

M. N. WEBSTER.
CLIMBING DEVICE.

APPLICATION FILED SEPT. 17, 1910.

Patented Sept. 26, 1911.

3 SHEETS-SHEET 1.

1,004,547.

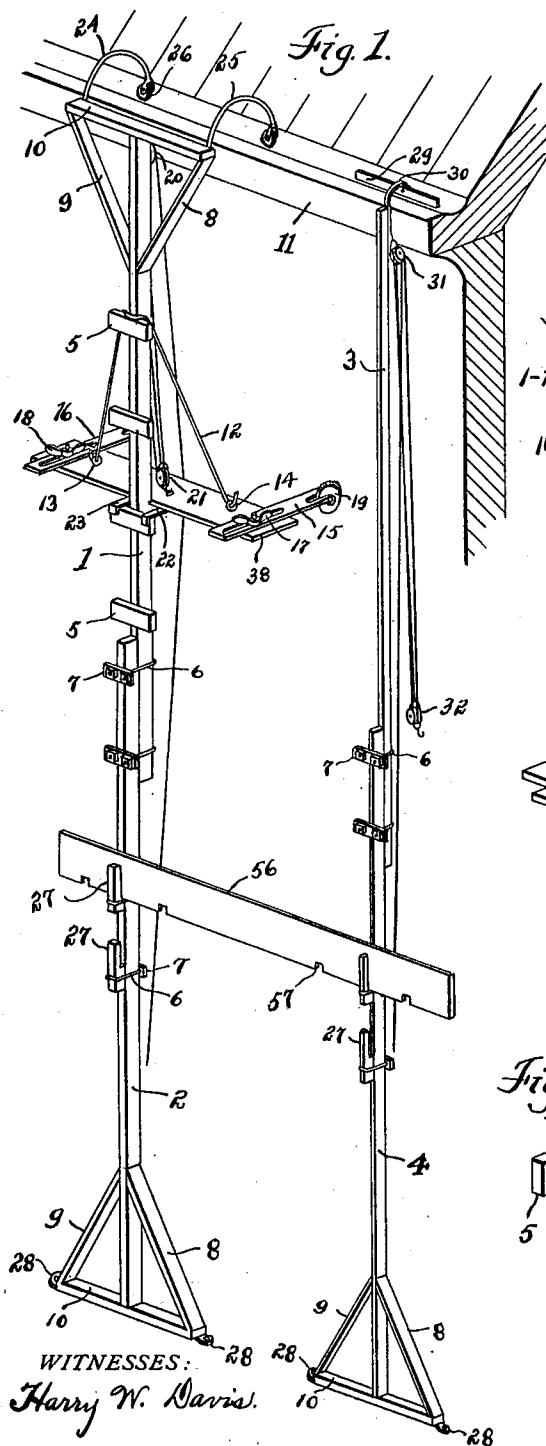


Fig. 2.

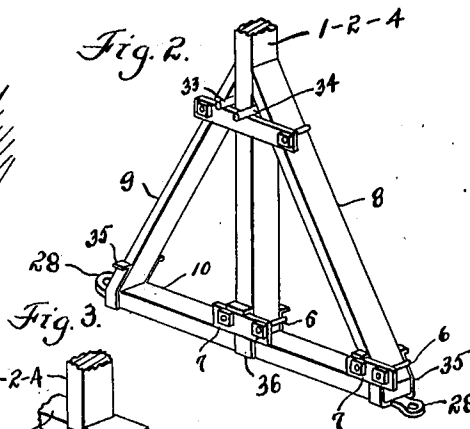


Fig. 3.

