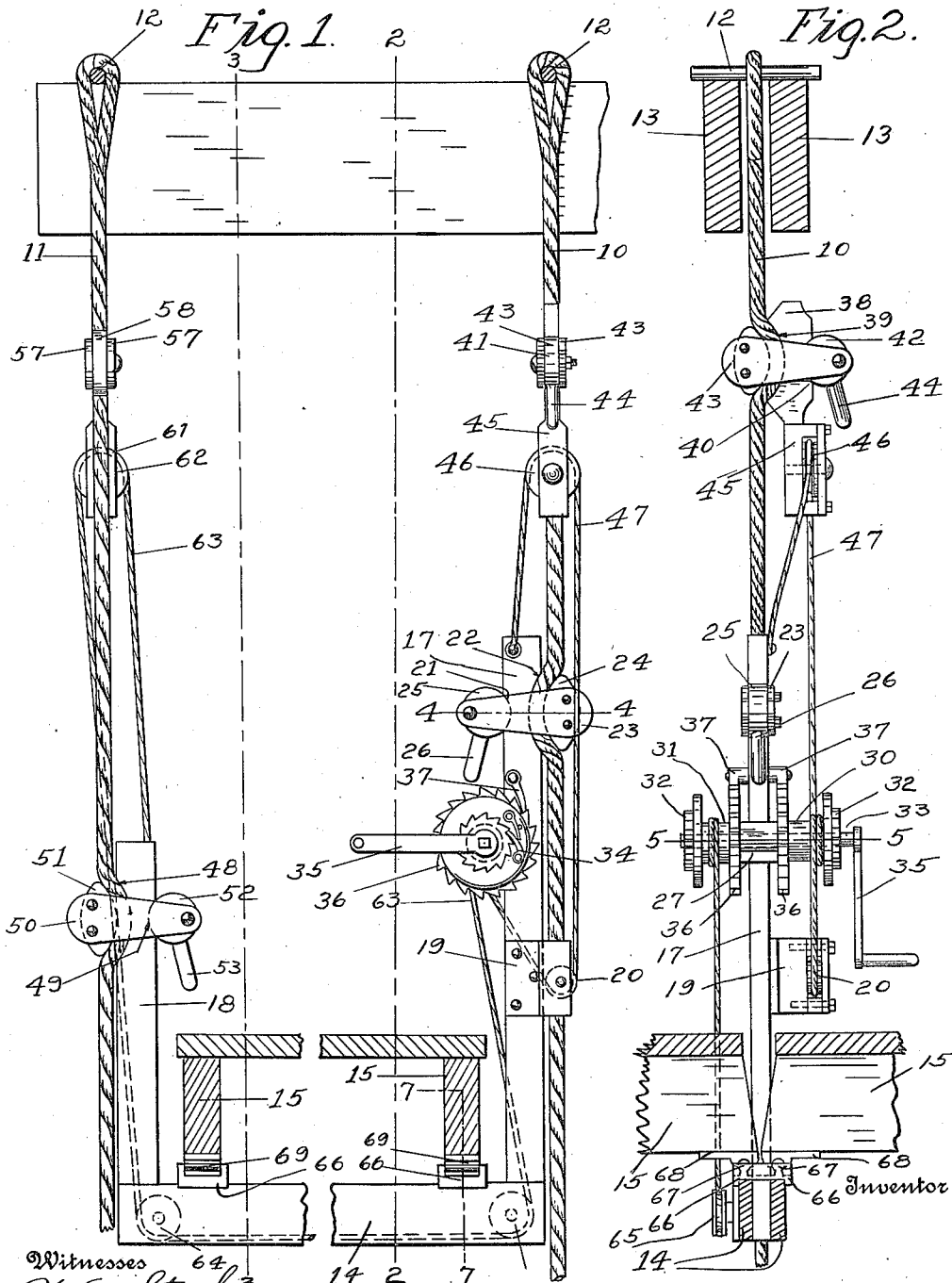


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SCAFFOLD.
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Patented Nov. 19, 1912.

2 SHEETS—SHEET 1.



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2 SHEETS-SHEET 2.

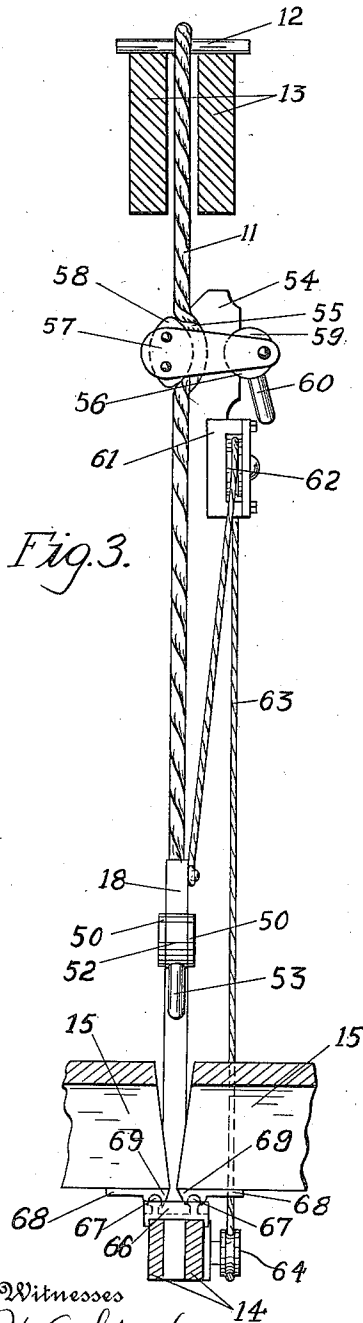


Fig. 3.

