

(No Model.)

E. E. STROUT.

STAGING.

No. 378,810.

Patented Feb. 28, 1888.

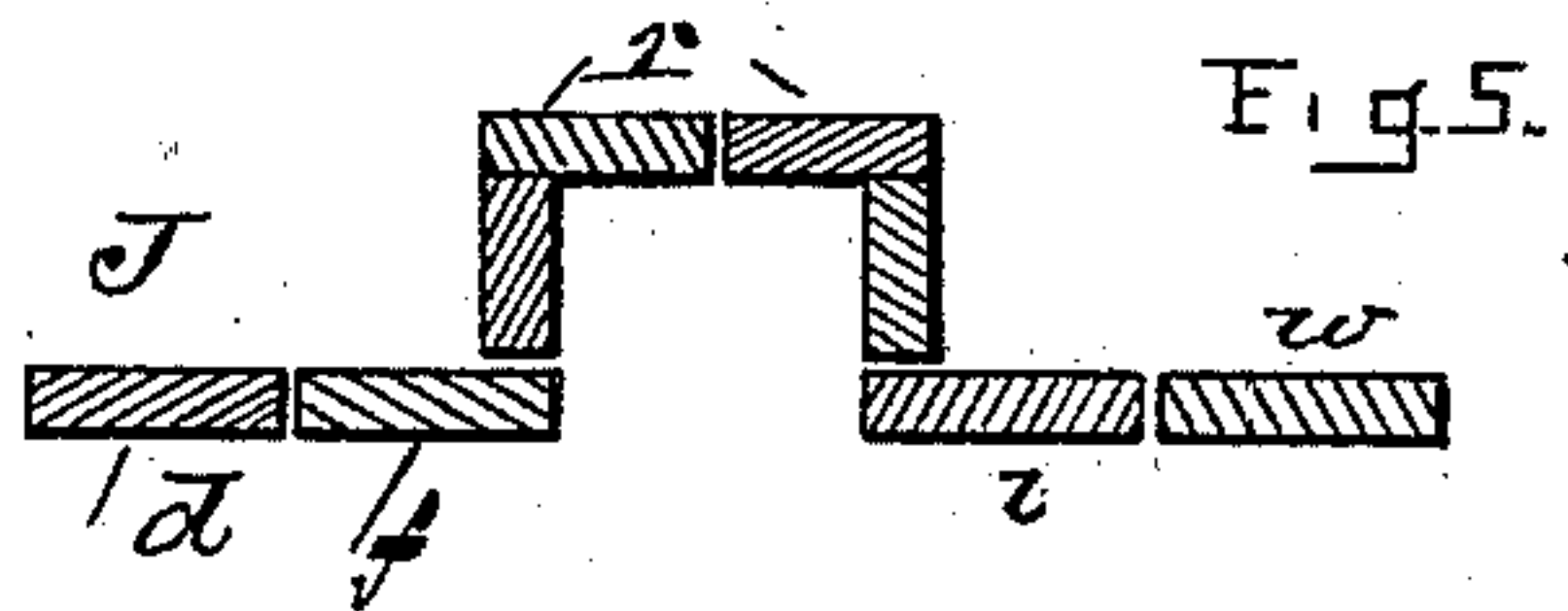
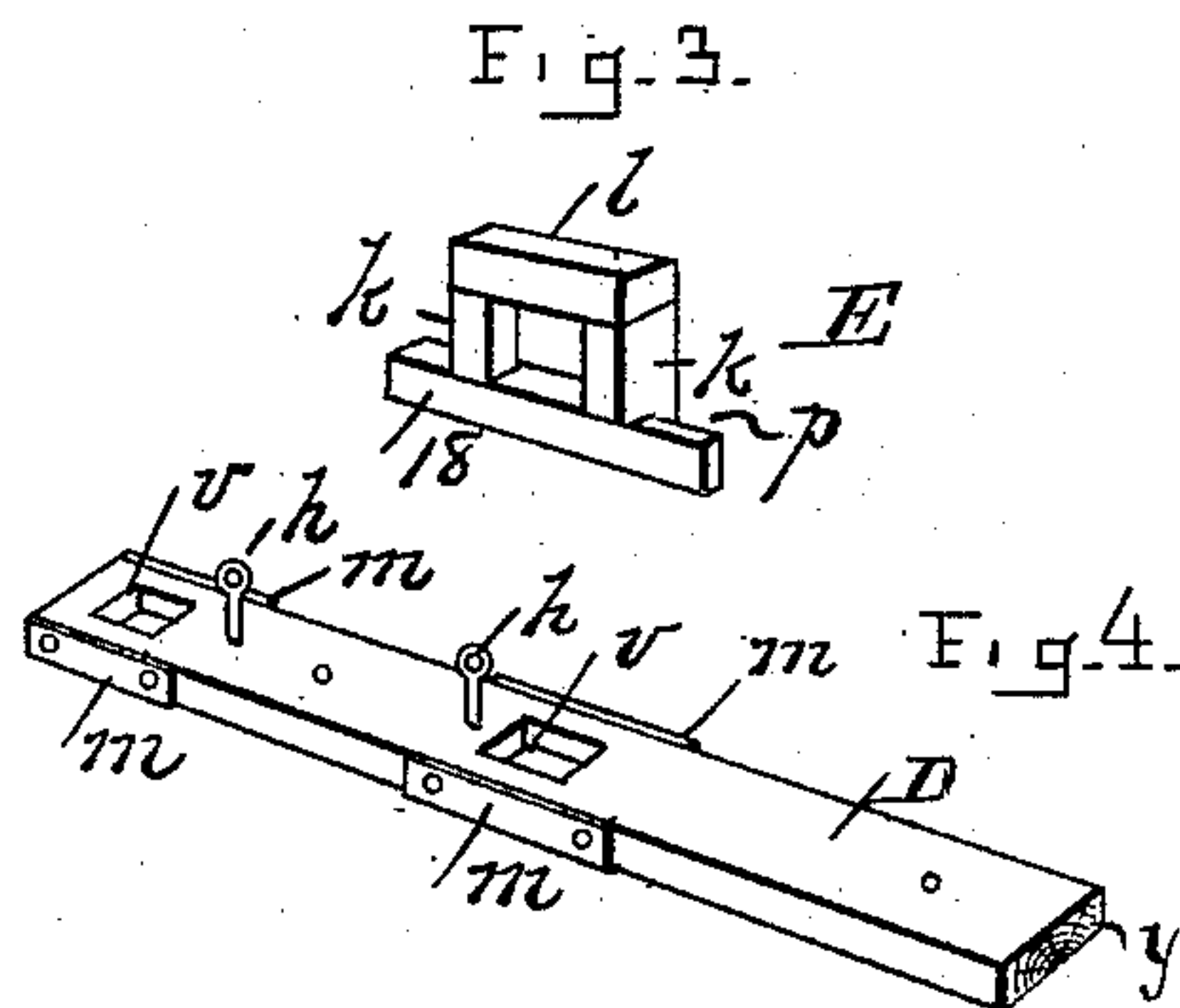
