

July 21, 1925.

1,546,698

L. ZOLL ET AL

FOLDING OR EXTENSION SCAFFOLD

Filed May 2, 1922

4 Sheets-Sheet 1

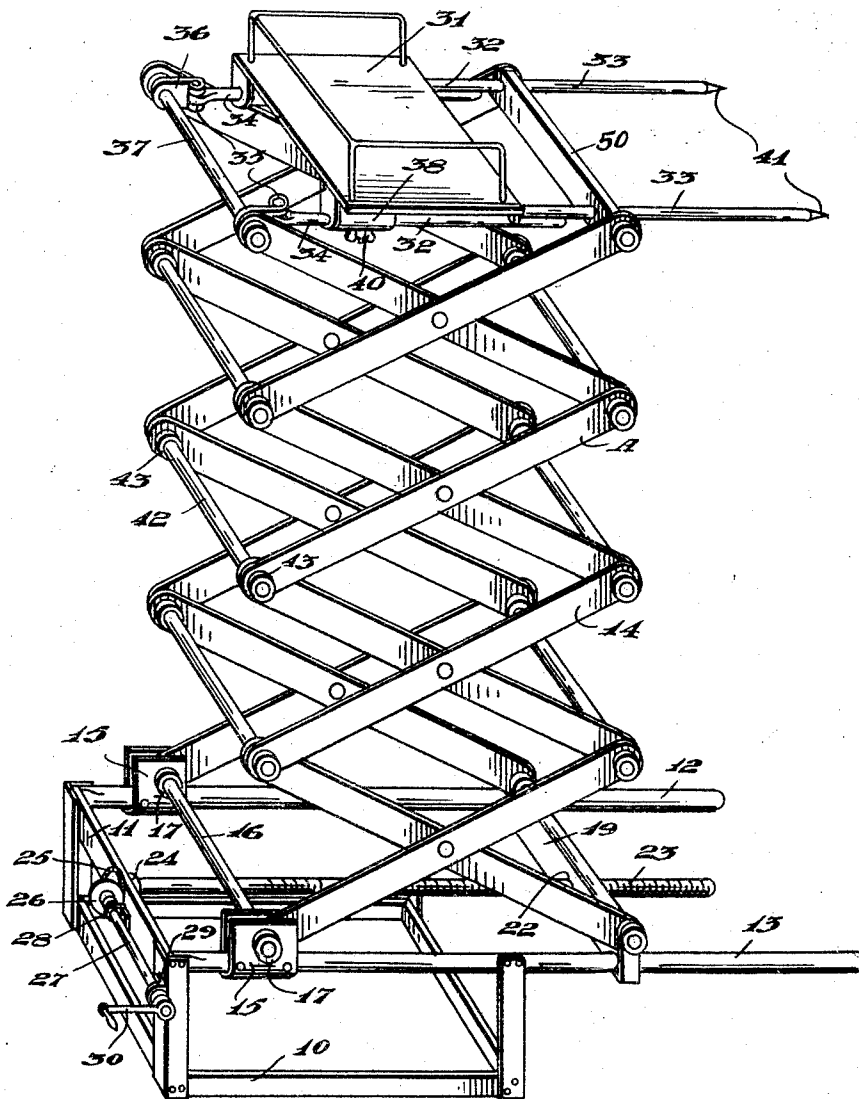


Fig. 1.

