No. 734,321. PATENTED JULY 21, 1903.

J. A. HAGAN.

ADJUSTABLE STAGING.

APPLICATION FILED AUG. 8, 1902.

NO MODEL. 3 SHEETS—SHEET 1.

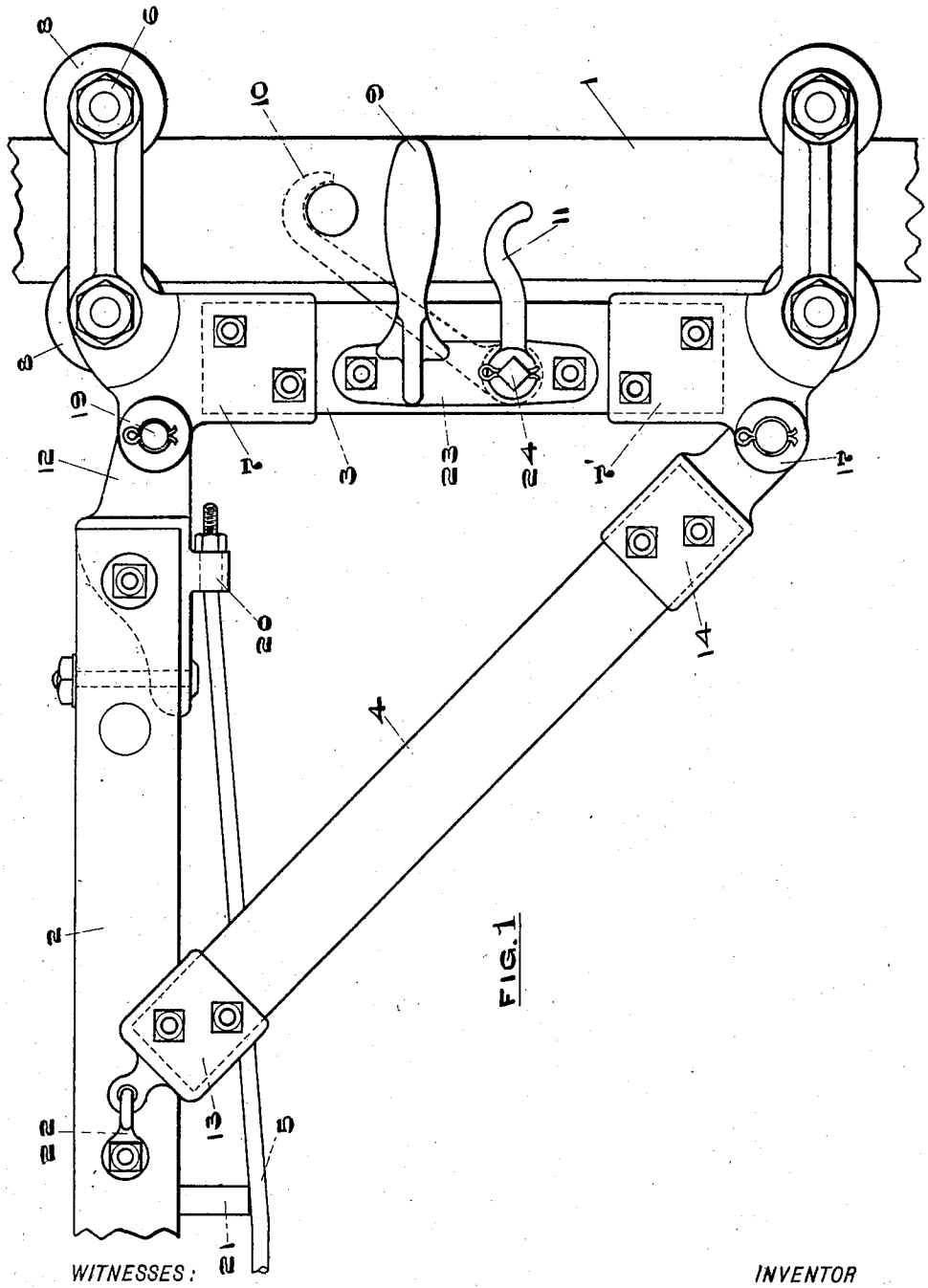


FIG. 1

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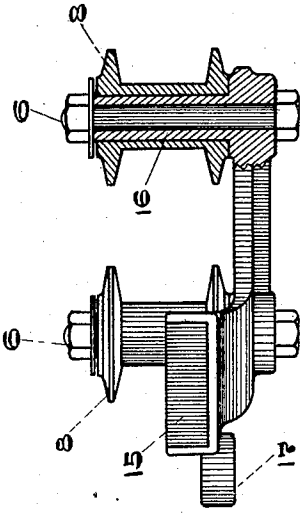


FIG. 3.

