J. D. RUPP.

FOLDING SCAFFOLD.

APPLICATION FILED SEPT. 26, 1919.

1,377,095.

Patented May 3, 1921.

2 SHEETS—SHEET 1.

FIG. 1.

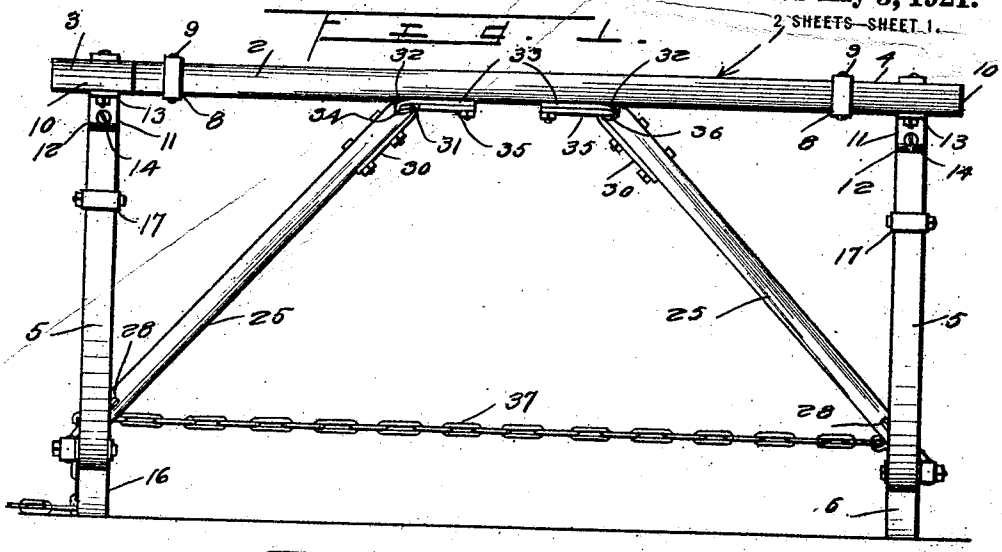


FIG. 2.

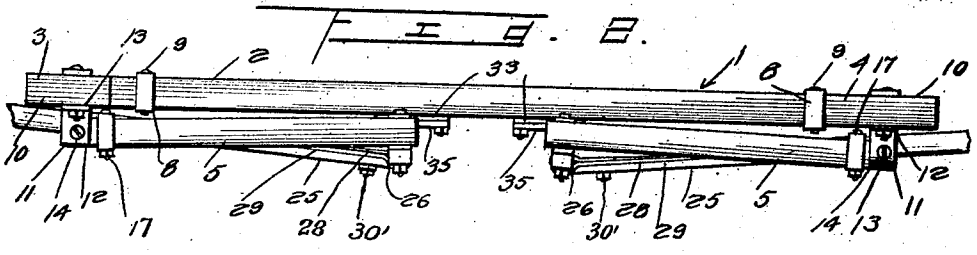
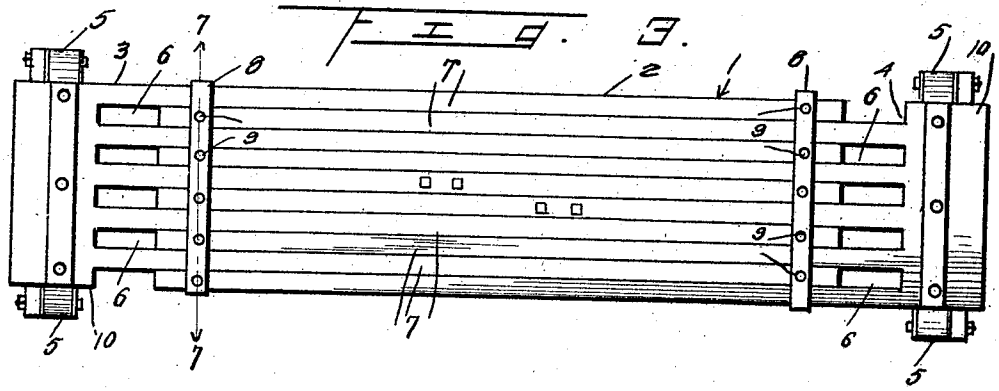


FIG. 3.



