

(No Model.)

O. J. MEISEL.
GUARD FOR STEP LADDERS.

No. 396,886.

Patented Jan. 29, 1889.

Fig. 1

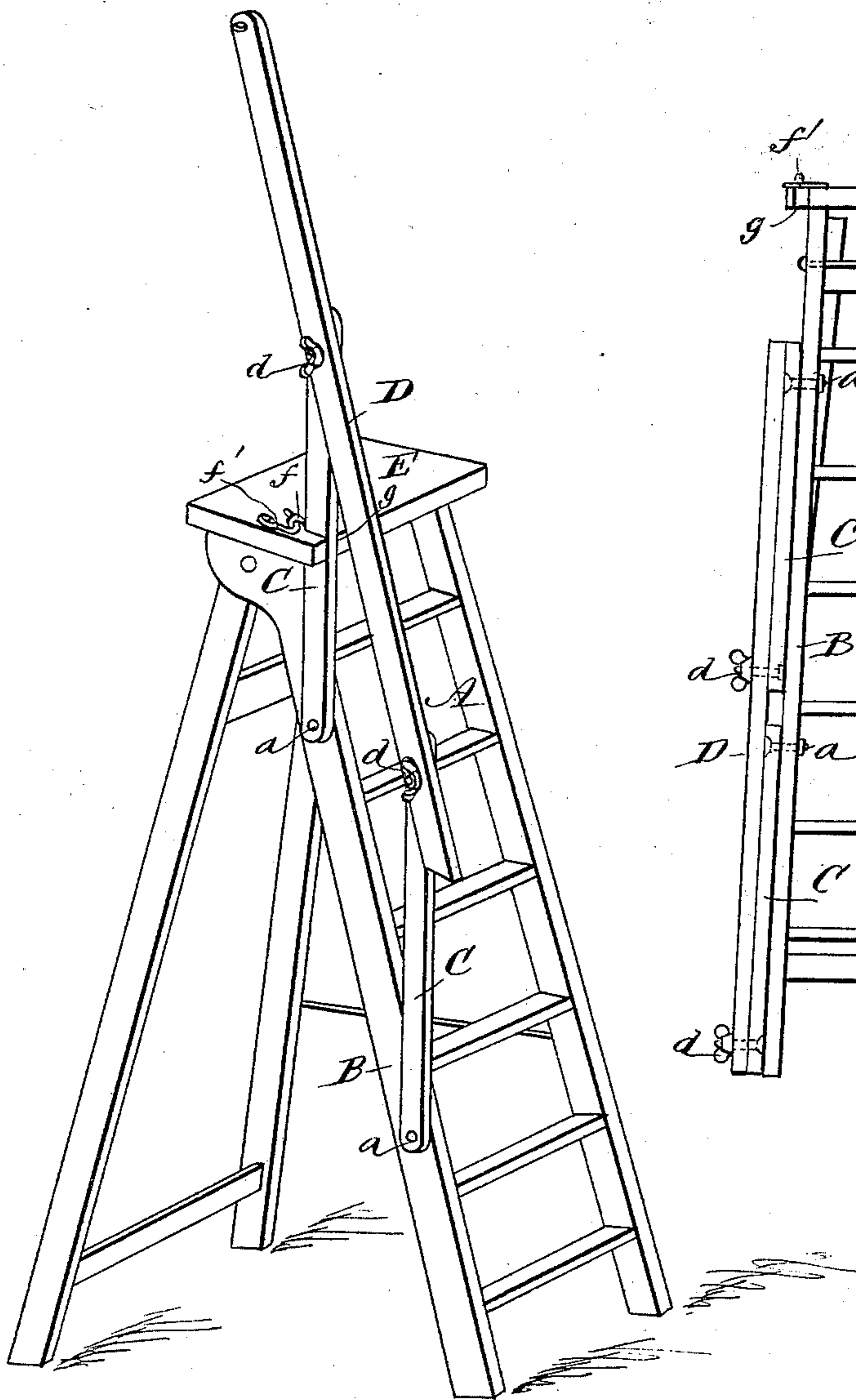
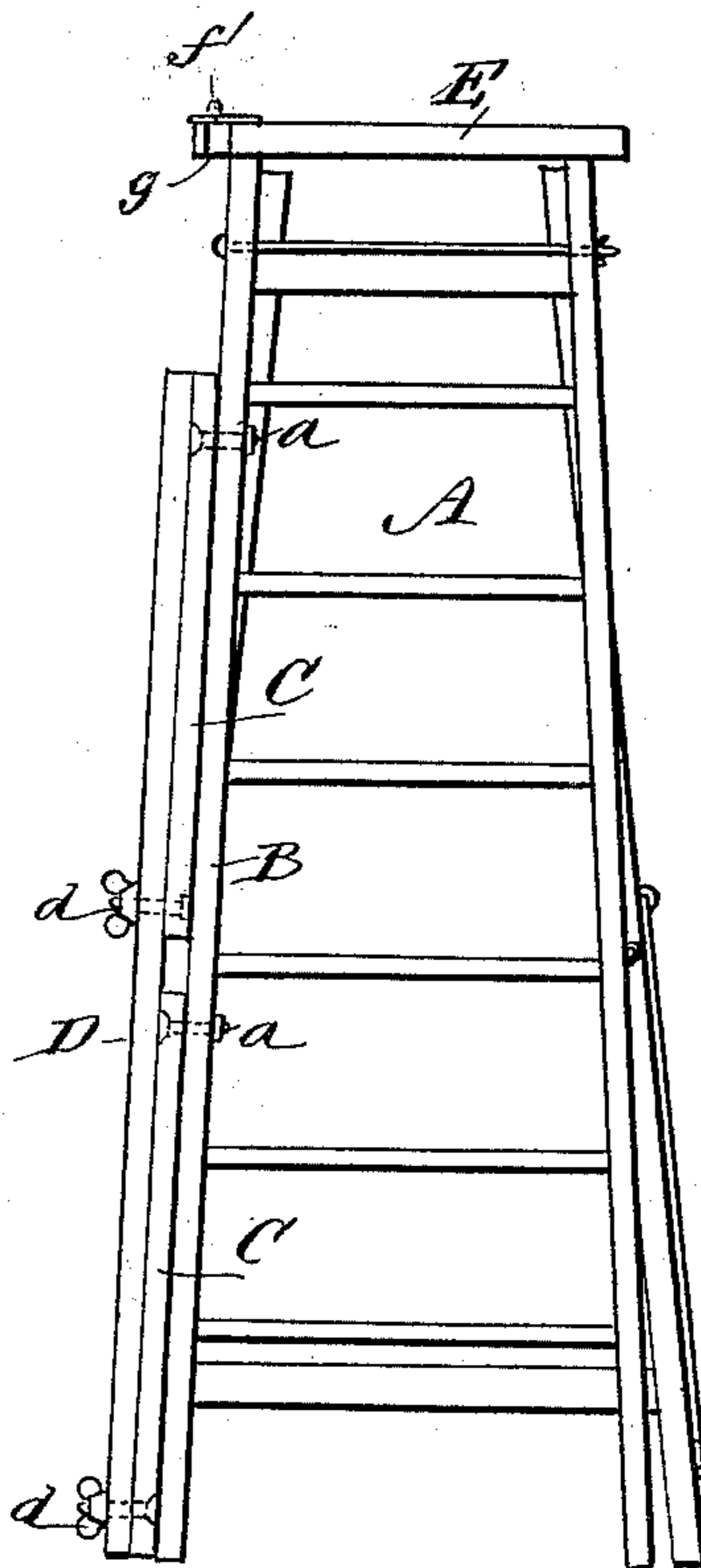


