

D. P. CHESEBRO.
SCAFFOLD HANGER.
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927,946.

Patented July 13, 1909.

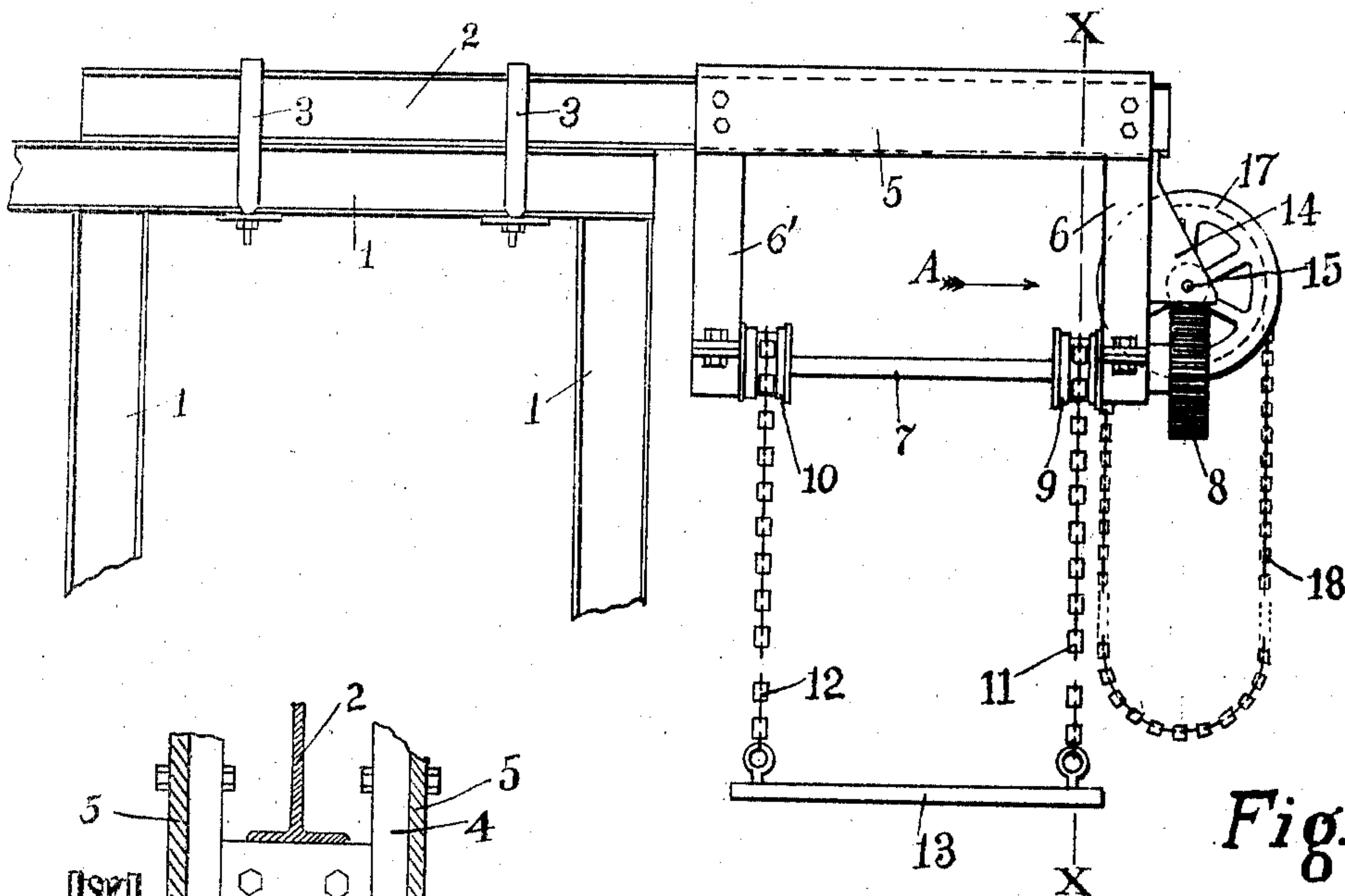


Fig. 1.

