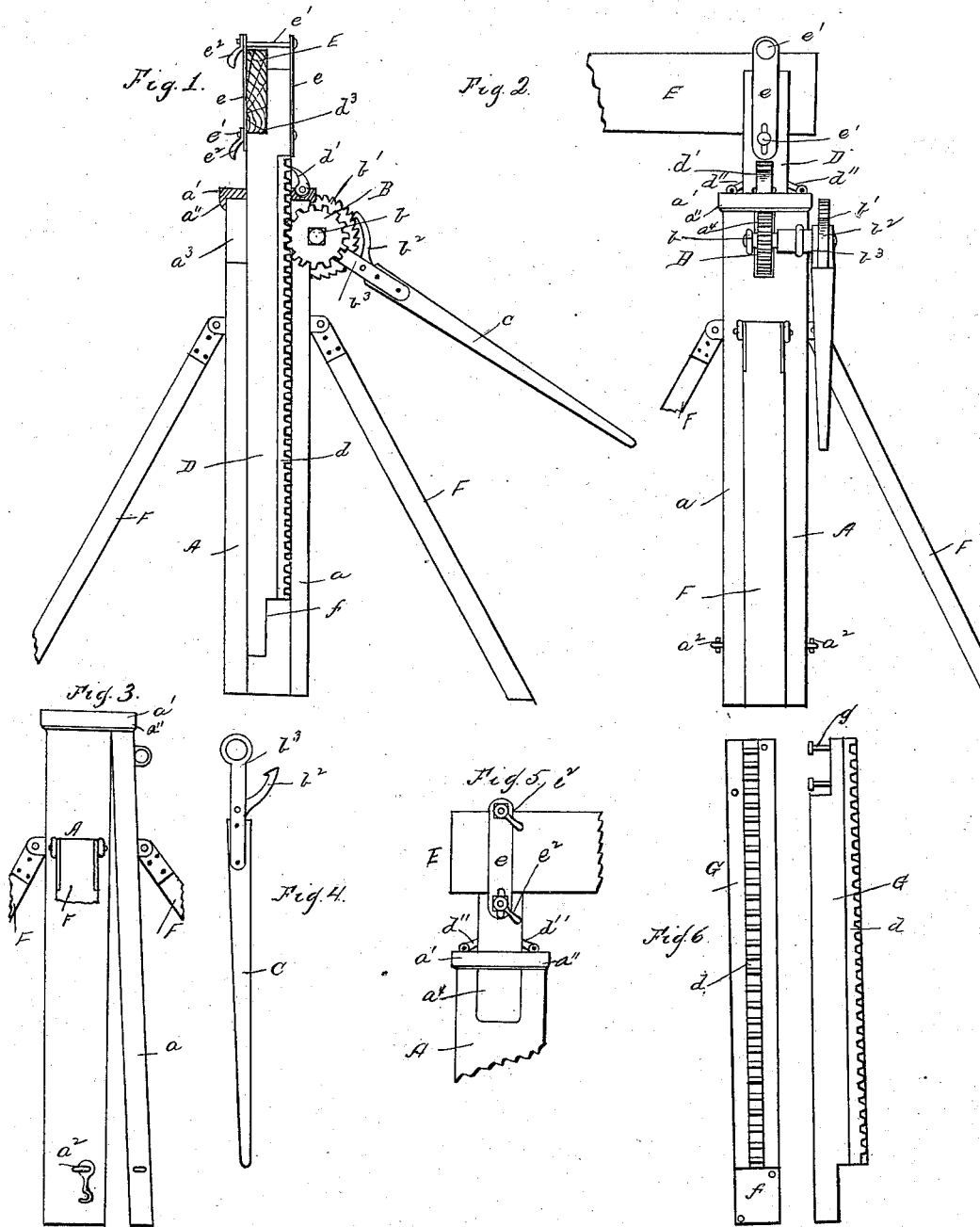


(No Model.)

N. STADLER.
SCAFFOLD AND STAGING.

No. 382,245.

Patented May 1, 1888.



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UNITED STATES PATENT OFFICE.

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SCAFFOLD AND STAGING.

SPECIFICATION forming part of Letters Patent No. 382,245, dated May 1, 1888.

Application filed January 10, 1888. Serial No. 260,369. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS STADLER, a citizen of the United States of America, residing at Manitowoc, in the county of Manitowoc and State of Wisconsin, have invented certain new and useful Improvements in Scaffolds and Staging, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain new and useful improvements in scaffolds, having for its object the provision of a new and improved device for raising the scaffold-sections the desired extent so as to place thereon the ends of the foot-boards and firmly hold the elevated parts at the desired point.