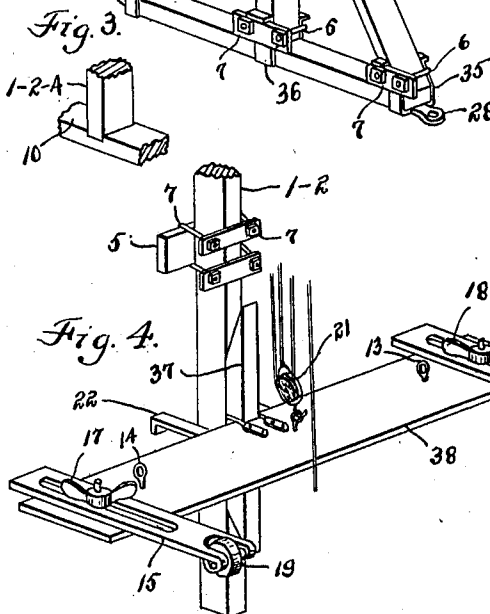


Fig. 4.

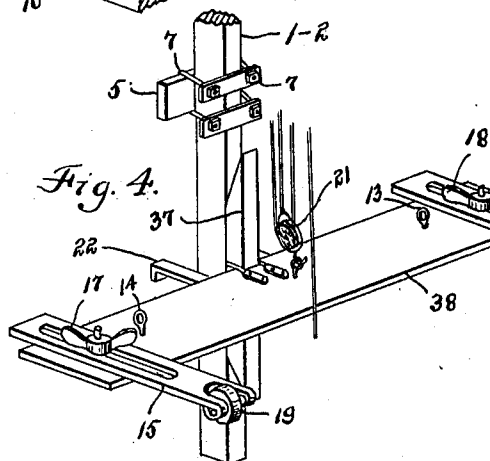


Fig. 6.

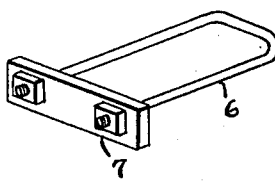


Fig. 5.



WITNESSES:
Harry W. Davis.
Samuel C. Jones

M. N. WEBSTER INVENTOR.

BY

M. N. Webster ATTORNEY.

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3 SHEETS-SHEET 2.

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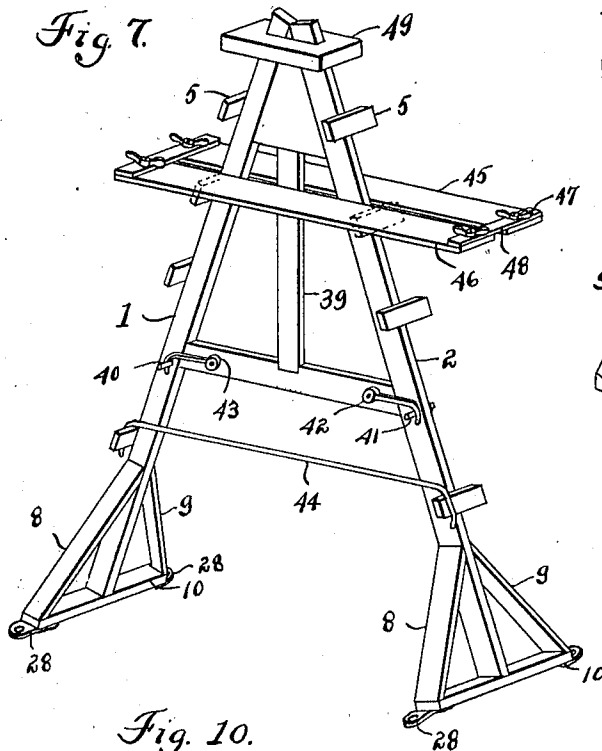


Fig. 8.

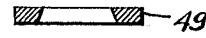


Fig. 9.

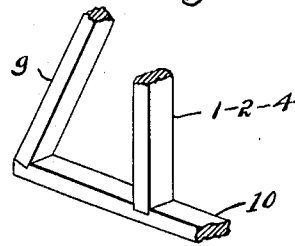


Fig. 10.

