

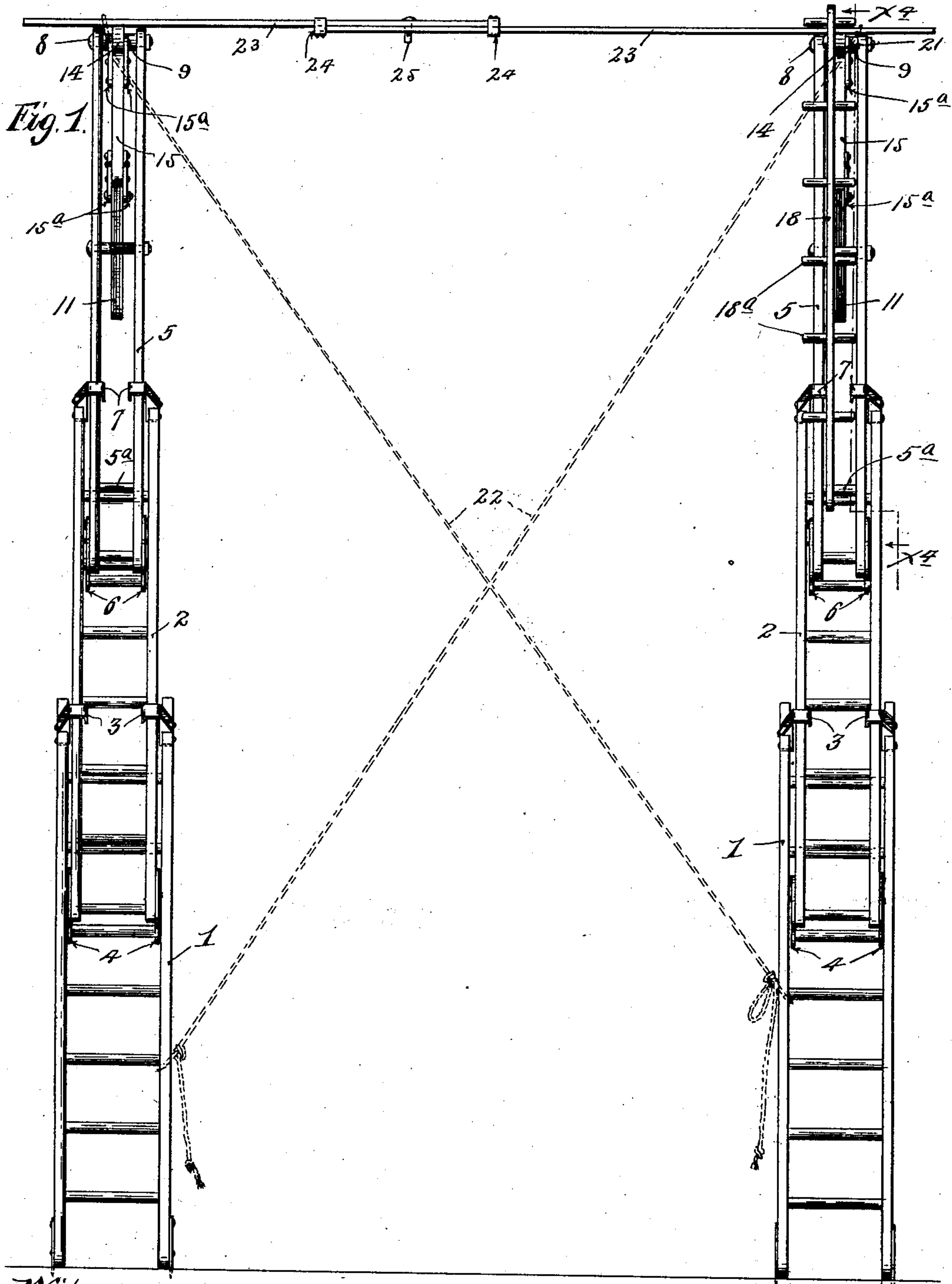
No. 747,564.