The invention comprises the detail construction, combination, and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation of my invention with a portion of the inclosing-casing removed. Fig. 2 is a front view thereof, showing parts broken away. Fig. 3 is a detail view of the inclosing casing or post. Fig. 4 is a detail view of the operating-lever. Fig. 5 is a detail view of the upper end of the post, showing the means employed for securing the end of the cross-plank; and Fig. 6 represents front and side views of the post or bar and extensible section.

Referring to the drawings, A designates the inclosing casing or post, provided with a front removable section, *a*, which is held in its normal position by a top cap, *a'*, having a depending flange, *a''*, and lower side hooks, *a²*, engaging eyes, as shown. In the upper portion of the rear of the post is formed an opening, *a³*, opposite to which, in the front removable section, is a second opening, *a⁴*, as shown.

B is a spur wheel or pinion secured upon a shaft, *b*, passed through suitable bearings on the front section, *a*, and upon the outer projecting end of this shaft is keyed a ratchet-wheel, *b'*, as shown. The wheel or pinion B is preferably provided with a hexagonal-shaped opening to fit a correspondingly-shaped portion of the shaft *b*, and it is thus held rigid with said shaft.

C is a lever provided with a finger, *b²*, designed to engage the teeth of the ratchet-wheel *b'*, said lever being secured in position by

eye-plates *b³*, passed onto the shaft *b* on either side of the wheel *b'*.

D is a vertically-sliding post or bar designed to pass through the casing or post A and cap *a'*, and is provided on its front side with a toothed segment or rack-bar, *d*, with which engages the wheel or pinion B. To the cap *a'* is secured a pawl, *d'*, designed to engage with the rack-bar *d*, and thereby hold the sliding post or bar in its elevated position. To the top of the cap *a'* are also secured pawls *d''* *d'''*, the ends of which bear against the sides of the post or bar D. The upper end of the sliding post or bar D is provided with an offset or shoulder, *d⁴*, whereon rests the cross-plank E of the scaffold, said plank being secured in position by means of two corresponding plates or straps, *e e*, secured to the sides of the upper end of the post or bar D, said plates or straps being connected by bolts *e'*, whereon work handled nuts *e²*, whereby the operator can readily fasten or loosen the hold on said cross-plank.

To the front, rear, and sides of the casing or post A are pivotally secured or hinged the upper inner ends of inclined braces or supporting-bars F F, the outer lower ends of which bear upon the ground or floor to hold the post A steady in position.

In practice the ends of the cross-planks are secured to the upper ends of the sliding posts or bars of two similar raising or elevating devices, and when it is desired to raise or elevate said cross-plank the same is effected by the operator grasping the lever C, and bearing down thereon will effect the turning of the wheel *b'* and shaft *b*, together with the spur wheel or pinion B, which, engaging with the rack-bar *d* of the sliding post or bar, will effect the raising thereof, said rack-bar being also engaged with the pawls *d'* and *d''*, which holds said post or bar in position, when the operator can, if desired, repeat this operation and raise the post or bar to a still greater extent.

As it is often desirable to elevate the post or bar D beyond the limit of which it is itself capable, I have formed in the lower end of said post or bar a groove or recess, *f*, wherein is designed to be secured the upper end of an extensible section, G, (shown in Fig. 6,) said section being a counterpart of the post or bar D. When the post or bar D has been elevated

to near its full extent and it is desired to still further raise the same, the extensible section G is secured thereto by removing the front section, *a*, of the casing or post A and bolting the ends of said post or bar and section together by bolts *g*, the opening *a*³ in the rear of said casing or post enabling this to be done. After this is accomplished, the front section, *a*, is replaced, and by manipulating the lever the posts or bars can be still further elevated and the scaffolding formed upon the cross-planks. By means of the pawls *d'* *d''* all downward movement of the post or bar is prevented.

From the foregoing description of my invention it will be seen that I have provided simple and highly efficient means for securing the ends of a cross-plank of a scaffold, and also for raising or elevating the same to any desired extent and firmly holding the same when elevated.

I claim as my invention—

1. The combination, with the casing or post having a removable front section and an opening in its rear wall, and the cap having the pawls connected thereto, of the vertically-slid-

ing post or bar operated by a pinion and lever, and the extensible sections capable of being secured to said post or bar, substantially as shown and described.

2. The casing or post having the cap on its upper end, the sliding post or bar having a rack-bar on its front face, the single pawl *d'*, engaging said rack-bar, and the pawls secured to said cap and bearing against the sides of said post or bar, substantially as shown and described.

3. As an improvement in scaffolds, the casing or post having a removable front section, the sliding post or bar having a recessed lower end, and the extensible section designed to be secured to said grooved end of the post or bar, substantially as shown, and for the purpose stated.

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

NICHOLAS STADLER.

Witnesses:

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