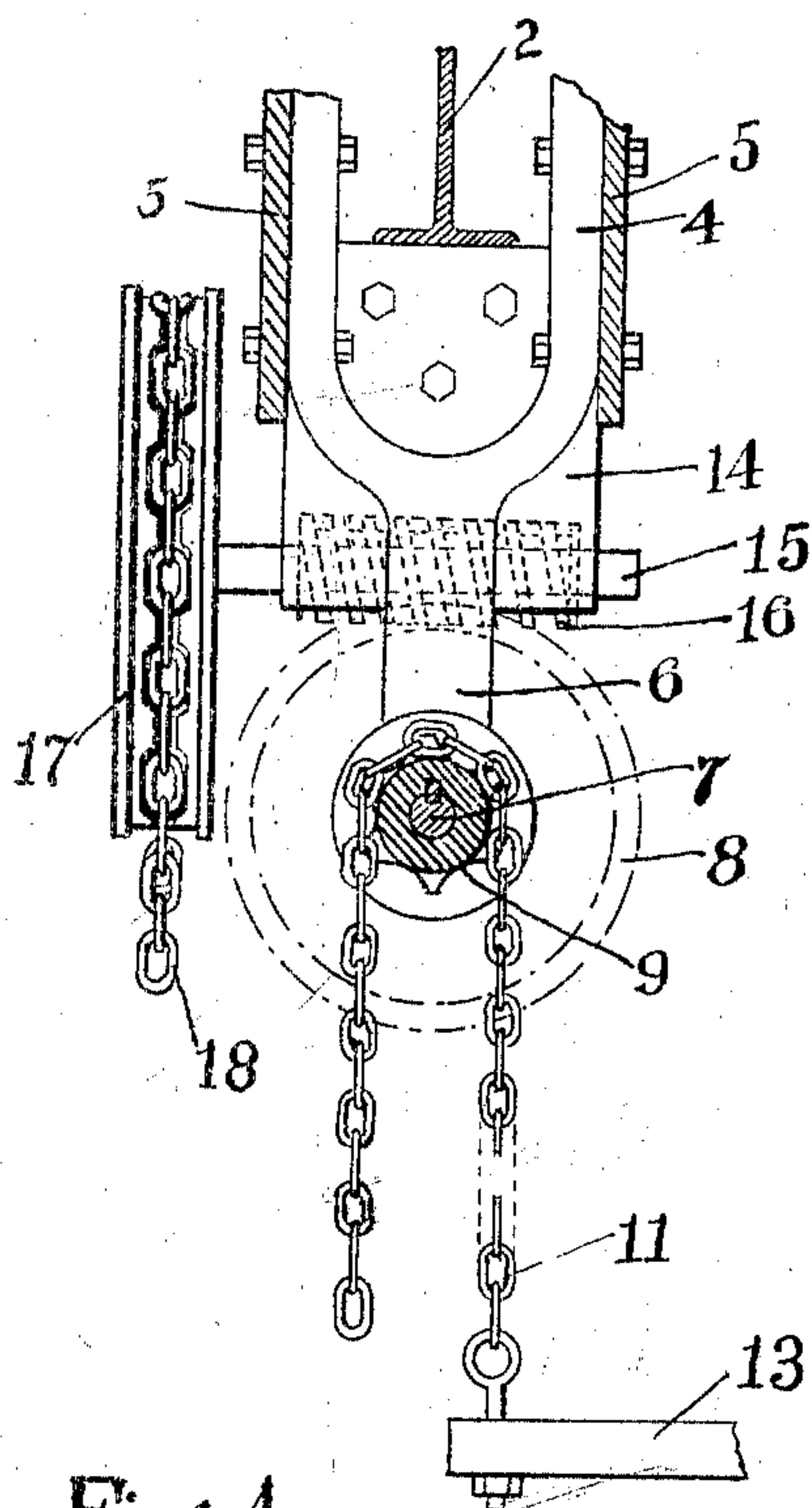


Fig. 4.