PATENTED DEC. 22, 1903.

J. B. & R. MURRAY.
PORTABLE SCAFFOLDING.
APPLICATION FILED JAN. 15, 1903.

NO MODEL.

3 SHEETS—SHEET 1.



Witnesses.

H. D. Kilgore
A. H. Opsahl

Inventors.

John B. Murray.
Robert Murray.
By their Attorneys.
William M. Alcock

No. 747,564.

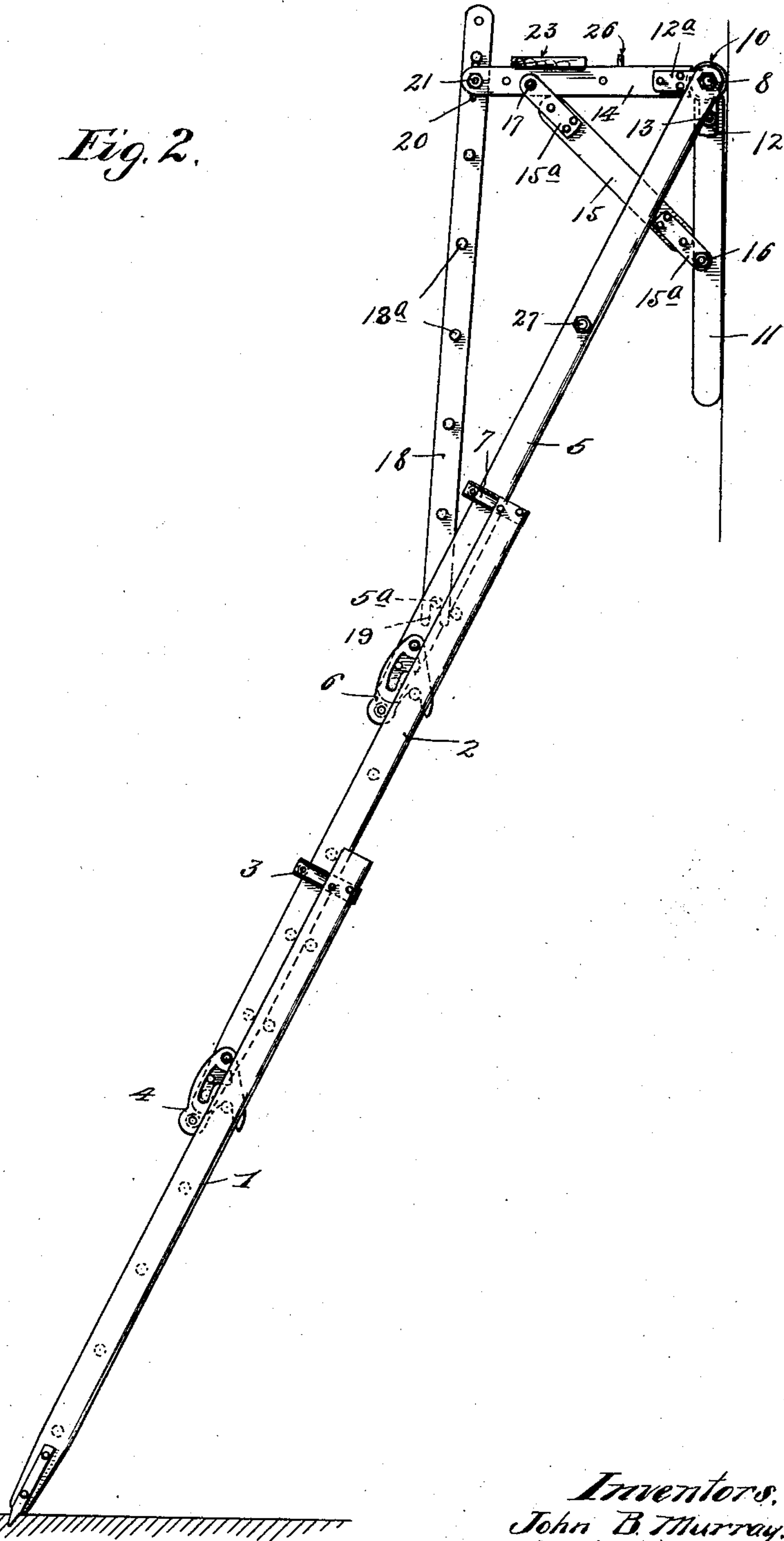
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3 SHEETS—SHEET 2.

