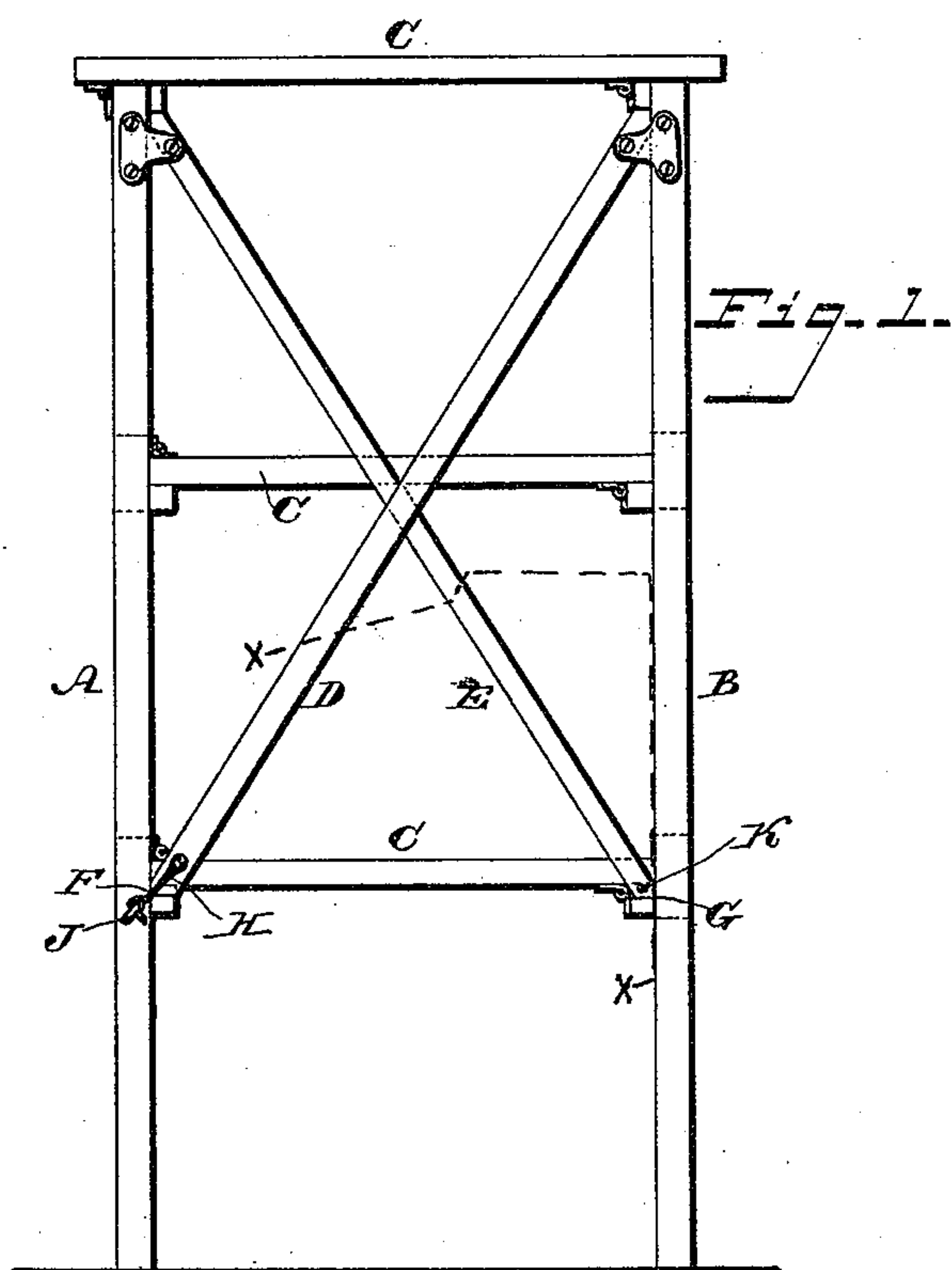
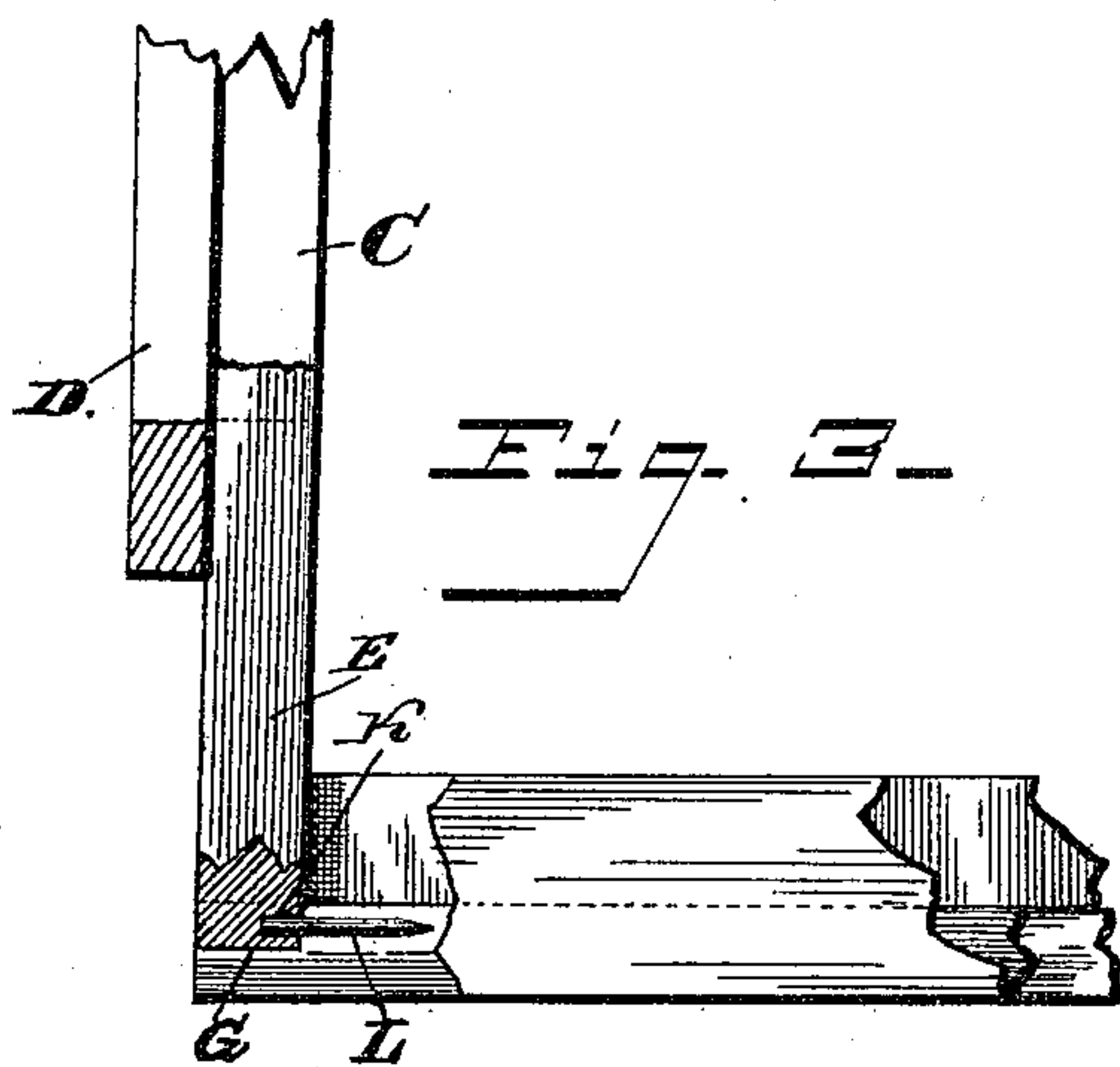
