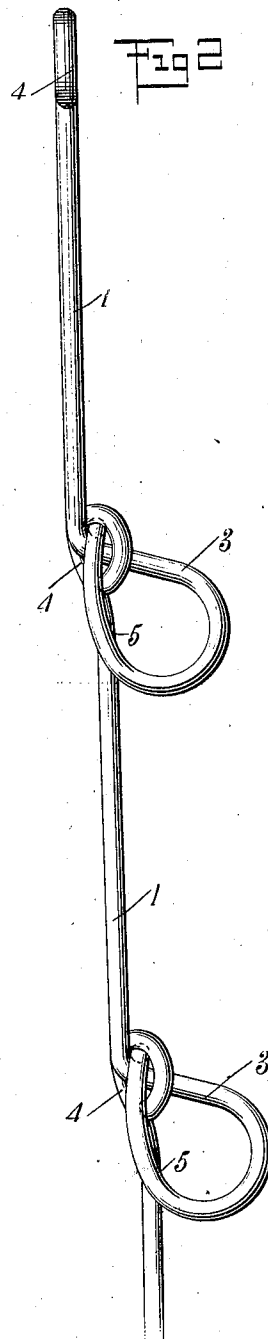
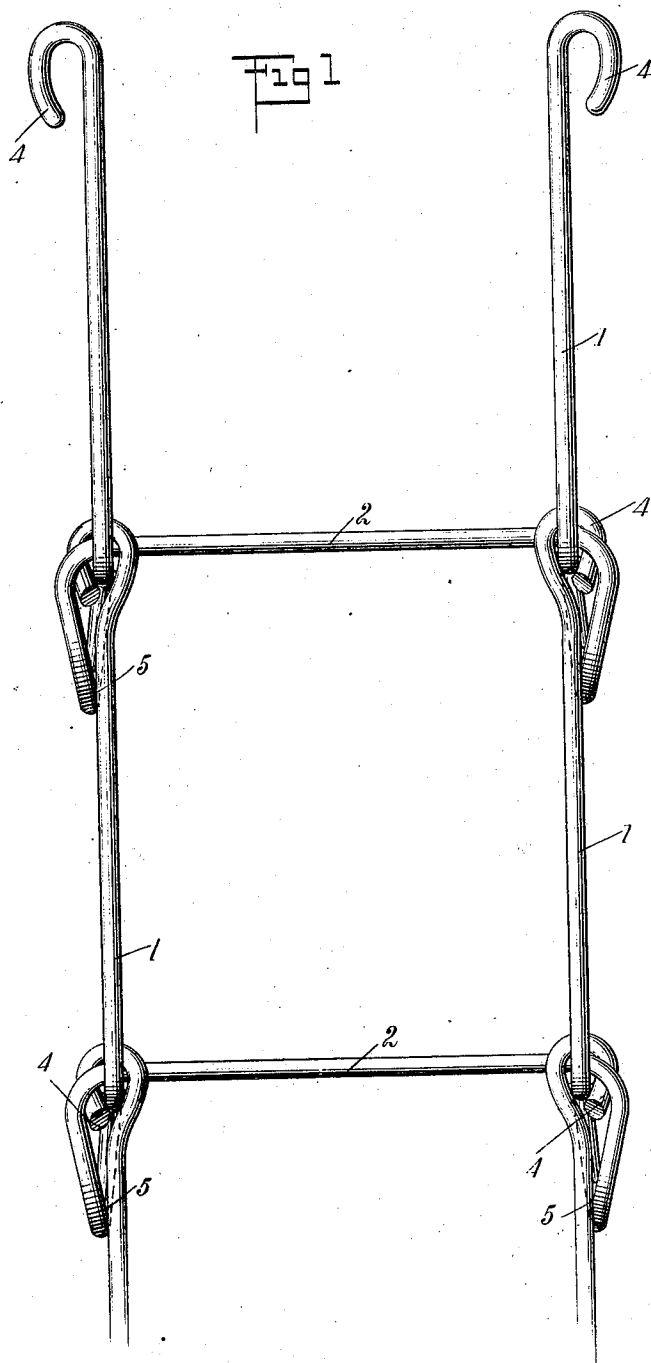


W. F. McSTAY.
LADDER.
APPLICATION FILED DEC. 7, 1911.

1,044,407.