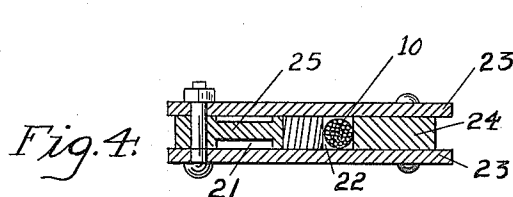


Fig. 4.

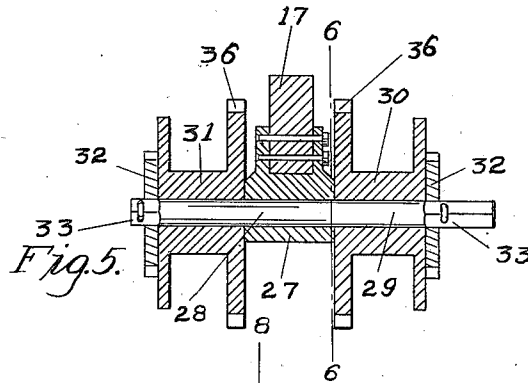


Fig. 5.

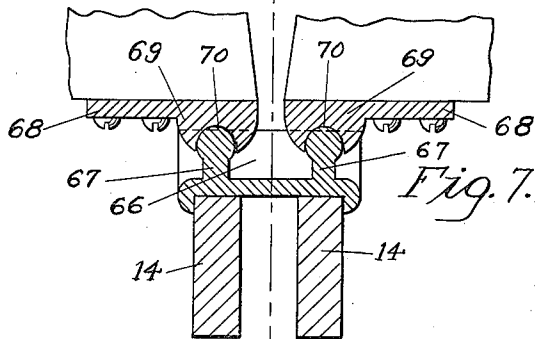


Fig. 7.

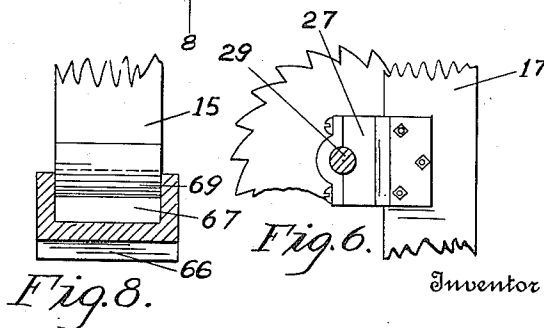


Fig. 8.

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SCAFFOLD.

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To all whom it may concern:

Be it known that I, ADOLPH FRED WALTHER, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Scaffolds, of which the following is a specification.

This invention relates to scaffolds which are suspended from the top of a house by means of thick cables, the scaffold being adjustably mounted upon the cables.

The principal object of this invention is to construct a scaffold so that a number of scaffolds may be connected with the same cables and which may be independently adjusted upon the cables. This is accomplished by having the scaffold provided with clutch mechanisms so that the scaffolds may be released from the cables and either raised or lowered to the desired point and then again connected with the cables so that the scaffolds will be held in the adjustable positions.

This invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a view of the scaffold partially in end elevation, and partially in cross section. Fig. 2 is a section along the line 2—2 of Fig. 1. Fig. 3 is a section along the line 3—3 in Fig. 1. Fig. 4 is a section along the line 4—4 of Fig. 1. Fig. 5 is a section along the line 5—5 of Fig. 2. Fig. 6 is a section along the line 6—6 in Fig. 5. Fig. 7 is a section along the line 7—7 of Fig. 1. Fig. 8 is a section along the line 8—8 of Fig. 7.

Referring to the accompanying drawings it will be seen that this invention comprises the cables 10 and 11 which are suspended from the upper portion of the building by means of the bars 12 which are carried by the beams 13. There are four cables provided, two outer cables 10 and two inner cables 11.