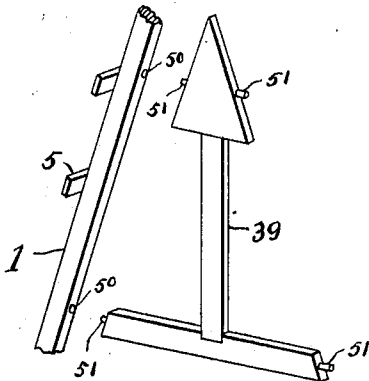
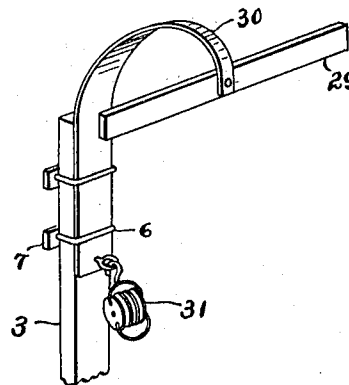


Fig. 11.



WITNESSES:

Harry W. Davis.

Samuel Cleaver

M. N. WEBSTER INVENTOR.

BY

M. N. Webster

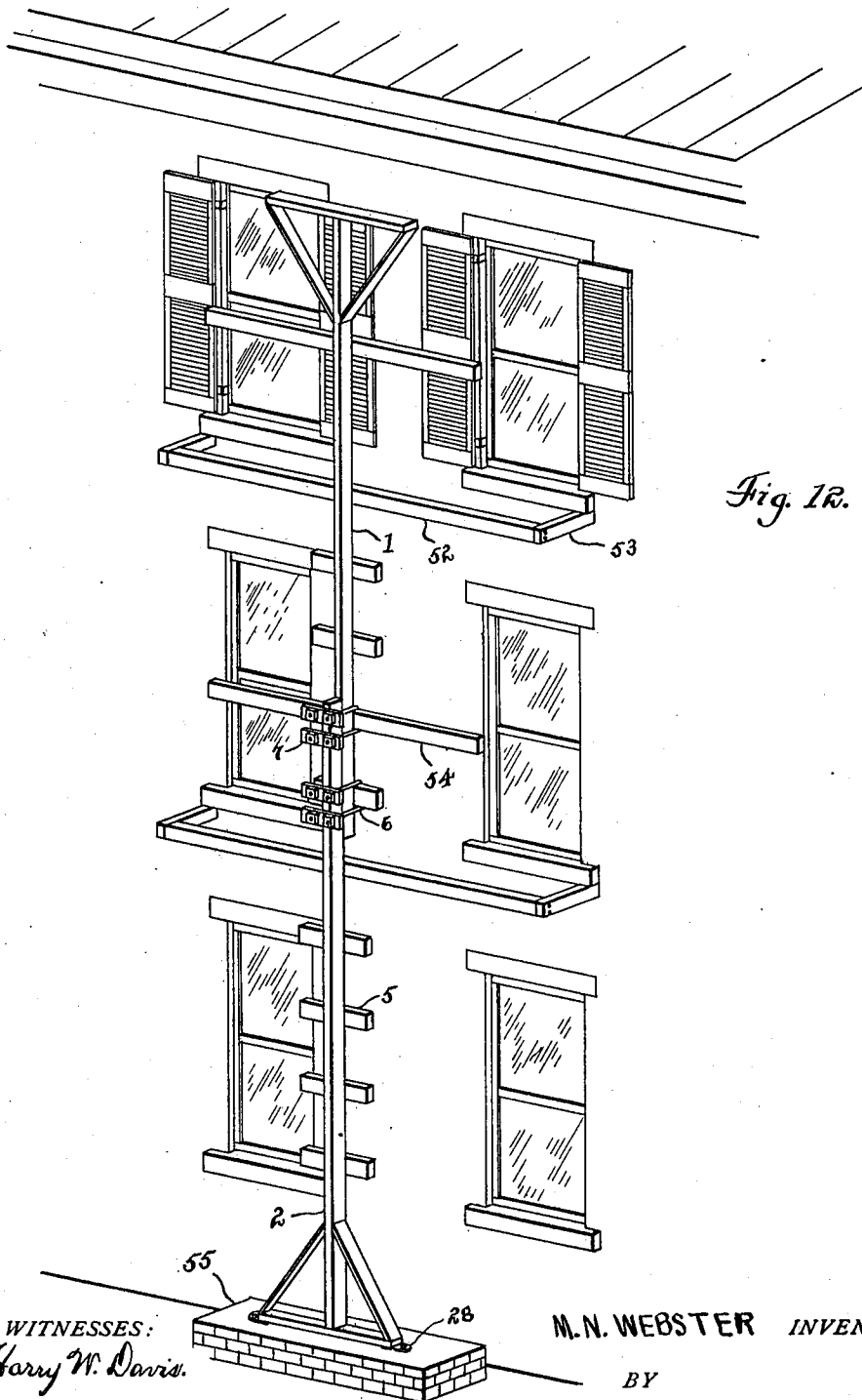
ATTORNEY.