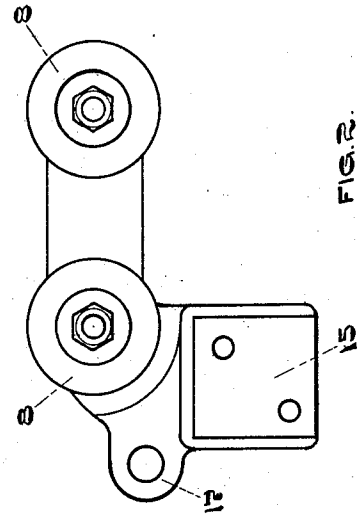


FIG. 2.

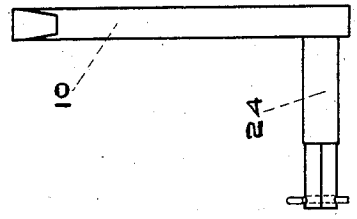
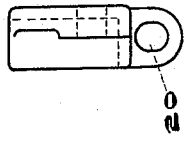


FIG. 4.



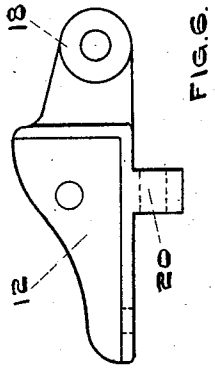


FIG. 6.

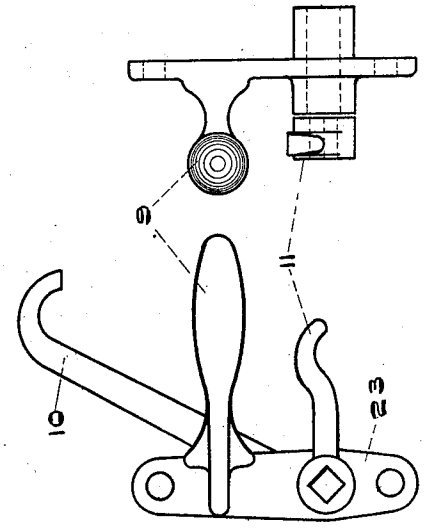


FIG. 5.

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NO MODEL. 3 SHEETS—SHEET 3.