Patented Nov. 12, 1912.



WITNESSES

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WILLIAM FRANCIS McSTAY, OF MONCTON, NEW BRUNSWICK, CANADA, ASSIGNOR OF
TWENTY-FOUR AND ONE-HALF ONE-HUNDREDTHS TO CHARLES A. MURRAY, OF
MONCTON, NEW BRUNSWICK, CANADA, AND TWENTY-FOUR AND ONE-HALF ONE-
HUNDREDTHS TO EDGAR S. READE, OF OTTAWA, ONTARIO, CANADA.

LADDER.

1,044,407.

Specification of Letters Patent.

Patented Nov. 12, 1912.

Application filed December 7, 1911. Serial No. 664,381.

To all whom it may concern:

Be it known that I, WILLIAM F. McSTAY, a subject of the King of Great Britain, and a resident of Moncton, in the Province of New Brunswick, Dominion of Canada, have invented a new and Improved Ladder, of which the following is a full, clear, and exact description.

My invention relates generally to ladders and more particularly to a wire ladder made up of a number of similar units, the construction and arrangement, however, being such that a rigid article is produced.

The principal object of my invention is to provide a new and improved ladder made up of a number of similar links rigidly connected together whereby the ladder may be picked up from a horizontal position into a vertical one without coming into folded position.

Other objects and advantages of the invention will appear as the description thereof proceeds, all of which is particularly pointed out and included in the appended claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a front view of the ladder; Fig. 2 is a side view thereof.

The ladder is designed to be built of a number of similar sections and hence the length of the ladder will depend on the number of sections used, the size of each section being dependent upon the work to which the ladder is put and the locality and occupation in which it is used.

Each link comprises the sides 1, and the horizontally extending cross piece 2, which piece is designed to serve as a round, the sides 1 and the piece 2 being of integral construction. Each side 1 at its lower end is extended rearwardly in a suitable curve 3, the curve being such that the material, where it joins the horizontally extending

portion 2, lies closely adjacent the rearwardly extending portion from the bottom of the side.

The upper end of each side 1 is provided with a suitable hook 4, each hook being adapted to be passed around and brought into tight engagement with the adjacent portions of the curved portion 3 and the round at one end of the round 2, the result being that each section is rigidly and non-foldably held in engagement with the adjacent section; it is to be noted that the hooks extend from the front toward the rear and that the arrangement of the curved portions 3 is such that, when the parts are assembled, contact between the parts is provided, as at 5.

Each of the curved portions 3, in addition to serving as a suitable means of connection to the hooks 4, also properly spaces each succeeding section of the ladder from the wall or support with which it is used, thereby providing for rapid travel up and down a ladder free from contact with the wall or support.

Each section will preferably be made of steel wire, although it is obvious that in some cases material other than steel may be desirable, the choice of such material, however, being a matter of expediency and being included within the spirit and scope of the appended claim.

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

A ladder made up of a number of units of similar construction, each unit comprising a horizontal intermediate portion adapted to serve as a round, and vertically extending end portions integral with the said intermediate portion for engagement with a succeeding unit, whereby the units are secured together; the material of the unit between the end of the said horizontal portion and the lower end of the said vertically extending portion being bent rearwardly and then upwardly in the form of a curve, whereby

the ladder may be spaced from a wall or other support, the upper ends of the vertically extending portions being overturned to form hooks, the said hooks engaging the
5 ends of the round and the lower ends of the said vertically extending portions and being tightly clamped, the upper ends of the said vertically extending portions engaging the said upwardly bent curved portions lying

between the horizontally extending portion 10 and the said vertically extending portion.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM FRANCIS McSTAY.

Witnesses:

WALTER S. BOWNESS,

ANDREW A. ALLEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