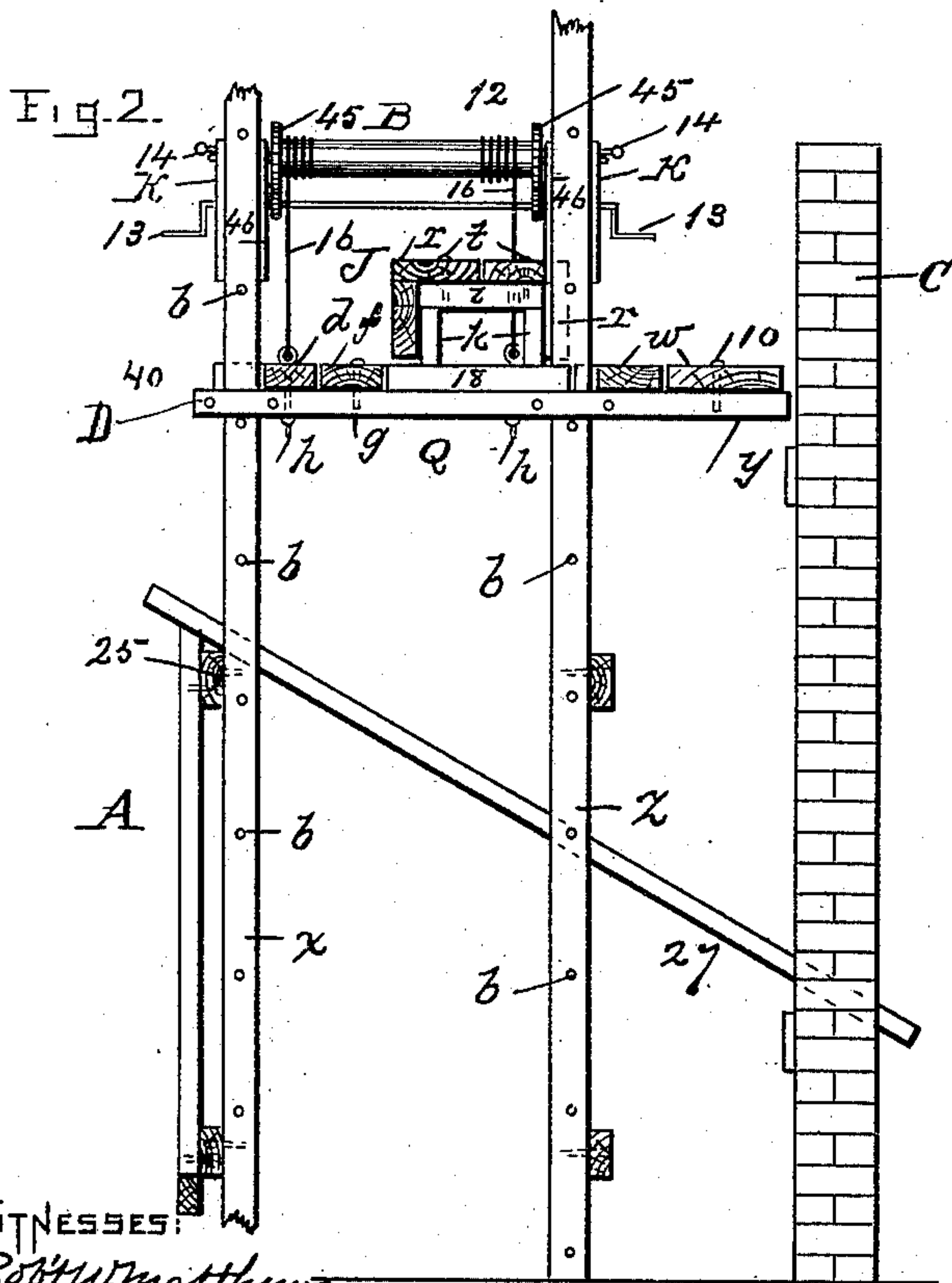
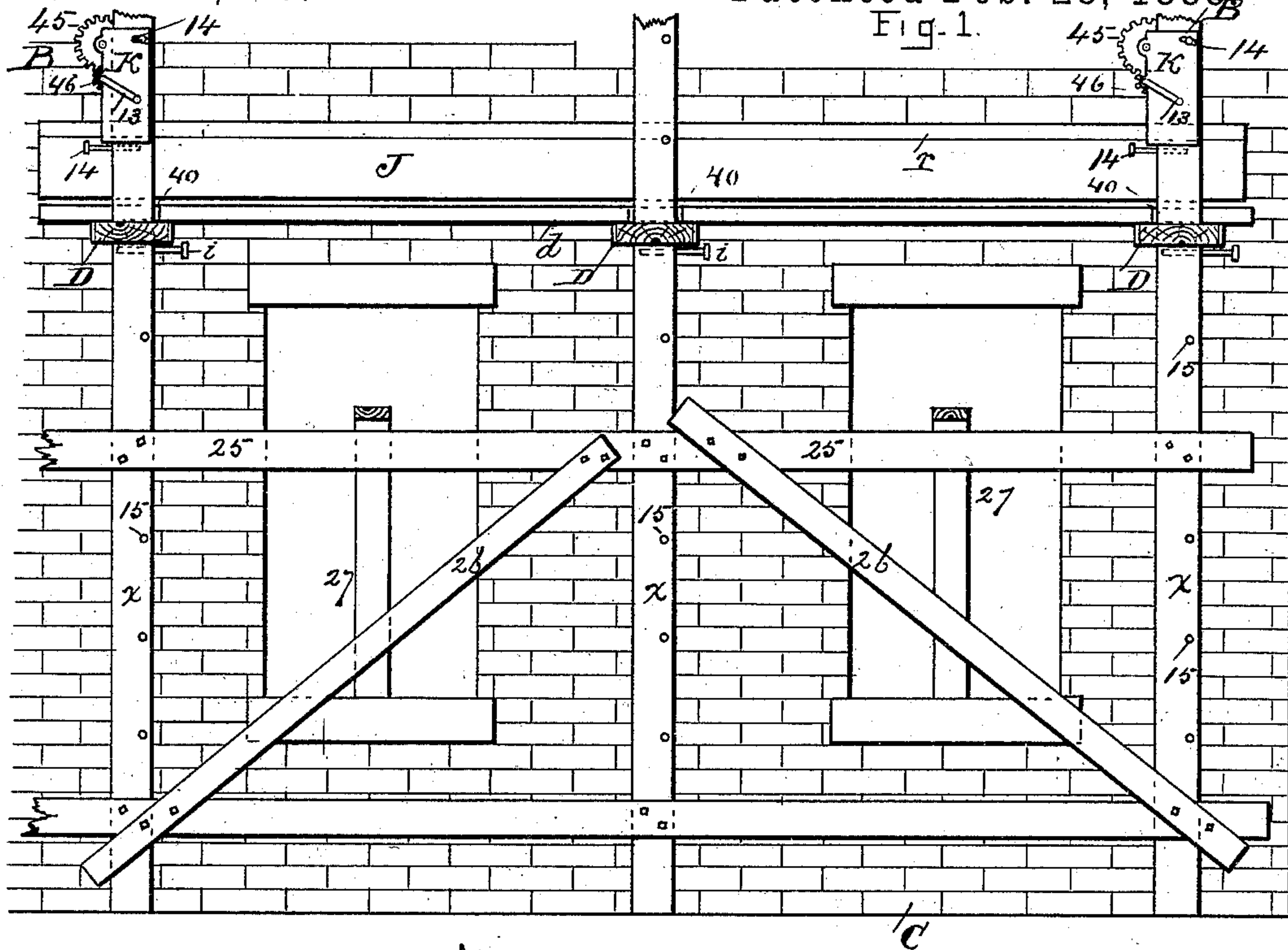