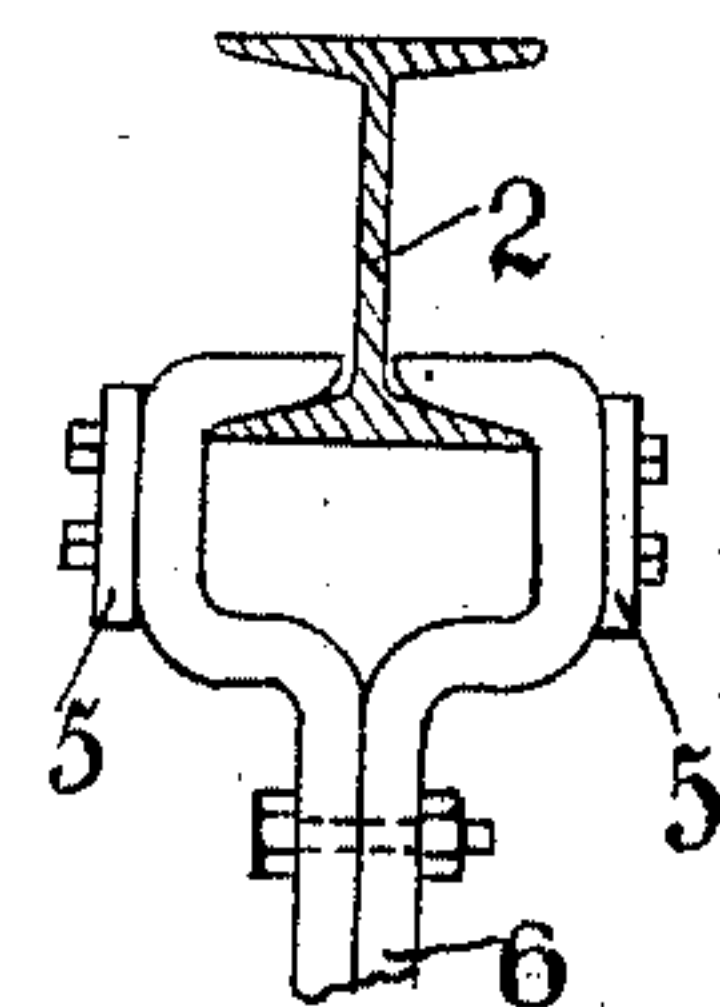


Fig. 5.