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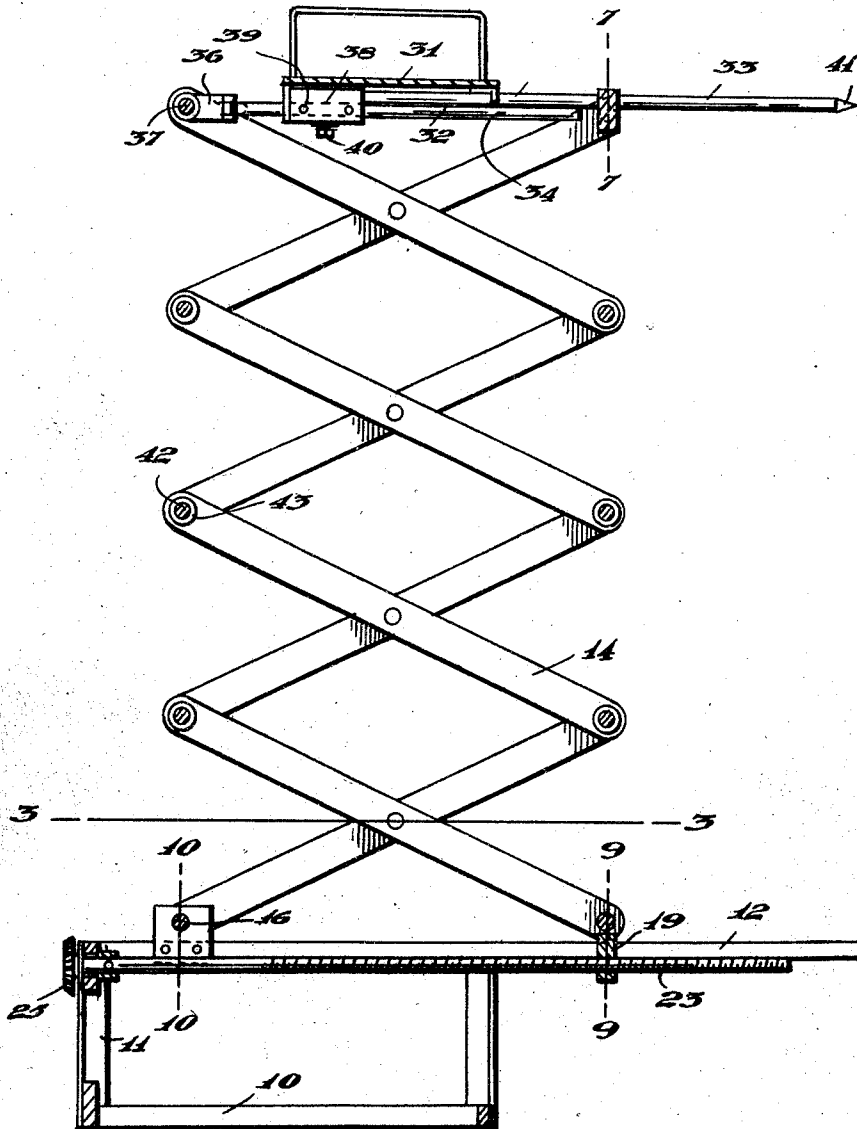


Fig. 2.

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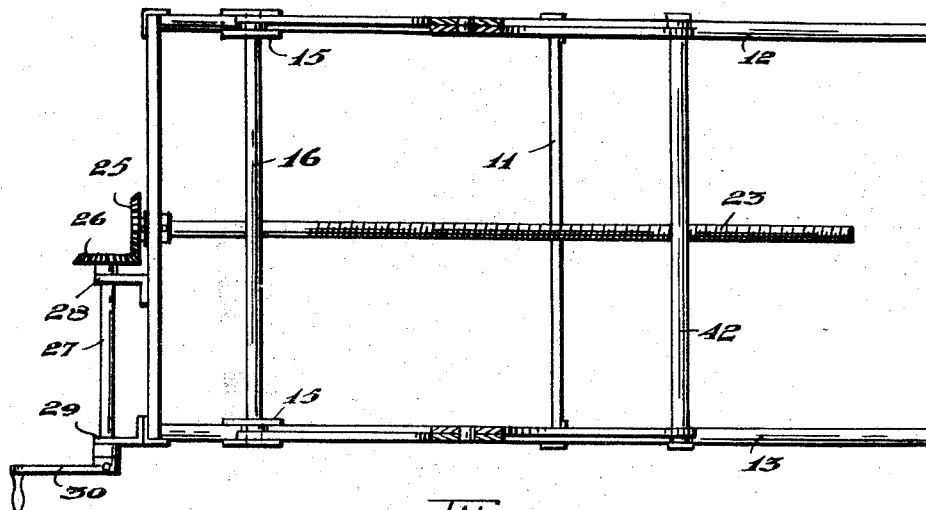


Fig. 3.

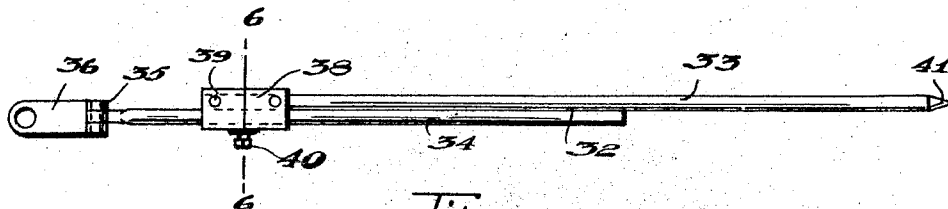


Fig. 5.