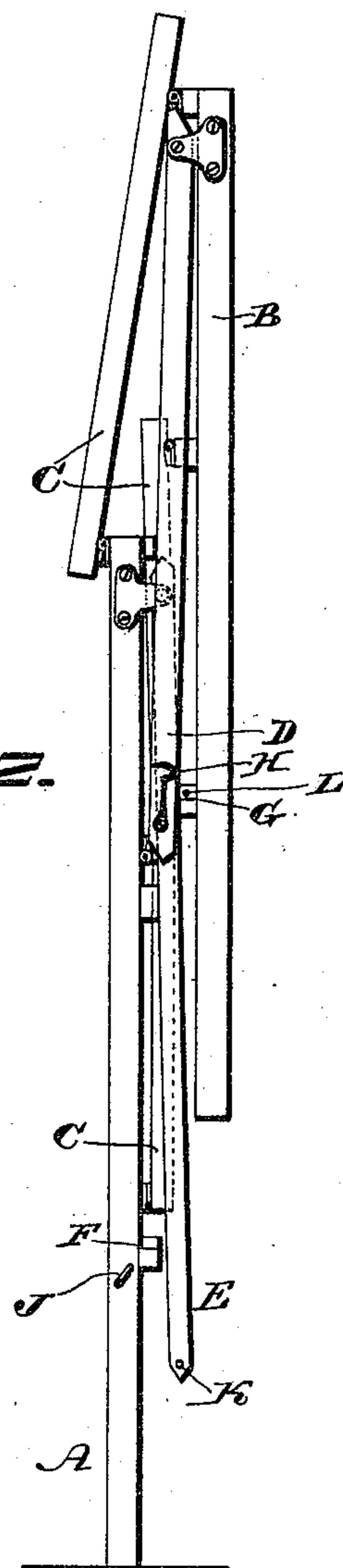


