

C. Croley.

Ladder.

No 67,636.

Patented Aug. 13, 1867.

Fig: 3.

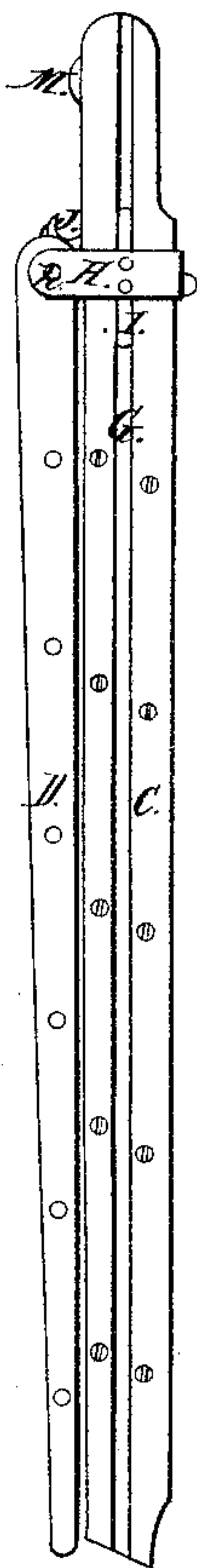


Fig: 1.

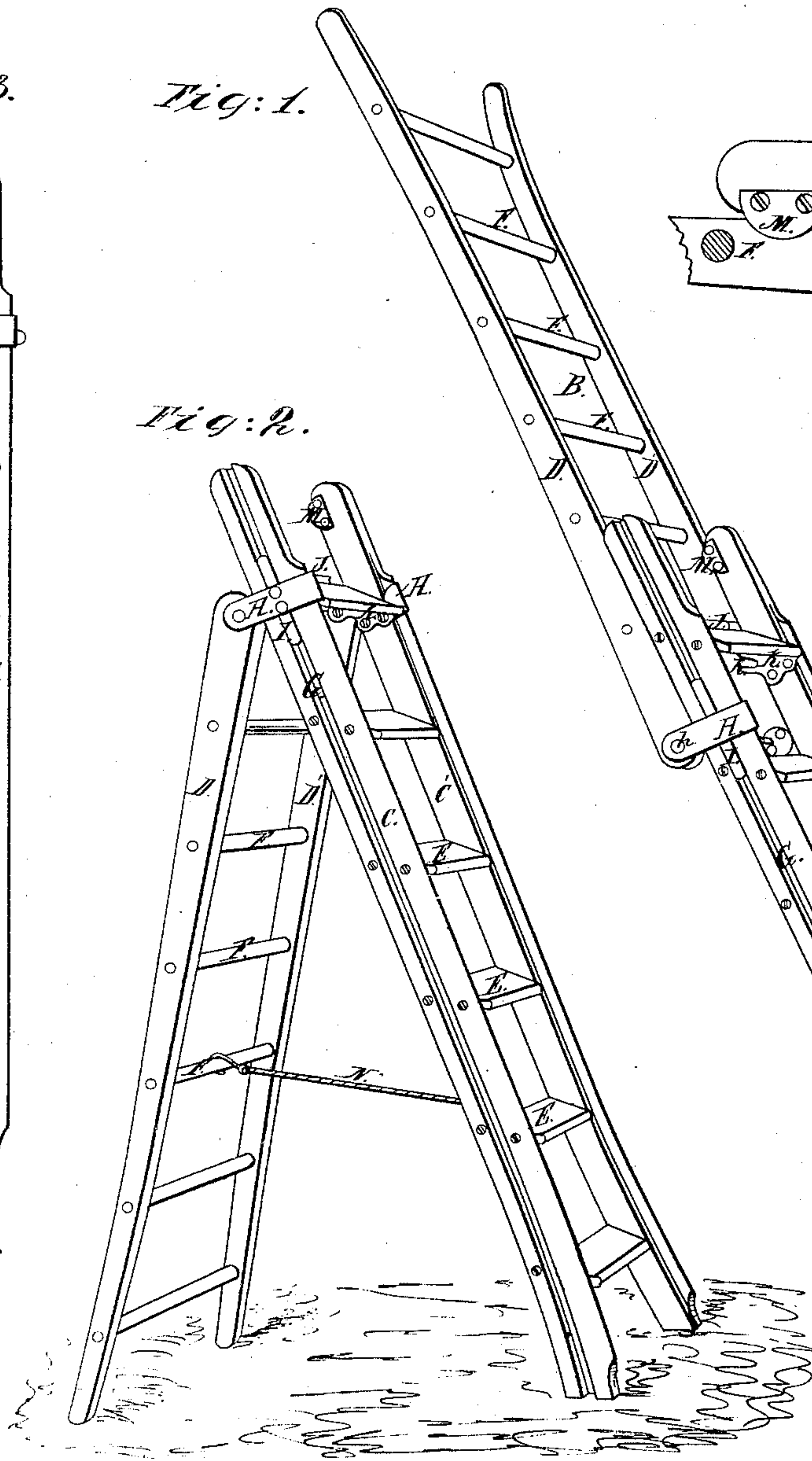


Fig: 2.