Inventor

J. D. Rupp.

By W. Randolph Jr.

Attorney

J. D. RUPP.

FOLDING SCAFFOLD.

APPLICATION FILED SEPT. 26, 1919.

1,377,095.

Patented May 3, 1921.

2 SHEETS—SHEET 2.

FIG. 4.

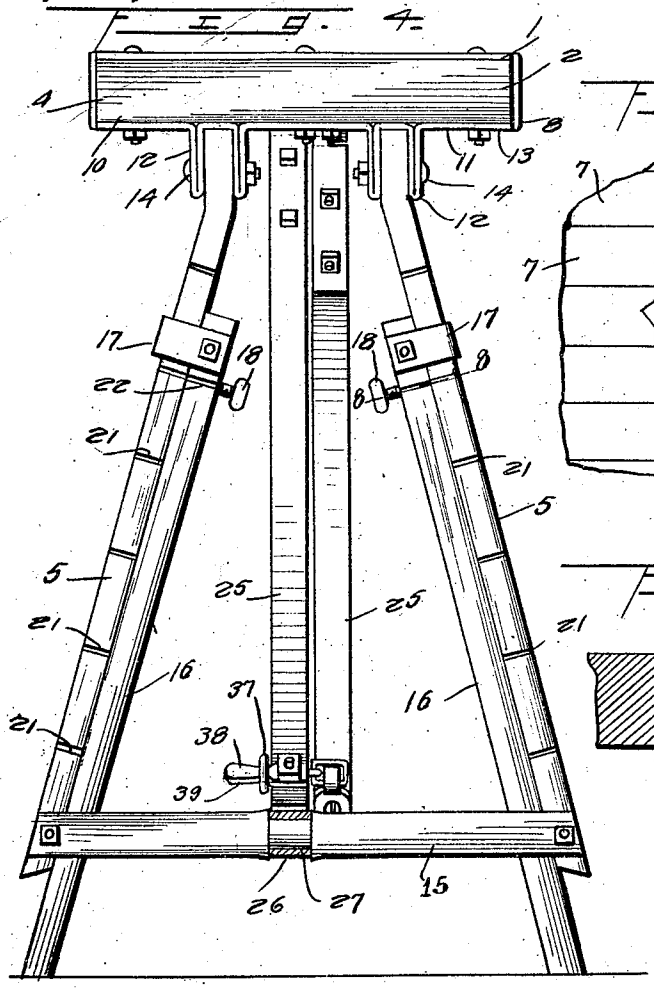


FIG. 5.

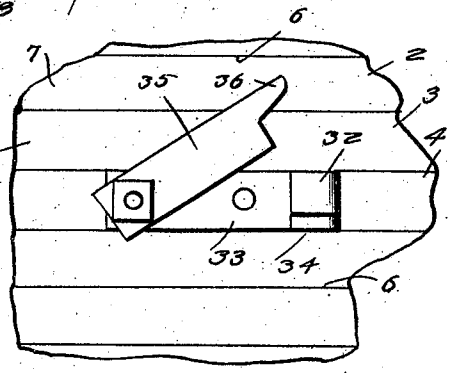


FIG. 6.

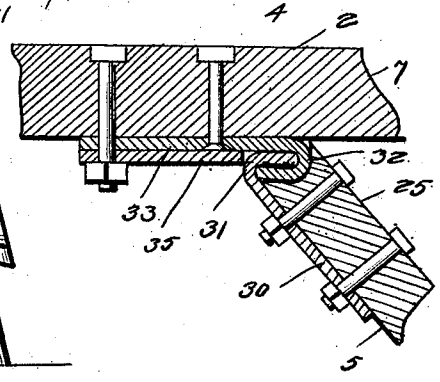


FIG. 7.