Fig. 2.



Witnesses.

H. D. Wilson.
A. H. Opsahl

Inventors.
John B. Murray.
Robert Murray.
By their Attorneys.

William M. Merchants

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3 SHEETS—SHEET 3.

Fig. 3.

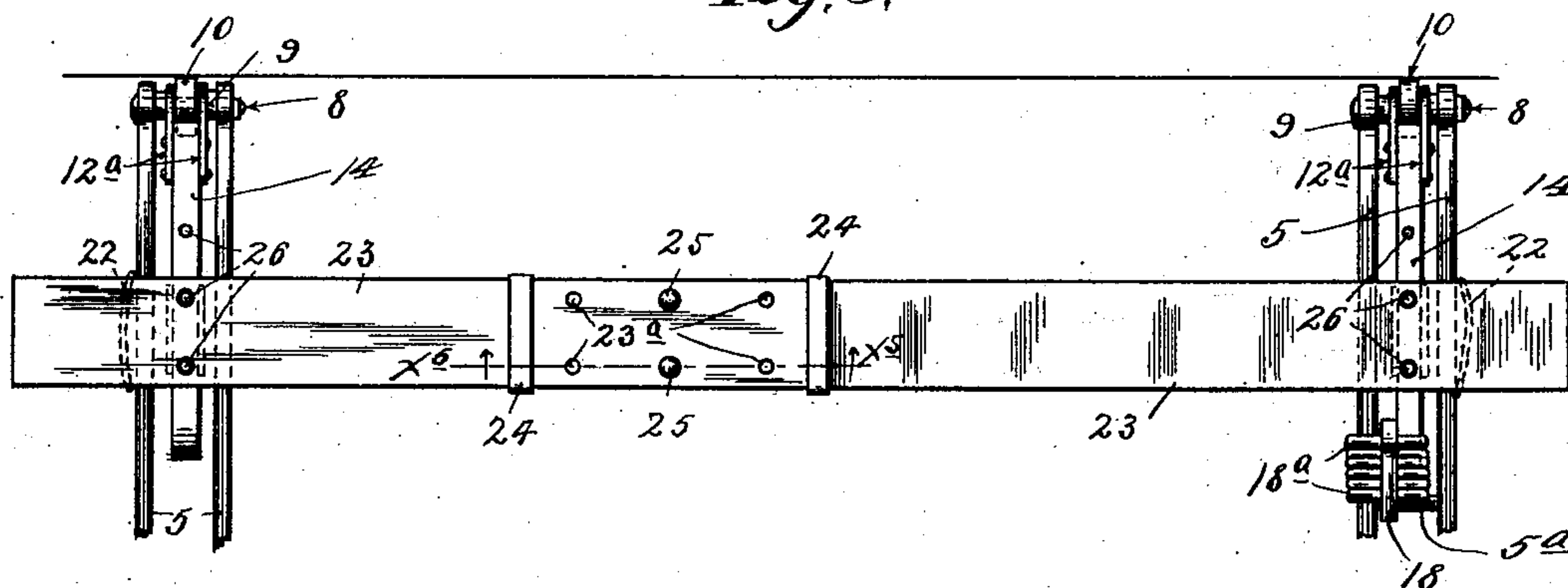


Fig. 4.