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3 SHEETS-SHEET 3.



WITNESSES:
Harry W. Davis.

Samuel C. Lauer.

M. N. WEBSTER INVENTOR.

BY

M. N. Webster ATTORNEY.

UNITED STATES PATENT OFFICE.

MOSES N. WEBSTER, OF LOUISVILLE, KENTUCKY, ASSIGNOR OF ONE-HALF TO JOSEPH L. MOSER.

CLIMBING DEVICE.

1,004,547.

Specification of Letters Patent. Patented Sept. 26, 1911.

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To all whom it may concern:

Be it known that I, MOSES N. WEBSTER, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Climbing Device, of which the following is a specification.

My invention relates to climbing devices used for scaffolds, step-ladders, and fire-escapes; and the object of my invention is to provide a simple and practical device that can be applied to any of these purposes.

The invention consists of novel features and parts and combinations of the same which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, which are part hereof and in which similar characters of reference indicate the corresponding parts in all the views.

Figure 1 is a perspective view of my invention embodied in the form of a scaffold. Fig. 2 is a detail perspective view of the base. Fig. 3 is a second detail perspective view of the base. Fig. 4 is a detail perspective view of the platform for the scaffold. Fig. 5 is a detail perspective view of the pole and a step. Fig. 6 is a perspective view of a clip. Fig. 7 is a perspective view of my invention embodied in the step-ladder. Fig. 8 is a detail sectional view of the cap of said step-ladder. Fig. 9 is a detail perspective view of the base construction. Fig. 10 is a perspective view of portions of the structure in Fig. 7. Fig. 11 is a detail perspective view of the top of the auxiliary pole in the scaffold structure. Fig. 12 is a perspective view of my invention embodied in the fire-escape.

My invention is essentially a climbing device comprising an extensible pole, climbing steps attached in a novel manner, bases of novel structure, a novel platform attachment for said pole, a novel auxiliary supporting pole and connections, novel attachments for using the portions of said pole for a step-ladder, and novel attachments for using said pole as a fire-escape.

The main pole of the climbing device consists of the pieces 1 and 2, adjustably connected by the clips 6. The clips 6 are preferably threaded at each end and provided with nuts adapted to press the connecting

elements 7 against the parts surrounded by the clips 6. The clips 6 are also used in pairs on each side of the pole, as shown in Fig. 12, to connect the steps 5 to the parts of the main pole 1 and 2. The steps 5 are recessed so as to fit the pieces of the pole 1 and 2 as shown in Fig. 5. To avoid weakening the main pole no recesses are provided therein.

The bases of the pieces 1 and 2 are provided with transverse supporting pieces 10, connected as shown in Fig. 3, and supported by the diagonal pieces 8 and 9, which preferably connect the ends of the pieces 10 to the sides of the parts 1 and 2 of the main pole. The preferred structure for these connections is shown in Figs. 2 and 9. In Fig. 9 is shown an oblique recess for the diagonal pieces and a vertical recess for the main pole. In Fig. 2 are shown the various devices for connecting the parts of the base to one another entirely by friction without weakening the main pole or its supports by the insertion of any pieces. The main piece of the pole 1 is connected to the base 10 by the collar 36, which has each end bent to hold the clip 6 and its connecting piece 7 from sliding up the pole. The lower ends of the diagonal supporting pieces 8 and 9 are held in position by a collar 35 substantially the same as the collar 36 and clipped in position in the same manner. The collars 35 are also used to hold in position the rings 28, which are provided to contain pegs to fasten the base of the pole to the ground. The upper ends of the supporting pieces 8 and 9 are held in position by a broad clip 6 and its connecting piece 7 which are held against sliding up said diagonal pieces by the pins 33 and 34 which pass between the pole and said supporting pieces on each side and rest upon the edges of the clip 6 and the connecting piece 7. This affords a secure means for connecting diagonal pieces to a pole on opposite sides without injecting any element into the structure of the parts.