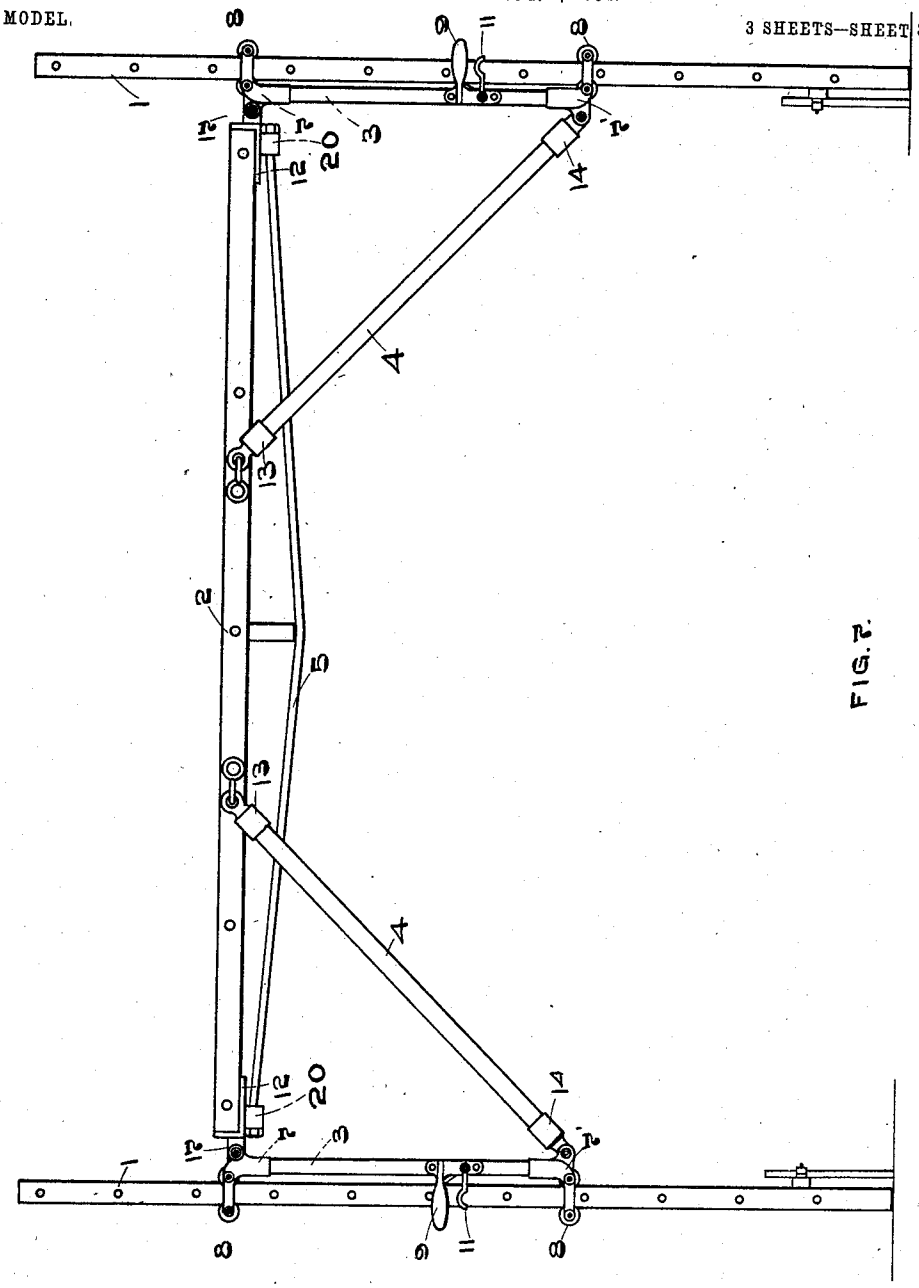


FIG. 2.

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No. 734,321. Patented July 21, 1903.

UNITED STATES PATENT OFFICE.

JOSEPH A. HAGAN, OF JANESVILLE, WISCONSIN.

ADJUSTABLE STAGING.

SPECIFICATION forming part of Letters Patent No. 734,321, dated July 21, 1903.

Application filed August 8, 1902. Serial No. 118,926. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. HAGAN, of Janesville, in the county of Rock and State of Wisconsin, have invented new and useful Improvements in Adjustable Staging; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in adjustable staging, and especially the adjustable staging shown and described in Letters Patent of the United States issued to me on the 1st day of February, 1898, and numbered 598,289. This application relates to certain details entering into the construction of said adjustable staging.

In the drawings, Figure 1 is a side elevation of that portion of an adjustable staging embodying my improvements. Figs. 2, 3, 4, 5, and 6 are details. Fig. 7 is a side elevation of my complete device.

The same reference-figures indicate identical parts in the several views.

My adjustable staging, as shown and described in said Letters Patent No. 598,289, consists of two upright ladders, upon the standards of each of which is adjustably mounted a jack, and to the four jacks so mounted is attached a horizontal platform. The ladders are provided with a base broadening and equalizing device. Being fully aware of the scope of said patent, I do not herein claim the construction therein shown; but I do show and describe and shall claim certain new, novel, and very useful details which I have lately embodied in the construction of said staging.

In the drawings (see Fig. 1) is shown a portion of the standard of a ladder 1.

2 is a portion of the platform.

3 is the coupling-rod of a jack.

4 is a brace connecting platform 2 and the jack and serves both as a support for said platform and a means of preventing endwise swaying of the staging.

5 is a tension-rod extending along the under side of the platform to stiffen same.

7 and 7′ are the mountings of the jack.

8 represents flanged rollers, of which there are two attached to each mounting and adapted to travel up and down the standards 1.

9 is a handle attached to the coupling-rod 3, which serves as a convenient means of raising and lowering the jack.

10 is a hook which is swingingly mounted in the escutcheon of the handle 9, said hook being adapted to support the jack and its superimposed platform.

11 is a finger-piece or trigger by means of which the hook is operated.

12 is the platform connection and tension-rod socket.

13 and 14 are brace ends.