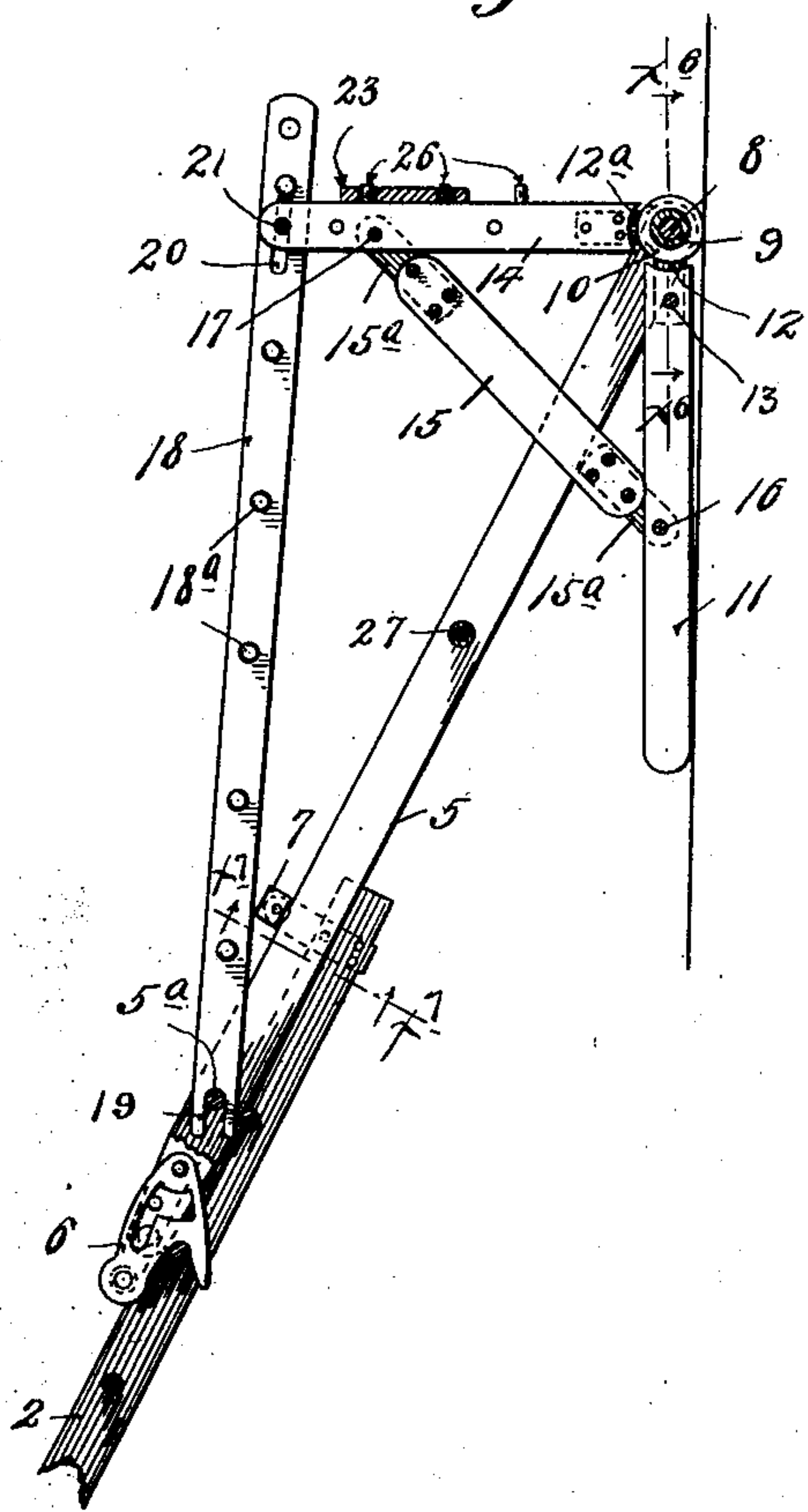


Fig. 5.