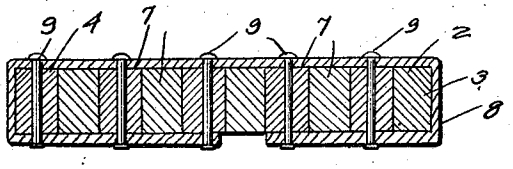
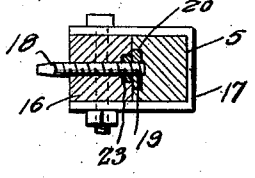


FIG. 8.



Inventor

J. D. Rupp.

By A. Randolph Jr., Attorney

UNITED STATES PATENT OFFICE.

JOHN D. RUPP, OF WESTBROOK, MINNESOTA.

FOLDING SCAFFOLD.

1,377,095. Specification of Letters Patent. Patented May 3, 1921.

Application filed September 26, 1919. Serial No. 326,430.

To all whom it may concern:

Be it known that I, JOHN D. RUPP, a citizen of the United States, residing at Westbrook, in the county of Cottonwood and State of Minnesota, have invented certain new and useful Improvements in Folding Scaffolds; and I 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.

This invention relates to scaffolds, and the primary object of the invention is to provide an improved scaffold which can be readily folded into a compact form so that the same can be readily carried and stored in a small space.

Another object of the invention is to provide an improved scaffold which can be adjusted to various heights and lengths, so that the same can be readily used for the desired work.

A still further object of the invention is to provide an improved folding and adjustable scaffold which is durable and efficient in use, one that is simple and easy to manufacture, and one that can be placed upon the market at a reasonable cost.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more fully described, claimed and illustrated in the accompanying drawings, forming a part thereof, in which:

Figure 1 is a side elevation of the improved scaffold, in operative position.

Fig. 2 is a similar view, showing the scaffold in its collapsed position.

Fig. 3 is a top plan view of the scaffold.

Fig. 4 is an end elevation of the improved scaffold.

Fig. 5 is an enlarged fragmentary bottom plan view of the scaffolding showing the means for locking the braces in position.

Fig. 6 is a detail section illustrating the connection of a brace to the base of the scaffold.

Fig. 7 is a transverse section taken on the line 7—7 of Fig. 3.

Fig. 8 is a detail section through one of the legs, taken on the line 8—8 of Fig. 4.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the numeral 1 generally indicates the improved scaffold, which includes the base 2 formed of a pair of slidably connected sections 3 and 4 and the supporting legs 5.

The sections 3 and 4 are each preferably formed from a single plank and are provided with a plurality of parallel arranged longitudinally extending slots 6, which end short of the outer ends of the base and provide a plurality of interfitting sliding fingers 7. The inner ends of each of the sections 3 and 4 carry guide straps 8, which extend transversely across the sections and are then bent downwardly and inwardly into engagement with the lower surface of the sections and the same are held in place by suitable fastening elements 9 which extend through the fingers 7 of their respective sections. The guide straps 8 form means for connecting the sections 3 and 4 together and permit the same to be adjusted to the desired length.

The slots 6 terminating short of the sections provide a solid hand portion 10, the lower surface of which carries the brackets 11 for the reception of the legs 5. The brackets 11 carried by the outer ends of the sections, are preferably formed from a single strip of material bent to form the U-shaped yokes 12 and the outstanding attaching portions 13. The upper terminals of the legs 5 are positioned in the U-shaped yokes 12 and held in place by pivot pins 14. The legs 5 extend downwardly from the U-shaped yokes in diverging relation to each other, so as to form a relatively wide supporting base and the lower ends of the legs are connected by a transversely extending brace bar 15. It can be seen that the upper terminals of the legs can readily be swung on their pivots 14 into engagement with the lower surface of the sections 2 and 3 and thus form a very compact structure.

The legs 5 each include a sliding section 16, by means of which the legs can be adjusted to the desired length, so as to adjust the height of the scaffold and each of the

sections 16 carries a spaced U-shaped yoke 17, which forms a guide for receiving the leg 5. The sections 16 are held in their adjusted position by means of set screws 18 which are carried by the sections 16 and which are adapted to extend into the spaced sockets 19 formed in the metallic strips 20 carried by the inner surface of the legs 5. The legs 5 are provided with markings 21, in alinement with the sockets 19, and the sliding section 16 carries a pointer or the like in alinement with the set screw 18 and thus when the pointer 22 is in alinement with any one of the markings 21, the user of the scaffold can at once see that the set screw is in alinement with the socket and can be threaded into the same. The inner ends of the set screws have nuts thereon which fit into recesses on the inner faces of the extension members 16.