The scaffold comprises the cross bars 14 which support the longitudinally extending bars 15, the bars 15 carrying the platform 16. Standards 17 and 18 are carried by the cross bars 14 and carry the mechanism by means of which the scaffold is connected with the cables 10 and 11. Each of the standards 17 carries a plate 19 upon which there is mounted a pulley wheel 20 and has its upper end provided with the oppositely disposed cut-out portions forming the seats 21 and 22. A clamp is mounted upon the

upper portion of the standard and comprises side bars 23 which are connected by means of the block 24 at one end and by means of the cam 25 at the opposite ends. When the cam 25 is turned by means of its handle 26, the block 24 is drawn toward the standard so that the cable 10 will be forced into the seat 22. As the cam 25 is turned to a greater amount, the cable will be tightly gripped between the block 24, and seat 22, so that the scaffold will be securely held in place. A block 27 is carried by each standard 17 and is provided with a transversely extending opening 28 through which a shaft 29 passes. The shaft 29 extends to each side of the block 27 and has the drums 30 and 31 mounted upon its outer ends. The ratchet plates 32 are mounted upon the squared ends 33 of the shaft 29 and the drums each carry a spring pawl 34 which engages the ratchet plate 32 so that when the shaft 29 is turned by means of the handle 35, the drums will also be turned. The drums are provided with ratchet teeth which are engaged by the pawl 37 so that the drum will be held in an adjusted position after the line which is on the drum has been wound up. A block 38 has opposite edges cut to provide the seats 39 and 40 and is connected with the cable 10 by means of the block 41, and cam 42 which are carried by the bars 43. By turning the cam 42 by means of the handle 44, the cable 10 may be gripped or released as desired. A head 45 extends from the lower end of the block 38 and carries a pulley wheel 46. A cable 47 is connected with the upper end of each of the standards 17 and passes over the pulley wheel 46 down and around the pulley wheel 20 and up to the drum 30 upon which it is wound. Each of the standards 18 has its upper end portion cut to form the oppositely disposed seats 48 and 49. Side bars 50 carrying the block 51 and cam 52 are provided so that when the cam 52 is turned by its handle 53, the cable 11 will be clamped in the seat 48, thus holding the standard 18 at the adjusted position. A block 54 is provided with the oppositely disposed seats 55 and 56. Side plates 57 are connected by the block 58 and cam 59 so that when the cam 59 is turned by its handle 60, the block 54 will be held in an adjusted position. The block 54 carries a head 61 having a pulley wheel 62 mounted therein. A cable 63 is connected with the upper end of each stand-

ard 18 and is carried over the pulley wheel 62 down and around the pulley wheel 64 and around the pulley wheel 65 up to the drum 31 upon which it is wound. The cross bars 14 are connected by means of the plates 66 provided with the ribs 67. The longitudinally extending bars 15 are provided with the plates 68 having the enlarged ends 69. The ends 69 are provided with the grooves 70, which fit upon the ribs 67. It will thus be evident that the longitudinally extending bar 15 may be readily removed from the cross bars so that the scaffold may be more easily packed or transported.

15 In the operation of this device, the scaffold is connected with the cables 10 and 11 as described. When it is desired to raise the scaffold, the pawl 37 is turned so that it is out of engagement with the teeth 36 and the drum can then be unwound. The 20 cams 42 are then turned so that the blocks 38 and 54 will be released from the cables 10 and 11 and the blocks raised to the position desired, and the cams then turned so that the cables will be tightly gripped. The 25 pawls 37 are returned to their normal position so that they engage the teeth 36 and the cams 25 and 52 are turned so that the scaffold will be released from the cables 10 and 11 and supported by the cables 47 and 63. By turning the handle 35 the scaffold will be drawn up the cables for the desired amount. The cams 25 and 52 are then 35 turned so that the cable will be again gripped thus removing the strain from the cables 47 and 63 and returning the same to the cables 10 and 11. It is, of course, understood that the cables 47 and 63 are metallic cables, whereas the cables 10 and 11 are 40 formed of hemp or other rope. When it is desired to lower the scaffold, the blocks 38 and 54 are released and lowered to the desired point and then again connected to the cables 10 and 11. The lower clamps are

then released and by unwinding the drums 45 the scaffold may be lowered to the point desired and the lower clamps again connected with the cable. It will thus be obvious that a number of scaffolds may be connected with the same cables 10 and 11 one 50 above the other.

What is claimed is:—

1. In a scaffold a plurality of cables, a platform comprising cross bars, plates connecting certain of said cross bars, ribs extending from said plates, longitudinally extending bars, plates mounted upon said longitudinally extending bars and provided with enlarged ends having curved grooves in which said ribs are adapted to fit, a platform connecting said longitudinally extending bars, standards carried by said cross bars and means for connecting said standards with said cables.

2. A scaffold comprising a plurality of 65 cables, a platform, clamps connecting said platform with said cables, blocks carried by said platform, a shaft extending through each of said blocks, said shaft being provided with squared end portions, drums 70 mounted upon said shaft, ratchet plates mounted upon said squared portions of said shaft, a pawl carried by each of said drums and engaging said ratchet plates, pawls carried by said platform and adapted to engage said drums, clamps connected with 75 said cables, pulley wheels carried by said last-mentioned clamps and cables connected with said platform and passing around said pulley wheels and having their free ends 80 wound upon said drums.

In testimony whereof I affix my signature in presence of two witnesses.

ADOLPH FRED WALTHER.

Witnesses:

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