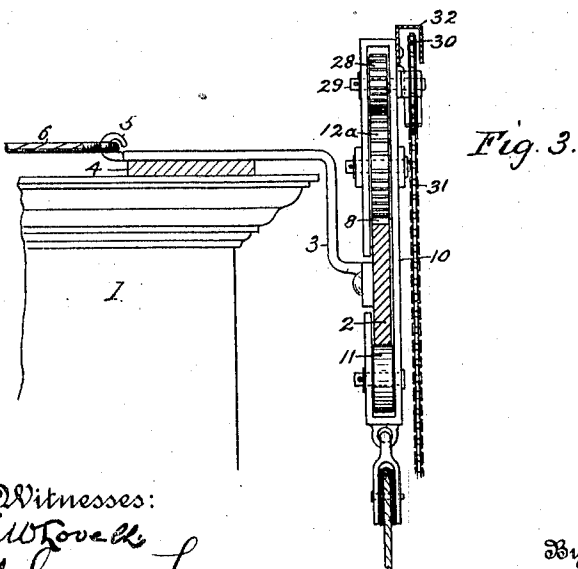
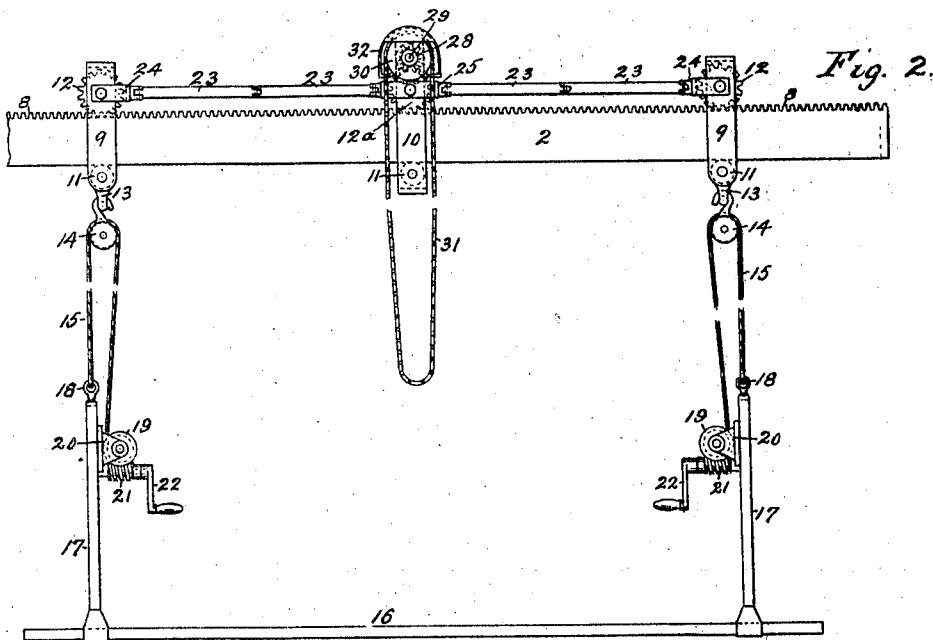
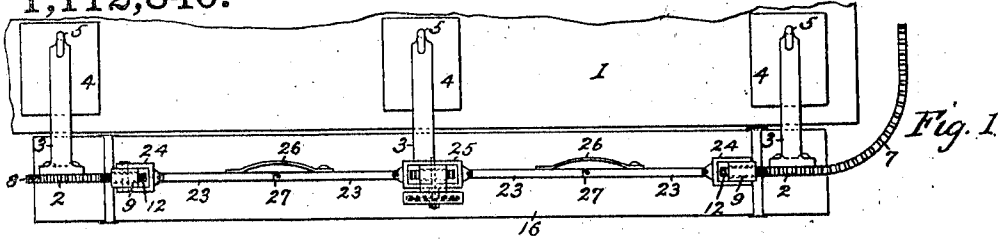


N. ROYACK.
SWINGING SCAFFOLD.
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1,112,840.

Patented Oct. 6, 1914.



Witnesses:
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UNITED STATES PATENT OFFICE.

NATHAN ROYACK, OF BROOKLYN, NEW YORK.

SWINGING SCAFFOLD.

1,112,840.

Specification of Letters Patent.

Patented Oct. 6, 1914.

Application filed June 10, 1914. Serial No. 844,216.

To all whom it may concern:

Be it known that I, NATHAN ROYACK, a subject of the Czar of Russia, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Swinging Scaffolds, of which the following is a specification.