The construction and operation of my device is substantially as follows: As should be understood, there are two standards to each ladder and one ladder at each end of the horizontal platform, each standard having a jack mounted thereon, each standard, jack, brace, mounting, &c., being the same as those shown in Fig. 1. The mountings 7 and 7′ consist of an L-shaped casting, on the vertical arm of which is formed a housing 15, Figs. 2 and 3, to receive the end of an upright coupling-bar or jack-stick 3 and on the other end or horizontal arm of which are formed two hollow stub-shafts 16, extending inward at a right angle to the arm on which they are located. (Shown in Figs. 2 and 3.) Upon each stub-shaft is placed a flanged roller 8, the distances between the flanges of each roller being equal to the thickness of the standard 1 and the distance between the peripheries of the two rollers being equal to the width of said standard. Roller 8 is secured upon its respective stub-shaft by means of a bolt 6 and a washer 6′. The bolt is passed through the hole in the stub-shaft, washer 6′ is placed upon said bolt, and the nut screwed tightly in place, clamping the washer against the free end of the stub-shaft, and for the purpose of insuring the free rotation of roller 8 said roller is made somewhat shorter than the stub-shaft and revolves freely thereon. Upon the vertical arm of the mounting on the side opposite the horizontal arm is formed an eye, which on the upper mounting 7 serves as a means of attaching the platform 2 and on lower mounting 7′ serves as a means for attaching brace 4. The mountings 7 and 7′ thus constructed roll up and down easily on standards

1 and are much easier to operate, cheaper to construct, and neater in appearance than the "clasps" shown in the patent aforesaid. The platform connection 12 (see Fig. 6) is formed upon one side into a housing to receive one end of the platform-stringer and is provided with suitable holes for securing said connection and said stringer together. An eye 18 is formed on said connection, through which and through eye 17 on mounting 7 is passed a rod 19, which serves to secure platform 2 to mounting 7. Upon the lower side of connection 12 is formed a socket 20, which receives the end of tension-bar 5, the other end of which tension-bar is held by a similar socket upon the other end of the platform. Said rod 5 impinges against a bridge 21, attached to the under side of the platform at the center thereof, and thus supported the platform is light and of ample strength. Brace 4 is attached at one end to eye 17 on mounting 7' and at the other end to a loop or staple 22, attached to the platform, which staple admits of the outward swing of the lower end of the brace as the jack conforms to the spread of the standards 1 of the ladders. The jacks and platform are sustained at any desired height by means of the hook 10, which engages a round of the ladder. The handle 9 at the base is formed into an escutcheon 23, through which holes are drilled to secure same to rod 3. Upon said escutcheon on the side opposite to and somewhat below the handle 9 is formed a sleeve, which passes through rod 3. Through this sleeve from the side opposite the handle 9 is inserted the shank 24 of hook 10, which shank extends through the escutcheon, and said extension is made square to take trigger or finger-piece 11, said trigger being secured in place by a split cotter passing through the shank or other suitable means. Thus it will be readily understood that hook 10 is on the inside of coupling-rod 3 and the handle for raising the jacks is on the opposite or outside of said rod 3, and my construction locates the trigger or finger-piece 11 also outside and just beneath said handle 9 and in such a relative position thereto that as said handle 9 is grasped to raise the jack a finger may be placed about the trigger and a slight pressure on same will disengage the thereto-attached hook from the round of the ladder, permitting the jack to be moved as desired.

Having described my device, what I claim as new, and desire to secure by Letters Patent, is—

1. In an adjustable staging, the combination of two upright ladders, a jack adjustably mounted upon each of the standards of said ladders, mountings upon each end of the coupling-bars of said jacks, two flanged rollers upon each of said mountings, adapted to travel upon the standards of said ladders, an eye in each of said mountings adapted for the attachment of a platform and of a brace, a platform attached to the uppermost of said mountings, a brace attached at one end to said platform, and at the other end to the eye in the lower mounting, a tension-rod upon the under side of said platform, a hook attached to each of the coupling-bars of said jacks, adapted to engage the rounds of said ladder and to secure said jacks and the thereto-attached platform in the desired position, all combined, arranged and operating, substantially as described and for the purpose specified.

2. In an adjustable staging, consisting of the combination of two upright ladders, with platform-jacks traveling thereon, and connected by and supporting a horizontal platform, a handle attached to said jacks, a base or escutcheon as an integral portion of said handle, a sleeve upon said escutcheon on the side opposite to said handle, in combination with a hook, having a shank adapted to be inserted in said sleeve, said shank being adapted for the reception of a trigger, substantially as shown and described.

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

JOSEPH A. HAGAN.

Witnesses:
F. P. STARR,
THEO. W. GOLDIN.