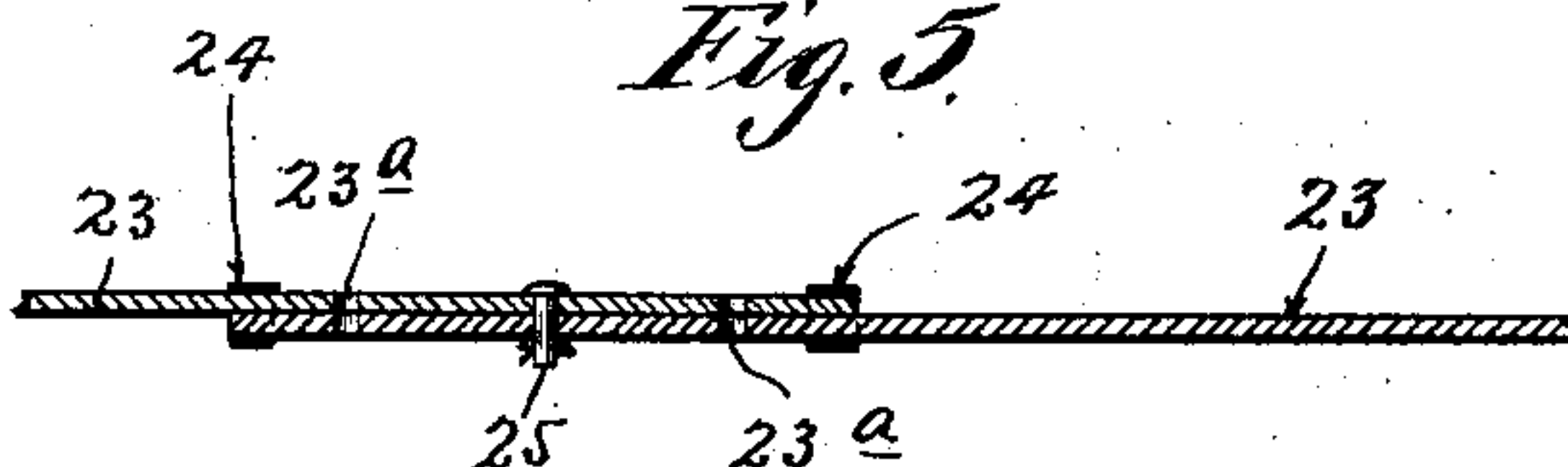


Fig. 6.

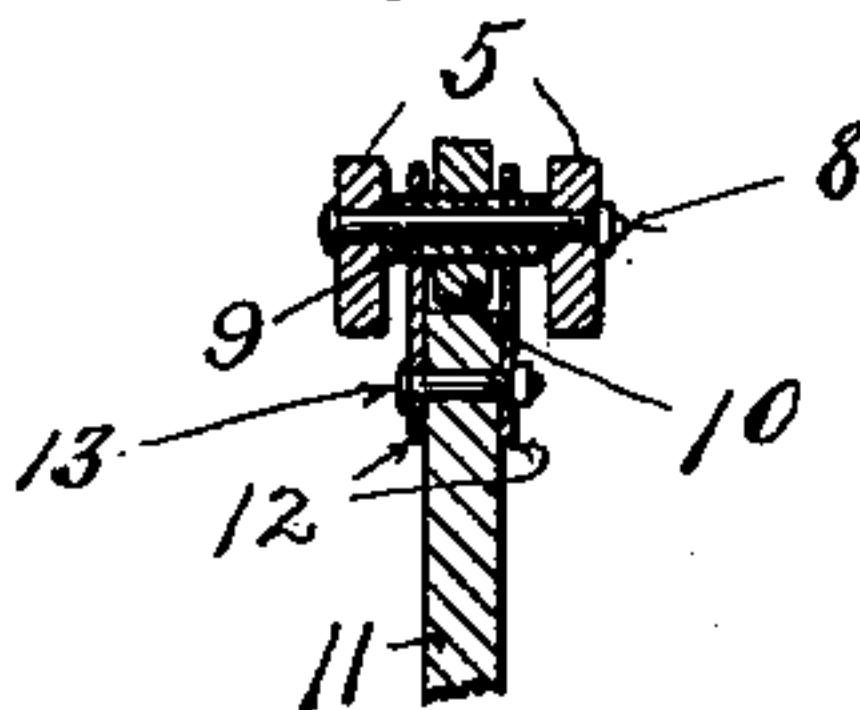


Fig. 7.