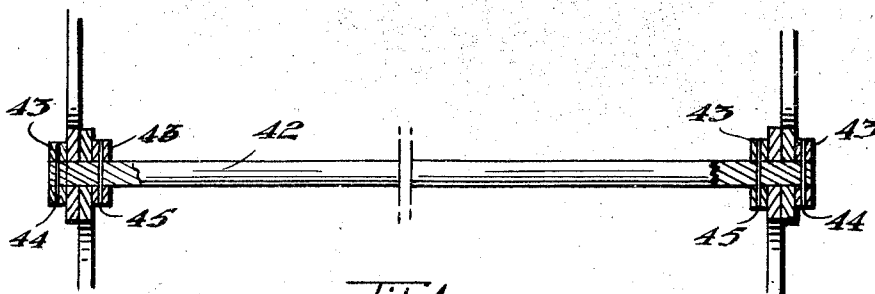


Fig. 4.

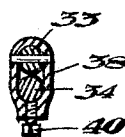


Fig. 6.

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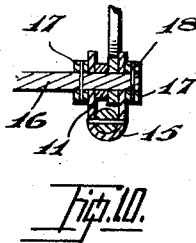
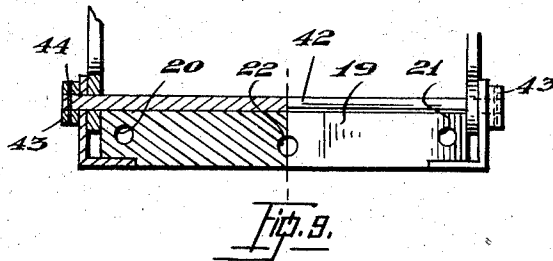
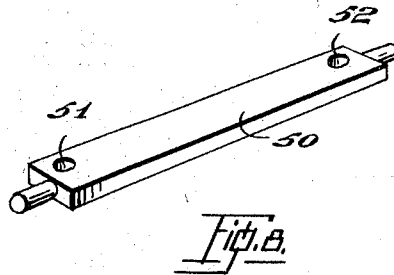
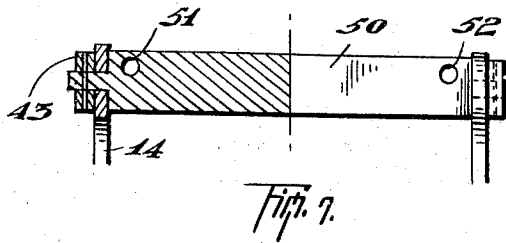
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Filed May 2, 1922

4 Sheets-Sheet 4



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Patented July 21, 1925.

1,546,698

UNITED STATES PATENT OFFICE.

LOWIS ZOLL AND JOHN GOTTSCHALL, OF VANGUARD, SASKATCHEWAN, CANADA.

FOLDING OR EXTENSION SCAFFOLD.

Application filed May 2, 1922. Serial No. 557,347.

To all whom it may concern:

Be it known that we, LOWIS ZOLL and JOHN GOTTSCHALL, both subjects of the King of Great Britain, of Vanguard, in the Province of Saskatchewan and Dominion of Canada, have invented certain new and useful Improvements in Folding or Extension Scaffolds, of which the following is a specification.

10 This invention relates to folding or extension scaffolds and has for its objects to provide an improved means whereby a platform may be suitably raised to the desired height with a minimum amount of effort.

15 Further objects are to provide a scaffold having an adjustably mounted platform.

Further objects are to provide an improved extension scaffold which is simple in construction, not liable to go out of repair and generally to adapt the several parts to better perform the functions required of them.

In the drawings:

25 Figure 1 is a perspective view of the improved extension scaffold.

Figure 2 is a vertical section through the same.

Figure 3 is a cross section on the line 3—3 of Figure 2.

30 Figure 4 is a cross section showing one of the connections of the links used in the lazy-tongs mechanism.

Figure 5 is a detail view showing in elevation one of the adjustable arms.

35 Figure 6 is a cross section on the line 6—6 of Figure 5.

Figure 7 is a detail partly in section and partly in elevation taken on the line 7—7 of Figure 2.