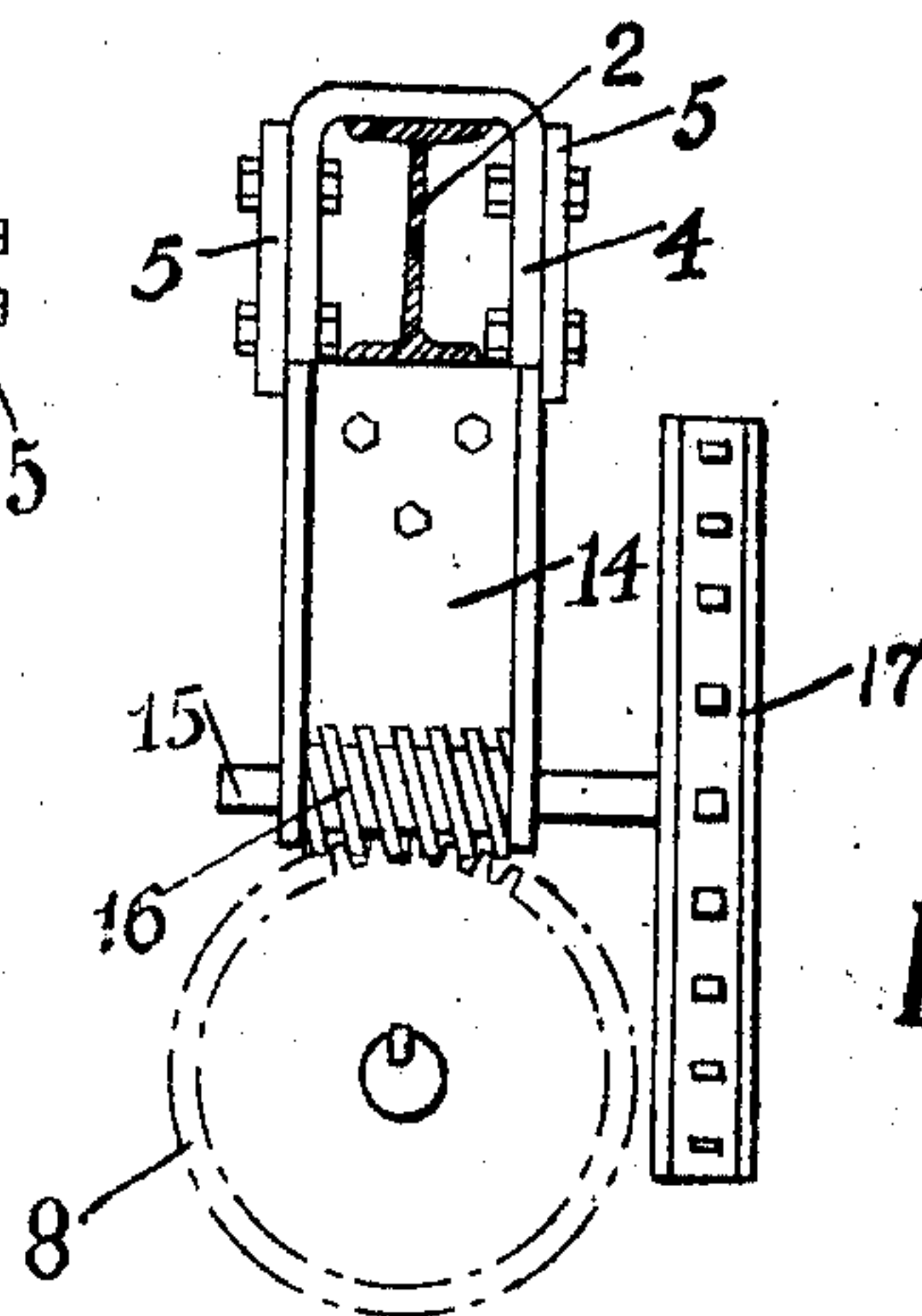


Fig. 3.