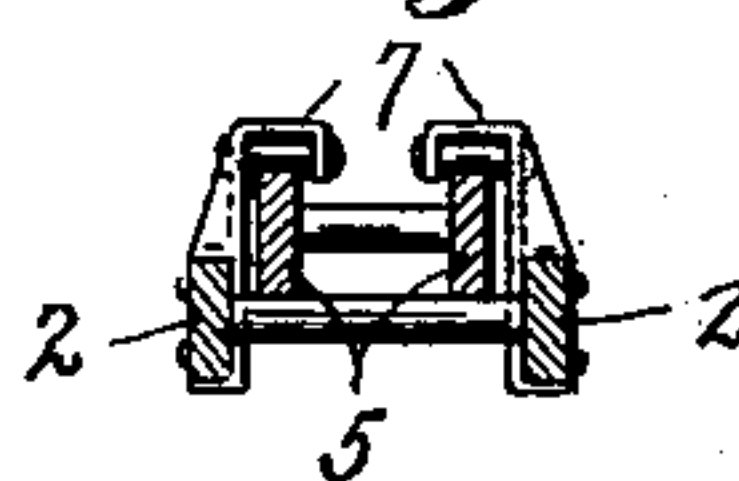
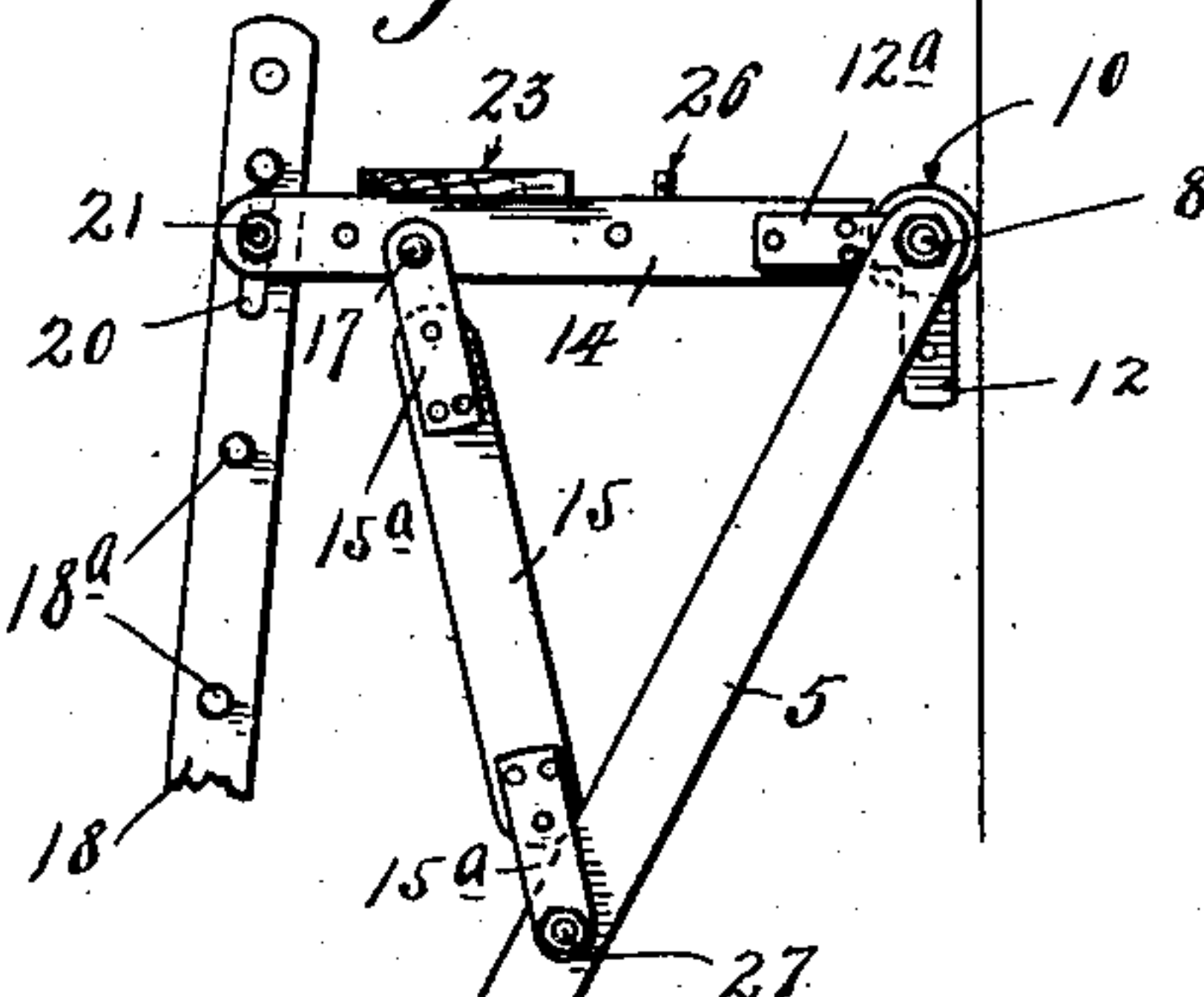