40 Figure 8 is a perspective view of the block engaging the adjustable rods.

Figure 9 is a detail, partly in section, and partly in elevation taken on the line 9—9 of Figure 2.

45 Figure 10 is a fragmentary section on the line 10—10 of Figure 2.

In the drawings:

A represents the improved extension scaffold comprising a base 10 which is formed of a skeleton body portion 11 on which are mounted two rods 12 and 13. A lazy-tongs mechanism 14 is provided which has two of its lower links provided with U shaped clamps 15 through which a shaft 16 extends. The shaft 16 also extends through the links of the lazy-tongs mechanism and is

secured thereto by means of washers or collars 17 which are held on the ends of the shaft by means of cotter pins 18. The set of links pivotally connected to the links provided with the U shaped members 15 carries a block 19 which has two orifices 20 and 21 through which the rods 12 and 13 extend. The block 19 is provided at its central part with a threaded orifice 22 which is engaged by a threaded shaft 23 journaled in a bearing 24 on the skeleton frame 11 and carrying at its outer end a bevel gear 25 in mesh with a bevel gear 26 carried by a shaft 27 journaled in the bearings 28 and 29 and provided with an operating crank 30. The upper end of the lazy-tongs mechanism 14 is provided with a platform 31 mounted on a pair of adjustable arms 32. The arms 32 are formed of two portions 33 and 34, the portion 34 being pivotally connected as at 35 to a member 36 which is engaged by a shaft 37 carried by a set of links of the lazy-tongs mechanism 14. The portions 33 of the adjustable arms 32 are connected to the portion 34 thereof by means of sleeves 38 secured as at 39 to the portions 33 and loosely engaging the portions 34 of the arms. The sleeves and portions 33 of the arms are designed to be secured to the portions 34 thereof by means of a set screw 40 extending through the sleeve 38. If desired, the ends of the portions 33 of the arms 32 may be pointed as at 41 in order to engage the structure along which the scaffold is extended.

The connection between the sets of links of the lazy-tongs mechanism may be suitably made by means of a shaft 42 engaging the links and securely held thereon by means of washers 43 and 44 on either side of the links secured to the shaft by means of cotter pins 44 and 45.

The portions 33 are designed to be supported by means of a block 50 engaged by one of the sets of links of the lazy-tongs mechanism and which is provided with orifices 51 and 52 slidably engaging the portions 33.

When this improved extension scaffold is used, the lazy-tongs mechanism 14 is raised in order to raise the platform 31 through the operation of the crank 30 which actuates the bevel gears 25 and 26 and transmits a rotary motion to the shaft 23, which being in threaded engagement with the orifice formed in the block 19 will draw the block 19 along

its shank and thus raise the mechanism 14 and the platform 31 which is carried by the mechanism.

5 In order to lower the scaffold, the movement of the crank 30 is reversed and the block 19 being pushed away from the shaft 16 will lower the platform 31. It will be obvious that the shaft 23 being in threaded engagement with the block 19, the weight of
10 the platform 31 would not be sufficient to cause the shaft 23 to rotate in the orifice 22 and therefore the extension scaffold is automatically locked in raised or lowered position.

15 As many changes could be made in the above construction and many widely different embodiments of our invention within the scope of the claim, constructed without departing from the spirit or scope thereof, it is intended that all matter contained in the
20 accompanying specification and drawings shall be interpreted as illustrative and not in a limiting sense.

25 It is evident that the adjustable arms 32 could also be mounted at the junction of any of the pairs of links of its lazy-tongs

mechanism through the medium of similar brackets 36. Also any power can be used to operate the lazy-tongs mechanism if desired in lieu of the hand power shown 30 and described.

What we claim as our invention is:

A device of the character described, comprising in combination with a lazy-tongs mechanism, a pair of parallel bars hingedly 35 mounted thereon, a platform, a pair of sleeve members secured to the underside of said platform, and adjustably secured on said bars, a second pair of bars pointed at the outer ends thereof, and rigidly secured in 40 the sleeve members above the first pair of bars, and adapted to engage with a wall or the like.

In witness whereof we have hereunto set our hands in the presence of two witnesses 45 this 20 day of April, 1922.

LOWIS ZOLL.
JOHN GOTTSCHALL.

Witnesses:

GEORGE N. ORMSTEAD,
JAMES MCGILVAY.