Diagonally and inwardly extending braces 25 are carried by the brace beams 15 so as to hold the legs in their extended position and the central portion of the braces 15 is provided with a reduced rounded portion 26, which rotatably receives a split collar 27, having the outwardly extending feet 28 which are positioned in the slotted end 29 of the diagonally extending braces 25. A suitable bolt 30′ extends through the brace and feet for holding the brace in position. The inner end of the brace has a plate 30 secured thereto which is provided with a reduced hooked end 31 which is adapted to engage the hook 32, formed on the plate 33 and the latter is secured to the central finger of the section pivotally supporting the brace bar. One portion of the hook 32 is provided with a closed end 34 so that the hook 31 can only be slid into engagement with the hook 32 in one direction, and the plate 33 carries a pivoted member 35 having a reduced end 36 which is adapted to engage in the hook 34 and hold the hook 31 against accidental displacement.

A link chain 37 is carried by the lower end of one of the diagonal braces 25 and is secured to the bolt which holds the diagonally extending brace in position on the collar 27 and this chain is adapted to extend from one brace to the other, so as to form an additional means for preventing the lower terminals of the legs from spreading when the scaffold is in its complete extended position and the opposite diagonally extending brace carries a link chain engaging member 38, which includes a shank 39 carried by the connecting bolt of the diagonally extending brace and collar 27 having an enlarged flat head which is adapted to be extended into any one of the links to hold the same against movement. To fold the device, the braces 25 are detached from the base and the legs are folded against said base as illustrated in Fig. 2. The legs 5 are made as short as possible by the adjustment of the sliding sections 16 before they are folded.

From the foregoing description, it can be seen that an improved scaffold is provided, which can be readily adjusted to the desired height and length and can be readily folded and stored in a compact space.

In practice, I have found that the form of my invention illustrated in the accompanying drawings and referred to in the above description, as the preferred embodiment, is the most efficient and practical; yet realizing the conditions concurrent with the adoption of my device will necessarily vary, I desire to emphasize that various minor changes in details of construction, proportion and arrangement of parts may be resorted to, when required without sacrificing any of the advantages of my invention as set forth.

What I claim as new is:

1. A folding scaffold of the class described including a pair of sections having outer solid ends and inwardly extending interfitting parallel spaced fingers, guide brackets carried by the inner ends of the fingers, depending U-shaped brackets carried by the lower surface of the solid portion, legs pivotally mounted in said U-shaped members, transverse bars secured to the lower terminals of the legs, adjustable sections carried by said legs, and diagonally extending braces pivotally carried by said transverse brace bars and arranged to detachably engage the lower surface of the first mentioned sections, as and for the purpose specified.

2. A folding scaffold of the class described including a pair of slidably connected sections, pivoted legs carried by the outer ends of the sections, longitudinally extending metallic plates carried by the inner surface of the legs, said plates having a plurality of equidistantly spaced sockets formed therein, spaced U-shaped guide yokes carried by the legs, sliding sections mounted in said yokes, set screws carried by said sliding sections and arranged to engage in any one of said sockets, said legs having graduations formed thereon showing the position of said sockets, and a pointer carried by the last mentioned sections adjacent to the set screws, as and for the purpose specified.

3. In a device of the class described, a pair of slidable connecting sections, pivoted legs carried by the outer ends of the sections, transversely extending brace bars secured to the lower ends of the legs, a pivoted diagonally extending brace carried by the brace bar, a hook secured to the free ends of the braces, a coöperating hook carried by the lower surface of each one of the sections, having one end of the same closed,

the hook on the diagonally extending brace being arranged to fit in the hook carried by the section, and a pivoted catch arranged to engage the hook carried by the section to prevent the accidental displacement of the hook carried by the brace, as and for the purpose specified.

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

JOHN D. RUPP.

Witnesses:
A. HAYS,
WM. KNUTSON.