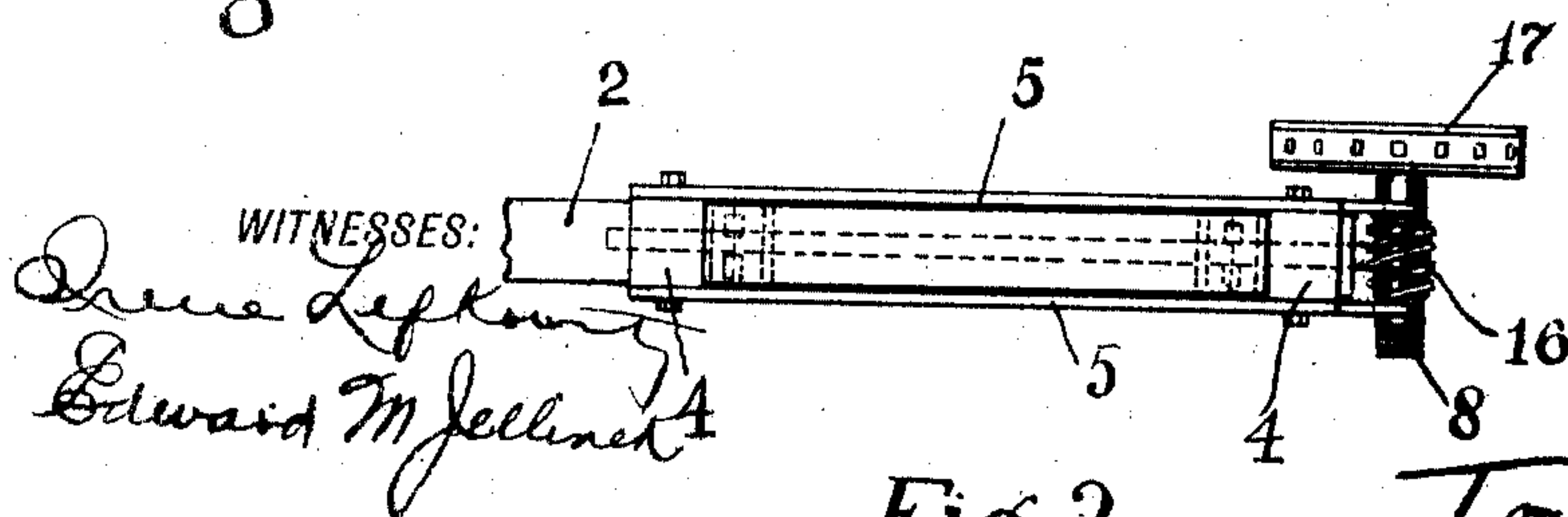


Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

DENISON P. CHESEBRO, OF NEW YORK, N. Y., ASSIGNOR TO NEW YORK SCAFFOLDING COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

SCAFFOLD-HANGER.

No. 927,946.

Specification of Letters Patent.

Patented July 13, 1909.

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To all whom it may concern:

Be it known that I, DENISON P. CHESEBRO, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Scaffold-Hangers, of which the following is a specification.

My invention relates to means for supporting and operating swinging scaffolds such as used for building up the walls of a structure after the metallic or other framework has been completed.

The main object of my invention is to simplify the construction and decrease the weight of devices of this character whereby they can be more readily handled.

A further object of my invention is to so construct the apparatus that additional stops to prevent accidental lowering of the scaffold platform, other than the winding mechanism, will not be necessary.

My invention particularly relates to such apparatus wherein the winding mechanism is supported above the scaffold platform and from which the said platform depends.

Heretofore in this type of scaffold apparatus it has been the practice to construct a large rectangular framework, within which the winding drums and operating mechanism are supported. This construction results in a very heavy and unwieldy apparatus besides necessitating the use of at least two string-pieces projecting from the building to support it.

By practicing my invention but one string-piece is required, which at its outer end telescopes within a frame of the supporting apparatus, the winding drums and operating mechanism being supported below the string-piece whereby any weight or strain will come directly on the said string-piece and not to one side thereof as in the case where a horizontal framework supported on two string-pieces is utilized.

My invention consists in the special constructions and combinations of parts hereinafter more particularly described and then specified in the claims.

In the accompanying drawings, Figure 1 diagrammatically illustrates the framework of a building having my invention in its preferred form secured thereto. Fig. 2 is a plan view of the supporting apparatus shown

in Fig. 1. Fig. 3 is an enlarged end view showing the winding mechanism. Fig. 4 is an enlarged section taken on the line XX Fig. 1 and looking in the direction of the arrow A. Fig. 5 illustrates a modification.

In the drawings, 1 indicates the columns and girders forming the framework of a building in the course of construction. A string-piece preferably consisting of an I beam 2 is detachably secured to one of the beams 1 by means of the straps 3 or otherwise and projects outwardly for a greater or less distance from the face of the framework, 1.

A frame preferably consisting of open end pieces 4 and side bars 5 secured to said end pieces is adapted to be slid over the projecting end of the string-piece 2 preferably so as to have the string-piece 2 encircled by said frame and by means of which the operating parts of my invention are supported.