Fig. 5.

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ATTYS.

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EDWARD E. STROUT, OF LYNN, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
TO WINFIELD SMITH, OF SAME PLACE.

STAGING.

SPECIFICATION forming part of Letters Patent No. 378,810, dated February 28, 1888.

Application filed May 25, 1887. Serial No. 239,312. (No model.)

To all whom it may concern:

Be it known that I, EDWARD E. STROUT, of Lynn, in the county of Essex, State of Massachusetts, have invented a certain new and useful Improvement in Staging, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation representing my improved staging in position for use in erecting a building; Fig. 2, an end view of the same; Fig. 3, an isometrical perspective view of one of the bench-supports detached; Fig. 4, a like view of one of the cross-timbers detached, and Fig. 5 a vertical transverse section of the bench and platform covering of the staging.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates more especially to the class of staging employed by masons in the erection of brick buildings; and it consists in a novel construction and arrangement of parts, as hereinafter more fully set forth and claimed, the object being to produce a simpler and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body or frame-work of the staging; B, the windlass; Q, the platform, and C the wall of the building. The body consists, essentially, of a series of vertically-arranged posts or standards, xz , and cross-timbers D. The posts z are erected at intervals in a line or row which stands a few feet from the wall C of the building and in parallelism therewith, the companion posts x being disposed in like manner at corresponding intervals, but at a greater distance from the wall, as shown in Figs. 1 and 2.

The cross-timbers D are provided with mortises v , in which the posts xz are respectively

inserted, said timbers being fitted to slide vertically on said posts. The posts are preferably arranged about four feet apart and the inner posts, z , two feet from the wall C, each pair of posts xz being provided with one of the cross-timbers D, which are of such length that when in position on the posts their inner ends, y , will be nearly in contact with the outer face of the wall C, straps m being secured to the sides of said timbers opposite said mortises to re-enforce them and prevent them from breaking at that point when in use. The timbers D are supported on pins i , inserted in holes b , formed at regular intervals in the edges of the posts xz .

Two staging-planks, df , are disposed longitudinally on the cross-timbers between the posts x and z , the outer plank, d , being provided with notches 40, into which the posts x enter to hold said plank in position while the platform is being raised or lowered, the planks f being secured to the cross-timbers D by bolts g , and the planks d by eyebolts h .