Fig: 4.

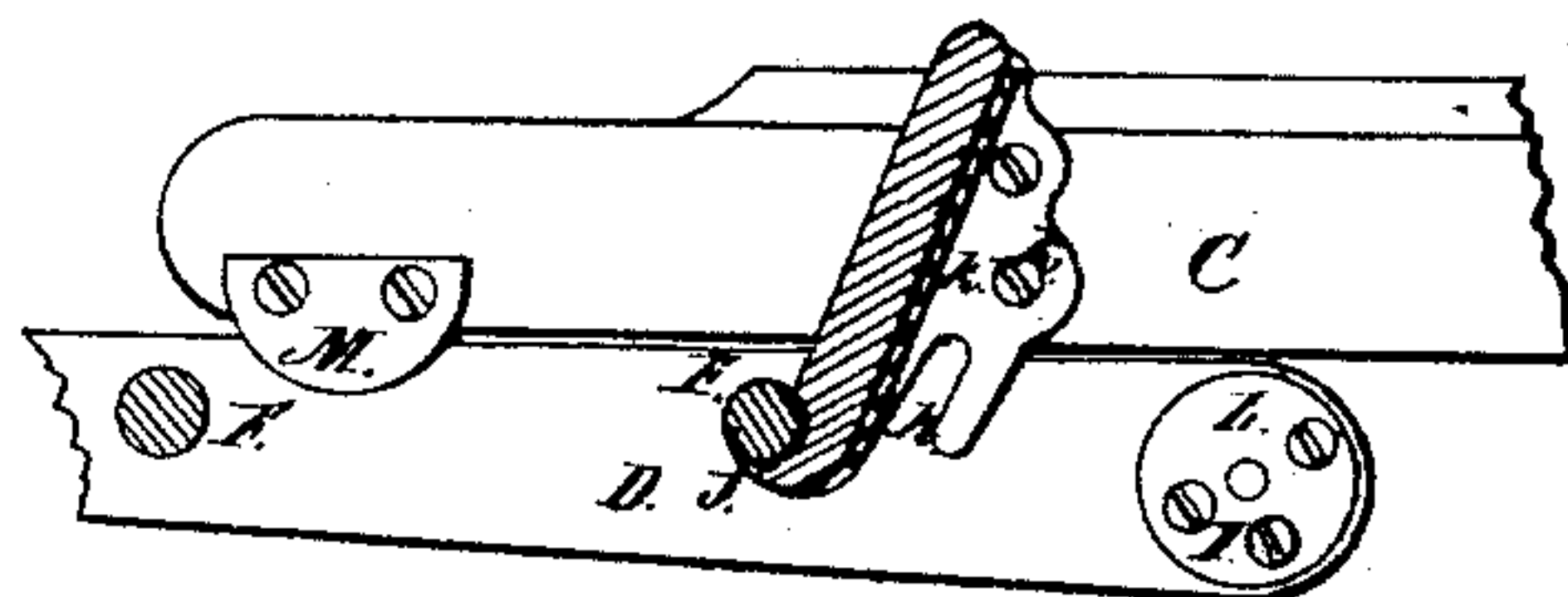
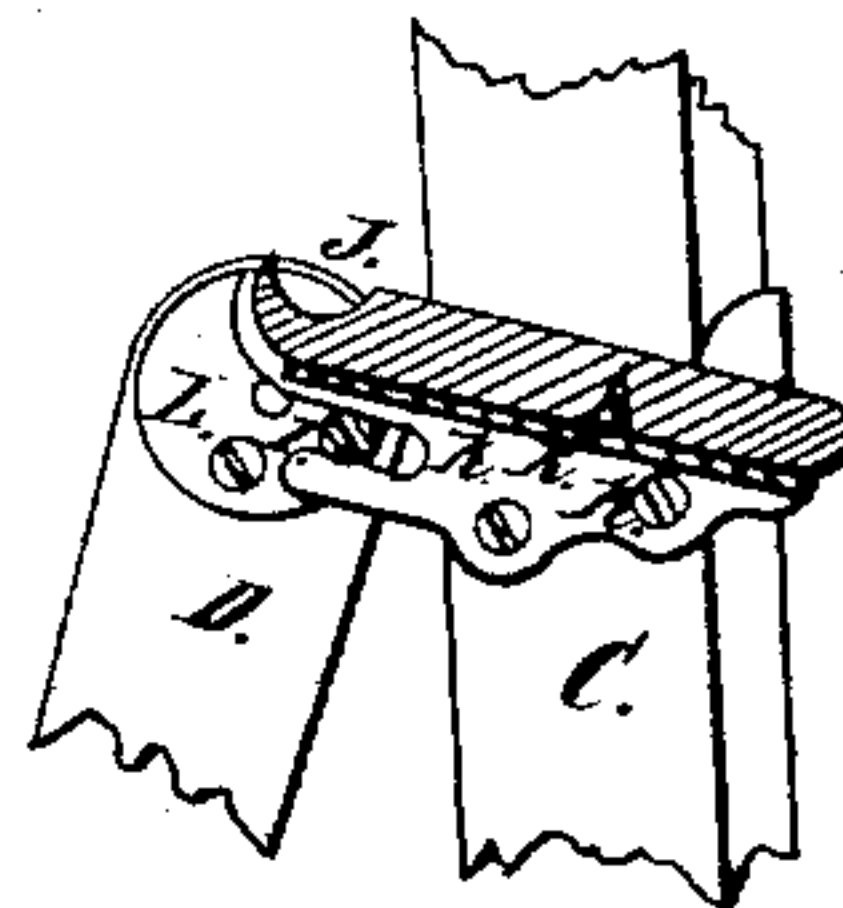