The invention relates to improvements in swinging scaffolds designed for the use of painters and other artisans while at work upon the vertical sides of a building; and the object of the invention is to provide a suitable track and connections for supporting and moving the scaffold or working-platform whereby the latter may be readily shifted both vertically and horizontally by the workmen thereon to embrace the entire surface of the several walls of the building. And the invention further includes certain details of construction hereinafter set forth.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like characters of reference are used to designate like parts throughout the several views, and in which:

Figure 1 illustrates a plan of a portion of a building having a section of a track temporarily secured thereon and provided with a movable swinging-scaffold as embodied in the present invention; Fig. 2 is a side elevation of the device; and Fig. 3 is an enlarged transverse section of the track, showing a means of its support from a building and also the power-carriage for effecting the movement of the swinging-scaffold along the track.

In the drawings, numeral 1 designates a portion of a building, to which is temporarily secured by any approved means a track 2. As herein shown, the track is provided with a plurality of supporting-brackets 3, one end of the latter being fixed to the track while the opposite end rests upon bearing-blocks 4, supported upon the roof of the building. Attached to the eyes 5 of the brackets, are ropes 6 for securing the brackets in any well-known manner. The track, with suitable curved portions 7 and the conveniently disposed supporting brackets 3, is adapted to be extended in length to embrace one or all sides of the building, and on its upper edge the track is formed with teeth 8, constituting a rack for the engagement of toothed gearing.

Surrounding the track and movable thereon are similarly arranged frames 9 and 10, the former constituting a pair of hanger-heads and the latter a power-carriage. At the rear side, the several frames are provided with a clearance-space for the foot of the fixed brackets 3, and at their lower ends the frames are provided with rotatable guide-rollers 11, which engage the lower edge of the track and vertically position the same thereon in conjunction with the gears 12 and 12^a, rotatably mounted in the upper end of the frames and engaging the teeth on the upper edge of the track. At the lower ends of the hanger-heads 9, eyes 13 are provided for the reception of a hook formed on the pulley-blocks 14, the latter carrying flexible cables or chains, 15, arranged to adjustably support the scaffold or working-platform 16. Uprights 17 are fixed to the platform and are provided at their upper ends with eyes 18 for the connection of one end of the cables 15, the opposite end of the latter being coiled around and secured to the drums 19, mounted for rotation in the bracket-bearings 20, fixed to the uprights 17. Motion is imparted to the drums in well-known manner by worm-wheels fixed on the drum-shafts and engaged by worms 21, mounted in the bracket-bearings, and actuated by the hand-cranks 22, the whole forming winches of common construction, which may be readily operated to adjust the vertical height of the working-platform.

The hanger-heads 9 and the power-carriage 10, are connected together for horizontal movement along the track by the double pair of links 23, pivotally jointed together and to the straps 24 and 25, respectively fixed to said heads and carriage. To effect the normal alinement of the connection-links 23 for maintaining a substantially uniform spacing of the hanger-heads upon the track, a leaf-spring 26 is fixed at one end to one of the links of each pair, while its opposite end engages the opposite link with sufficient pressure to yieldingly urge a contact between the adjacent square portions of the pivoted joints 27.

For imparting movement to the power-carriage 10, a relatively small gear 28 is fixed upon the shaft 29 and arranged to engage the larger gear 12^a which in turn engages the rack formed on the upper edge of the track, as heretofore described. The shaft 29 is rotatably mounted in the frame of the

carriage and is fixably provided at its free
 outer end with a chain-wheel 30, provided
 with a hand-chain 31, the latter being guided
 in its movement adjacent the wheel by the
 5 fork 32, fixed to the upper end of the frame.
 By the operation of the hand-chain, the gear
 wheels 28 and 12^a may be rotated and the
 carriage and its connected hanger-heads and
 scaffold propelled along the full length of
 10 the track in either direction, and in passing
 around the curved portion of the latter the
 springs 26 will yield and permit a lateral
 swinging movement of the connection-links
 23 about their pivoted joints, and in return-
 15 ing or passing to a straight portion of the
 track the springs will cause the link-connec-
 tions to again assume their normal straight-
 line position and effect the substantially uni-
 form spacing of the hanger-heads upon the
 20 track.

As thus constructed, it will be evident that
 the workmen upon the scaffold may readily
 operate the mechanism therefrom, and shift
 the same both vertically and horizontally to

embrace the entire surface of the several 25
 walls of the building.

What I claim as my invention and desire
 to secure by Letters Patent, is:

In a swinging scaffold, the combination
 of a track having straight and curved por- 30
 tions, hanger-heads movable along said track,
 a scaffold suspended from said hanger-heads,
 a power-carriage movable along said track
 and disposed between said hanger-heads, con-
 nections between said power-carriage and the 35
 hanger-heads comprising pivotally jointed
 links arranged for lateral movement, springs
 connected to said links and yieldingly con-
 trolling said lateral movement, and actuat-
 ing means for said power-carriage engaging 40
 said track.

Signed at New York, in the county of New
 York and State of New York, this eighth
 day of June, A. D. 1914.

NATHAN ROYACK.

Witnesses:

HERMAN LAZARUS,
 HERMAN ROKUSON.