A bench, J, consisting of a series of transversely-arranged legs or supports, E, covered with longitudinally-arranged plank r , secured thereto by bolts t , is disposed on the platform of the staging, the rear of said bench resting against the outer faces of the posts z . Each of said supports or legs consists of a base-timber, 18, standards k , and a cross-beam, l , resting on said standards, said bench-support being disposed longitudinally on the cross-timbers D between the posts xz , and the base 18 cut away on one side at its inner end, at p , to receive the standard z .

Planks w are arranged longitudinally on the projecting ends of the cross-timbers D between the posts z and wall C, the inner planks being secured to said cross-timbers by bolts 10.

The windlass mechanism B consists of a drum, 12, provided with a gear, 45, at each end, and a crank-shaft, 13, provided with pinions 46, which intermesh with said gears, said drum and shaft being arranged transversely of the platform and journaled in grip-plates K, which are fitted to slide vertically on the posts xz of the staging, said plates being secured on the posts by pins 14, passing through the plates into holes 15 and b in the posts.

Two windlasses are represented in the drawings—one at each end of the staging—each windlass being shown as provided with two ropes, 16, which are respectively secured at one end to the drum 12 and at the other to the eyebolts *h*, passing through the cross-timbers D. One of the windlasses may, however, be dispensed with, as two are not required.

In the use of my improvement, as soon as the workmen have built the wall C as high as it can be reached when standing on the ground, the posts *xz* are erected and the cross-timbers D, planks *d f w*, and bench J arranged as shown and described. The workmen then attach the windlass B to the posts *xz*, by means of the plates K and pins 14, at a height that can be conveniently reached, and secure the ropes 16 in the eyebolts *h*, after which the platform Q may be raised by turning the crank 13, and secured in position by means of the pins *i*, in a manner which will be readily obvious without a more explicit description. After the platform of the staging has been raised a short distance, ties 25 and girders 26 are nailed to the posts *x*, to brace the staging longitudinally, in the usual manner, and when it has passed or partially passed the windows of the building in process of construction braces 27 are secured to the ties 25 and window-sills or floor within the building to fasten the staging to the building. The holes 15 and *b* are respectively located about two feet apart, as it is usually desirable to raise the platform and windlass as often as the wall rises that distance. When but one windlass is used, it is moved from one set of posts to another as the staging is raised and secured in position.

The purpose of the bench J is to enable the hod-carriers to deposit the bricks and mortar used in constructing the wall C within easy reaching distance of the masons.

By dividing the floor of the staging into two parts, as described, the bricklayers or masons are enabled to occupy the projecting portion between the posts *z* and wall C while constructing the wall, without being interfered with by the hod-carriers or other laborers who use that portion located between the posts *x* and *z* in conveying material to the workmen.

I do not confine myself to using the staging in the construction of brick-work only, as it is equally well adapted for use in the erection of wooden buildings.

Having thus explained my invention, what I claim is—

1. The combination of the inner posts, *z*, and outer posts, *x*, provided with pin-holes *b* and 15, the cross-timbers D, provided with mortises through which said posts are passed, the pins for supporting said timbers on the posts, the windlass B, the adjustable perforated grip-plates adapted to slide on said posts and in which said windlass has its bearings, the pins for supporting said grip-plates in holes of the posts, and the ropes attached to said windlass and connected to said cross timbers, substantially as described.

2. The combination of the inner posts, *z*, and outer posts, *x*, provided with two series of pin-holes, the cross-timbers D, provided with mortises through which said posts are passed, the pins for supporting said timbers on the posts, the floor-planks *d f w*, secured to the timbers D, the windlass B, the perforated adjustable grip-plates in which said windlass has its bearings, the pins for supporting said grip-plates, and the cords passing over said windlass and secured to said timbers, substantially as described.

3. The combination of a series of vertical outer posts, a series of vertical inner posts, a platform adapted to slide vertically on said posts and projecting beyond the inner posts, a windlass mechanism mounted on said posts and vertically adjustable thereon, and ropes connecting said windlass mechanism and platform, substantially as described.

4. In a staging of the character described, the drum 12 and crank-shaft 13, mounted in the sliding plates K, in combination with the posts *xz*, means for adjustably securing said plates on said posts independently of the platform, the platform Q, and ropes 16, substantially as set forth.

5. In a staging of the character described, the bench supports or legs E, each consisting of the base or sill 18, standards *k k*, and cap *l*, said base being cut out at one side, as shown at *p*, in combination with the posts *xz* and platform Q, substantially as described.

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Witnesses:

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BENJAMIN PHILLIPS.