Fig. 2.



WITNESSES:

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FOLDING STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 438,883, dated October 21, 1890.

Application filed June 19, 1890. Serial No. 355,959. (No model.)

To all whom it may concern:

Be it known that I, NEHEMIAH GOLDBERG, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Folding Step-Ladders, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a folding step-ladder having means for bracing the same when in operative condition, as will be hereinafter set forth.

Figures 1 and 2 represent rear views of a step-ladder embodying my invention, the same being respectively in unfolded and folded conditions. Fig. 3 represents a partial side view and partial section of a detached part thereof on line *x x* of Fig. 1 and on an enlarged scale.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A and B designate the legs, and C designates the steps of a folding step-ladder, the ends of the steps being hinged to the inner sides of the legs. The hinges of the lower and central steps are respectively on the upper and lower sides of the ends of said steps. The hinges of the top step are on the under side of the end of the same, one of the hinges being on the outside of the leg A. By this disposition of the hinges, as aforesaid, provision is made for changing the steps from horizontal to vertical direction, and adapting the legs thereto for the purposes of folding and unfolding the ladder.

D and E designate braces, each of which is hinged to one of the legs and extends diagonally to the other legs, the two braces crossing each other, each brace having its lower ends abutting against shoulders F and G on cross-pieces of the respective legs.

The brace D is provided with a hook or catch H, which engages with an eye or keeper J on the leg A, and the brace E has an open-

ing K to receive a pin L, projecting from the rear end of the cross-piece of the leg B adjacent to the shoulder G thereon. When the ladder is to be folded, the brace D is unhooked or unfastened and disconnected from the shoulder F, after which it is swung down. The brace E is also moved out from engagement with the shoulder G and then swung down. The leg B is now raised, and with it the brace D, and the steps C follow the same, turning to vertical positions and folding against the leg A, the ladder thus being in compact condition for packing, storage, handling, &c. It is evident that the ladder may be unfolded or restored by lowering the leg B and the steps C, after which the brace E is engaged with the shoulder G of said leg B and the brace D is engaged with the shoulder F of the leg A, said brace D then being secured to said leg by the fastening H. As the brace D is outside of the brace E and in contact with the same, said brace E is controlled by the brace D as fastened or locked, and thus prevented from being released, the legs and steps thus being held in serviceable and firm condition. As the brace E is connected at one end with the hinge of the leg A and at the other end with the pin L on the leg B, the spreading apart of said legs is prevented.

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

A step-ladder having legs with steps hinged thereto and braces which extend from one leg to the other, each brace being hinged at one end to a leg and engaging with shoulders on the opposite leg, one of the braces being provided with a fastening device and controlling the other brace, said parts being combined substantially as described.

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Witnesses:

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