Fig. 8.



Witnesses,
H. D. Kilgus.
A. H. Opsahl

Inventors,
John B. Murray,
Robert Murray.
By their Attorneys.

William M. Meckert

UNITED STATES PATENT OFFICE.

JOHN B. MURRAY AND ROBERT MURRAY, OF MINNEAPOLIS, MINNESOTA.

PORTABLE SCAFFOLDING.

SPECIFICATION forming part of Letters Patent No. 747,564, dated December 22, 1903.

Application filed January 15, 1903. Serial No. 139,104. (No model.)

To all whom it may concern:

Be it known that we, JOHN B. MURRAY and ROBERT MURRAY, citizens of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Portable Scaffolding; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention has for its object to provide an improved portable scaffolding which may be readily adjusted vertically and in which the working deck or plank is located at the extreme upper ends of the vertical supports.

To this end it consists of the novel devices and combinations of devices hereinafter described, and defined in the claim.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a side elevation of the scaffolding. Fig. 2 is an end elevation of the same. Fig. 3 is a plan view of the scaffolding with some parts broken away. Fig. 4 is a vertical section on the line $x^4 x^4$ of Fig. 1. Fig. 5 is a section on the line $x^5 x^5$ of Fig. 3. Fig. 6 is a vertical section on the line $x^6 x^6$ of Fig. 4. Fig. 7 is a transverse section on the line $x^7 x^7$ of Fig. 4, and Fig. 8 is a view illustrating a modified adjustment of certain parts of the scaffolding.

It may be here stated that our invention involves the use of a pair of vertically-extensible supports—such as extension-ladders—having devices applied to the upper ends thereof, whereby they are adapted to firmly support the working platform or plank so that the workman will be above the ladders or vertical supports.

In the drawings the numerals 1 and 2 indicate, respectively, the upper and lower sections of extension-ladders of ordinary construction and provided, respectively, with ordinary guide-brackets 3 and pivoted latch-dogs 4. Each extension-ladder is provided with a third extension-section 5, which constitutes an upper end section of the ladder or vertically-adjustable support, but need