When my invention is used as a scaffold I attach the hooks 24 and 25, provided with the rollers 26 to one base to roll along the cornice of the building 11. I also provide the platform 38, hung by the cord 12 and the rings 13 and 14 to a step 5, as shown in Fig. 1, so that said platform will not tilt. I raise and lower the platform by the pulley 20, attached to an end of the pole and by the

pulley 21, attached to the platform. To hold the platform 38 evenly against the sides of the building I provide the arms 15 and 16 at each end thereof, slotted for adjustment and held in position by the thumb screws 17 and 18. The arms 15 and 16 are provided with rollers for movement up and down the building. The platform is provided with straps 22 and 23 to support it upon the steps and to cooperate with the piece 12 to keep it from tilting. To support the main pole stiffly I provide an auxiliary pole, made up of the pieces 3 and 4, connected in the same manner as the pieces of the main pole. I provide the piece 4 with a base similar to that on piece 2. I provide the free end of the piece 3 with the hook 30 and the flat piece 29 to rest on the cornice 11. I provide the pulleys 31 and 32 for doing hauling in connection with this auxiliary supporting pole. I connect the auxiliary pole to the main pole by the flat piece 56 provided with recesses along one edge to rest in the up-turned steps 27. The steps 27 are connected to the pole by the clips 6 in the same manner as are the steps 5. The board 56 can be provided with as many recesses as is desired so that the auxiliary pole may be placed at any desired distance on the main pole. In connection with the platform 38 I connect a vertical piece 37 to one edge thereof to further hold it against tilting.

To transform the essential elements of my invention into a step-ladder, as shown in Fig. 7, it is simply necessary to take the pieces of the pole apart, lay them diagonally against one another, and place on the cap 49. To support further the pieces 1 and 2 I provide the piece 39, provided with an arrow head and transverse base. The head and the ends of the base may be provided with pins 51 to enter appropriate recesses 50 in the pieces 1 and 2. To connect further said piece 39 with the pieces 1 and 2, I provide the pivoted hooks 43 and 42, adapted to connect the base of the supporting wedge 39 with pins 40 and 41 respectively in the pieces 1 and 2. The pieces can

be still further connected and supported by the element 44 connecting two opposite steps on the main pieces 1 and 2. The platform for said step-ladder consists of two flat pieces 45 and 46, connected by end pieces 48, which are held adjustably by the thumb screws 47. The pieces 45 and 46 rest on opposite steps 5 on the two parts of the main pole.

When my invention is embodied in a fire-escape, I prefer to set it in a solid base 55. I provide the long pieces 52, connected to the window sills by the pieces 53 so that fleeing occupants of the building may walk out from adjoining windows and reach the pole 1. For the benefit of those who might fall I provide the pieces 54, about midway the height of the windows, which said fleeing occupants may take hold of to reach the pole. The pieces 54 are connected with the main pole in the same manner as the steps 5.

I do not limit myself to the form or forms in which the essential principles of my invention are embodied further than is indicated in the claims.

I claim:

1. A climbing device, comprising a climbing pole, a transverse base piece, diagonal supporting pieces connecting said base piece with opposite sides of the pole, clips connecting the ends of said supporting pieces by friction with the sides of said pole, and elements passing between the sides of said pole and said supporting elements adapted to hold said compressing clips in position.

2. A structural support, comprising a supporting element, a transverse base piece, diagonal supporting pieces connecting said base piece with opposite sides of said supporting element, means for connecting the ends of said diagonal pieces by friction with the sides of said supporting element, and elements passing between the sides of said supporting element and said connecting mechanism adapted to hold it in position.

MOSES N. WEBSTER.

Witnesses:

ALLEN P. TWYMAN,
LEE L. SIMONS.