Fig: 5.



Witnesses:
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United States Patent Office.

CHARLES CROLEY, OF DAYTON, OHIO, ASSIGNOR TO AMERICAN LADDER COMPANY, OF HAMILTON, OHIO.

Letters Patent No. 67,636, dated August 13, 1867.

IMPROVED LADDER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES CROLEY, of Dayton, Montgomery county, Ohio, have invented a new and useful Convertible Ladder; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, making part of this specification.

This invention relates to a construction of ladder, in two or more parts or members, capable of being used either in the customary straight form or in the form of a step-ladder, or of being taken apart and used separately.

Figure 1 represents my ladder in its "long" or extended form.

Figure 2 shows it partially folded, so as to serve as a "step" ladder.

Figure 3 shows, by a side elevation, the closed or folded condition of the ladder.

Figure 4 is an enlarged sectional view of the joint as extended.

Figure 5 represents the same partially folded for use as a step-ladder.

My ladder comprises two nearly equal parts, A B, having customary shears or sides C C' D D', and steps, of which those E of part A are preferably of the flat form, while those F of part B may be round. Each shear C C' of part A has on its exterior side a groove, G, which extends from end to end, or from the extreme top of said shears as far down as may be necessary. Pivoted *h* to the lower ends of part B are hooked cheeks H, which engage around their respective shears on part A, and have each a tongue, I, which fits and is adapted to work within its appropriate groove G in said part. The top step of part A projects rearward, in the form of a semicircular trough or groove, J, to receive and hold either one of the rounds F of the upper ladder B. Attached to the inner sides of the shears C C' are brackets K, having notches *k*, which, when the step-form of the ladder is desired, receives studs or gudgeons *l* projecting from plates L secured to the lower ends of the part B. Ears M, projecting from the upper portions of the inner sides of the shears C C', hold said portion firmly against any lateral disturbance in the extended condition of the ladder. (See figs. 1 and 4.) The brackets K may have flanges *k''*, enabling their attachment to the under side of the uppermost step as well as to the inside of the shears. A cord, N, may be provided to prevent the undue spreading of the parts when employed in the form of a step-ladder. The ladder, when in its extended form, can be made longer or shorter by shifting the troughed step to different rounds.

To convert the ladder from the extended form to that of the step-ladder, the part B is slid up sufficiently to dislodge the round from the trough of the step, and is swung upon its pivot *h* until the gudgeon I enters the notch *k* in the bracket K. (See figs. 5 and 2.) A continuation of this action brings the two parts together in a compact form for putting away, as shown at fig. 3.

I claim herein as new and of my invention—

The combination of the gudgeons *l* and notched brackets K K, constructed and arranged as described, in connection with the troughed step J and separable or hinged ladders A B, for the purpose set forth.

In testimony of which invention I hereunto set my hand.

CHARLES CROLEY.

Witnesses:

GEO. H. KNIGHT,
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