Fig. 2



WITNESSES:

C. Neveu
C. Sedgwick

INVENTOR:

O. J. Meisel
BY *Munn & Co*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

OTTO J. MEISEL, OF TERRE HAUTE, INDIANA.

GUARD FOR STEP-LADDERS.

SPECIFICATION forming part of Letters Patent No. 396,886, dated January 29, 1889.

Application filed September 18, 1888. Serial No. 285,710. (No model.)

To all whom it may concern:

Be it known that I, OTTO J. MEISEL, of Terre Haute, in the county of Vigo and State of Indiana, have invented a new and Improved Guard for Step-Ladders, of which the following is a full, clear, and exact description.

The object of my invention is to provide a cheap and practical step-ladder guard or hand-rail which will afford protection and safety to a person in ascending or descending or in standing on the top of the ladder, and which can be folded at the side of the ladder entirely out of the way when not in use.

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

Figure 1 is a perspective view of a step-ladder having my invention applied thereto, showing the guard or hand-rail in elevated position for use; and Fig. 2 is a front view showing the hand-rail folded.

The step-ladder A may be of the usual or of any approved construction. To the side piece or upright, B, are pivoted the two arms C C, the pivots *a a* passing through the ends of the said arms. The outer ends of said arms are connected by thumb-screws *d d*, to the guard or rail D, the lower arm being connected near the lower end of the said rail, while the upper arm is connected at or about the center of the said rail. The pivot of the upper arm C is near the top step, E, while the pivot of the lower arm is a short distance below the center of the upright B, so that the upper arm will fold down parallel with the upright B and in line with the lower arm. In the upper arm C is fitted the staple *f*, with which the hook *f'* on the step E is adapted to engage, as shown in Fig.

1, for holding the hand-rail and arm C in position for use, and in the edge of the top step is cut the notch *g*, into which the upper arm C is adapted to enter, so that when in position for use the rail cannot have a sidewise motion. When the hand-rail or guard is to be used, the thumb-screws *d* are to be loosened and the arms C C turned to upright position and fastened by the hook *f'*. In this position of the arms C C the rail D stands out from the steps of the ladder and reaches above the top step, E, so that it assists in ascending and descending the ladder and also acts as a safeguard to a person standing on the top step.

To fold the hand-rail, it is only necessary to loosen the thumb-screws *d*, swing back the hook *f'*, and turn the arms down to the position shown in Fig. 2. The thumb-screws *d* are then to be tightened again to hold the arms and guard in place.

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

1. The top step having a recess at its edge, and the side piece or upright of the ladder having arms pivoted thereto, in combination with a guard-rail pivoted to the said arms and a fastening device for locking the upper arm in the said recess, substantially as and for the purposes set forth.

2. The top step, E, having a recess, *g*, at its edge, and the side piece, B, of the ladder, having the arms C C pivoted thereto, in combination with the guard-rail D, pivoted to the arms C by set-screws *d*, and a fastening device or hook, *f*, for locking the upper arm C in the recess *g*, substantially as described.

OTTO J. MEISEL.

Witnesses:

W. D. ESTABROOK,
WM. BIEL.