6, 6' indicate hangers depending from the supporting frame and which might be integral with or secured to the end pieces 4 at either end of the frame. The ends of the hangers, 6, 6' are provided with suitable bearings in which a shaft 7 is journaled. The shaft 7 is preferably disposed parallel with the string-piece 2 and extends beyond the hanger 6, to which end a gear wheel 8 is keyed.

9, 10 indicate winding drums preferably in the form of sprocket wheels each securely fastened to the shaft 7 at or near the hangers 6 and 6'. Chains 11, 12 pass over the sprocket wheels 9, 10 and have one end of each secured to the scaffold platform 13 in any desired manner, the other ends of the chains being preferably permitted to hang free. By employing sprocket wheels and chains as shown, the supporting chains or cables are permitted to travel in a vertical line when raising and lowering the platform 13 in contradistinction to the varying angular line taken by a cable when used on a winding drum on which the cable or chain is wound a number of turns to take up for raising the platform although I do not limit myself to this specific form of winding drum.

14 indicates a bracket secured to the hanger 6 and carries a shaft 15 journaled therein. The shaft 15 is located transversely to the shaft 7 and has a worm gear 16 fixed thereon,

said worm gear being in mesh with the gear wheel 8. A sprocket or other suitable operating wheel 17 is fixed to the end of the shaft 15 and is provided with an endless chain or cable 18, which chain is sufficiently long to be engaged by an operator standing on the scaffold platform 13 when said platform is in its lowermost position.

The operation of the apparatus will be obvious. When the operator standing on the platform pulls the chain 18 the platform will be raised or lowered, according to which way he causes the sprocket wheel 17 to rotate, through the worm 16, gear wheel 8, shaft 7 and chains 11, 12.

By my invention the apparatus is greatly simplified and reduced in weight and also causes the weight and strain of the scaffold and articles or apparatus which it is supporting to be brought to bear on and suspended directly by the string-piece 2. Also by my invention additional stops or safety devices to prevent the scaffold dropping are dispensed with, as the platform cannot move either up or down until the sprocket wheel 17 is rotated, as the worm 16 and gear 8 form a positive lock as is well known.

If desired, the hangers might be secured to the string-piece as shown in the modification Fig. 5 in which the supporting part for the hanger would not entirely encircle the string-piece, but would nevertheless be supported thereby and it will be understood that where the term "frame" is used herein is meant that part of the device which engages the string-piece and from which the hangers 6 depend.

What I claim as my invention is:

1. In a scaffold hanger, the combination of a frame adapted to encircle a string-piece projecting from a building, supports depending from said frame, a shaft secured to said supports and disposed parallel with said string-piece, parallel winding drums mounted on said shaft, cables or chains secured to the scaffold platform and passing around said drums and means whereby said

shaft may be rotated from said scaffold platform.

2. In a scaffold hanger, the combination with a string-piece projecting from the framework of a building and secured thereto, of a frame through which the outer end of said string-piece passes, hangers depending from said frame and said string-piece, a shaft supported by said hangers at a distance below said string-piece, sprocket wheels on said shaft, chains secured to the scaffold platform and passing over said sprocket wheels and means whereby said shaft may be rotated from said scaffold platform.

3. In a scaffold hanger, the combination of a frame adapted to engage and be supported by a string-piece projecting from a building, hangers depending from said frame, a shaft secured to said hangers, parallel winding drums secured to said shaft, cables or chains secured to the scaffold platform and passing around said drums, a gear-wheel secured to said shaft, a worm wheel in mesh with said gear wheel and means whereby said worm wheel may be rotated from said scaffold platform.

4. In a scaffold hanger, the combination of a frame adapted to encircle a string-piece projecting from a building, hangers depending from said frame, a shaft supported by said hangers, sprocket wheels secured to said shaft, chains secured to the scaffold and passing over said sprocket wheels, a gear wheel secured to said shaft, a worm wheel mounted on one of said hangers and in mesh with said gear wheel and a sprocket wheel and chain for actuating said worm wheel.

Signed at New York in the county of New York and State of New York this 3d day of March A. D. 1909.

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Witnesses:

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