not be provided with a full number of rungs. These sections 5, like the sections 2, are provided with latch-dogs 6 at their lower ends, which engage the rungs of said sections 2 in the same manner as the dogs 4 engage the rungs of the lower sections 1. The ladder-sections 2 are further provided at their upper ends with brackets 7, which engage the bars of the upper sections 5 in the same manner as the brackets 3 engage the sides of the ladder-sections 2. The upper ends of the bars of the section 5 are connected by a bolt 8, and on this bolt between the bars of said section 5 is a spacing-sleeve 9. A roller or wheel 10 is loosely mounted on the intermediate portion of the sleeve 9, and pivoted on the said sleeve is a depending bar 11, the pronged upper ends 12 of which embrace the said roller or wheel 9. The depending bar 11 is detachably secured to the prongs 12 by a bolt 13, and the said prongs have outwardly-projecting extensions 12^a, to which is rigidly secured an outwardly-projecting horizontal bar 14. The numeral 15 indicates a strut or truss-bar provided at its ends with laterally-spaced straps 15^a, detachably connected to the bars 11 and 14 by bolts 16 and 17, respectively. The character 18 indicates a supplemental detachable ladder-section formed by a single bar having rungs 18^a, which project from the opposite sides thereof. At its lower end the ladder-bar 18 is bifurcated at 19 and is adapted to straddle the lower rung 5^a of the ladder-section 2 for that matter. Near its upper end said ladder-bar is provided with a slot 20, through which and the outer end of the bar 14 a bolt 21 is passed to detachably connect the said parts and permit the ladder 18 a limited vertical movement and to cause the strain from weight placed on the bar 14 to be transmitted through the strut 15 to the depending bar 11, and hence thrown in part against the side of the wall or the side of the building.

The two extensible ladders or supports above described will of course be spaced apart laterally and will be so adjusted vertically that the horizontal bars 14 of the two ladders will stand in the same horizontal plane. It is advisable to tie together or brace the two

ladders by means of guy-ropes 22, which are connected thereto and crossed, substantially as indicated by dotted lines in Fig. 1.

The so-called "working deck" is, as shown, 5 made up of a pair of planks 23, which are overlapped and held together with freedom for sliding adjustments one upon the other by means of loops or endless straps 24, secured one to the end of each plank. The 10 overlapped ends of said planks are provided with perforations 23^a, which are brought into registration with the planks in different adjustments and through which a bolt or pin may be passed, as best shown in Fig. 5, to 15 hold the said planks in their set adjustments. The platform afforded by the planks 23 is supported by the horizontal bars 14 of the two ladders, and to prevent slipping thereof said bars 14 are provided with pins 26, which 20 work through suitable perforations in the said planks, as best shown in Fig. 4. As is evident, a portable scaffolding constructed as above described may be very quickly applied in working position against the side of 25 a building and may be very quickly adjusted to any desired height or moved from place to place. In adjusting the ladders vertically the rollers or wheels 9 prevent scratching of the side of the building.

30 With the device adjusted as shown in Figs. 1, 2, 3, and 4 a workman passing up or down the ladder would of course pass over the supplemental section 18.

35 The scaffolding is of course serviceable for a great many different purposes. It will be found especially serviceable, however, for use by carpenters and painters. When it is to be used by carpenters, it would usually be ad-

justed as already described. When, however, the device is to be used by painters, the ladder 40 may be adjusted as shown in Fig. 8. In this adjustment the depending bars 11 are removed and the depending end of the truss-bar or strut 15 is by means of the bolt 27 directly 45 connected to the sides of the extension-sections 5 of the ladder. This being done, the entire weight on the deck or plank 23 is thrown directly onto the upper portions of the ladder.

When the device is out of use, the sections 50 of the extension-ladders or extensible supports may be slid one upon the other into very compact form, and the plank-sections 23 may be slid one upon the other until they occupy approximately the same space as one 55 of the sections thereof.

The portable scaffolding described is of course capable of modification other than herein specified within the scope of our invention as herein set forth and claimed. 60

What we claim, and desire to secure by Letters Patent of the United States, is as follows:

The combination with a pair of vertically-extensible supports, each involving the extension-section 5, the horizontal rest-bar 14 65 and supplemental ladder-bars 18, said three parts being connected to form a triangle, of a deck or plank, supported on the bars 14, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses. 70

JOHN B. MURRAY.
ROBERT MURRAY.

Witnesses:

ELIZABETH H. KELIHER,
FRANK D. MERCHANT.