Jan. 7, 1930. C. M. DEARBORN 1,742,637

HORSE

Filed Nov. 1, 1927

FIG. 1

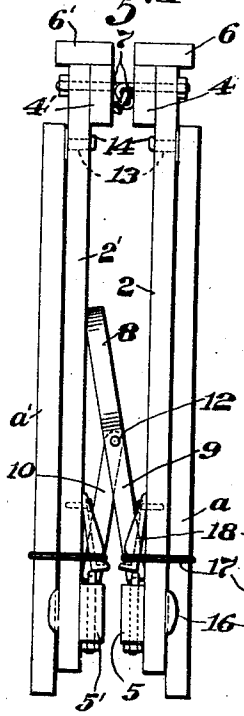



FIG. 2

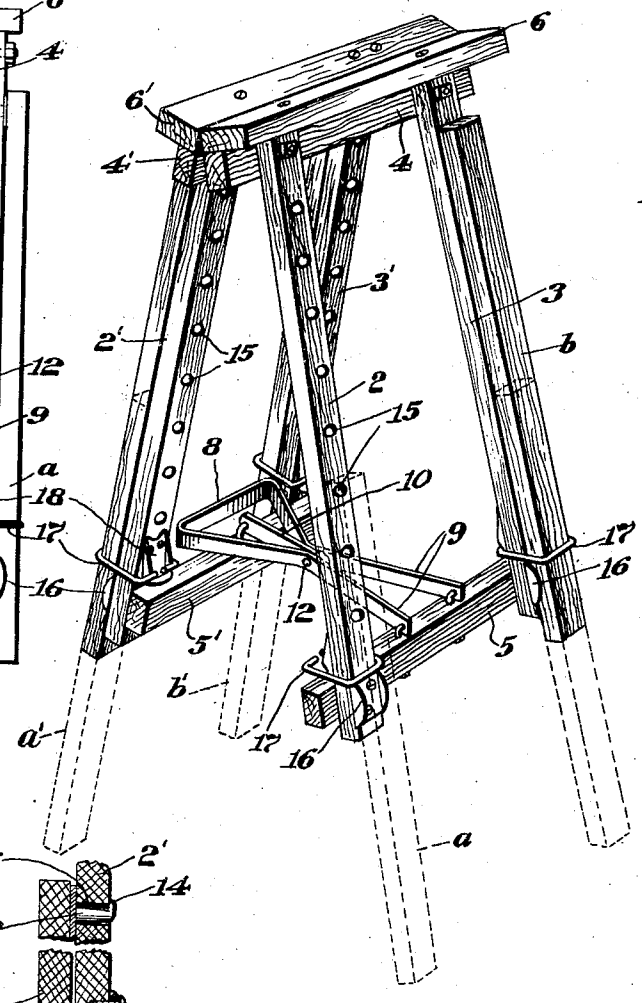
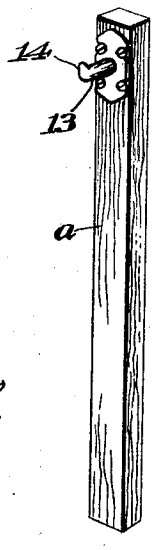



FIG. 3



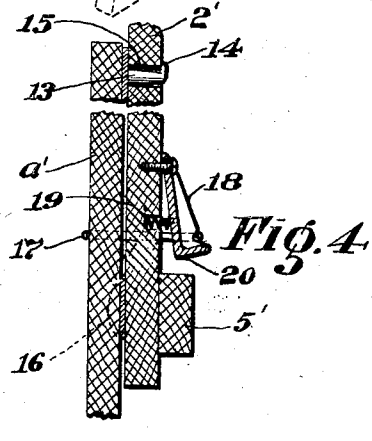




FIG. 4

INVENTOR:
Clayton M. Dearborn
BY J. H. McCready
his ATTORNEY

Patented Jan. 7, 1930 1,742,637

# UNITED STATES PATENT OFFICE

CLAYTON M. DEARBORN, OF LYNN, MASSACHUSETTS

## HORSE

Application filed November 1, 1927. Serial No. 230,330.

It is a common practice for plasterers, painters and others to use a low staging which consists simply of a wide plank supported near its opposite ends on two horses. The present invention relates to horses of this general character and it aims to improve the construction of such horses with a view to facilitating their adjustment to change their height and providing a sturdy, dependable construction which can be manufactured economically.

The nature of the invention will be readily understood from the following description when read in connection with the accompanying drawings, and the novel features will be particularly pointed out in the appended claims.

In the drawings,

Figure 1 is a side elevation of a horse constructed in accordance with this invention;

Fig. 2 is a perspective view of the horse shown in Fig. 1, one of the legs, however, being removed;

Fig. 3 is a perspective view of the adjustable section of one of the legs; and

Fig. 4 is a vertical, cross-sectional view showing certain details of the leg construction.

The construction shown comprises two frame-like sections hinged together at their upper ends. The right-hand frame comprises upright members 2 and 3 connected by horizontal top and bottom members 4 and 5, respectively, all of these members usually being made of wood. Another wooden piece 6 is secured to the part 4. The left-hand frame consists of similar parts designated by primed numerals corresponding to those used to designate like parts in the right-hand frame section. Each of these frames is very stiff and rigid, and the two frames are secured together at their upper ends by two pairs of eyebolts 7, Fig. 1, the individuals of each pair being interlocked with each other so that they hinge the two frames together. When the horse is in use the two frame-like sections are spread apart at their lower ends, as shown in Fig. 2, and they rest on the floor or some similar support. The floor may be uneven, and due to the fact that there are four points of contact with the floor, two on each frame, a rigid horse would wabble or tip unless the floor or surface on which it rests were in a true plane. This, of course, rarely happens. However, the loose pivotal connection between the upper ends of the frames permits sufficient relative movement of the frames to allow each frame to find a firm bearing so that any wabbling or tipping of the horse under the conditions ordinarily met is avoided.

In order to hold the horse in its operative position it is equipped with a toggle mechanism which, as shown, consists of a loop-shaped or bale-like member comprising a handle portion 8 and two legs 9—9. These legs are pivoted to the lower horizontal piece 5 of one frame. The other member of this toggle consists of a link 10 which is pivoted at one end to the horizontal piece 5′ of the other frame and at its opposite end to the central portion of the loop-shaped member 8, the legs of this member being bent toward each other and fastened by a pivot pin 12 to the link.

This toggle automatically drops into its straightened position when the legs of the horse are spread apart, as shown in Fig. 2, and it positively locks the horse in this position. At the same time the part 8 forms a convenient handle for lifting the toggle when it is desired to fold or collapse the horse.

An important feature of this invention resides in the arrangement for adjusting the length of the legs of the horse.

Referring again to the right-hand frame, it will be seen that it includes two legs, one consisting of the upper fixed section 2 and an adjustable section *a*, while the other consists of a fixed part 3 and an adjustable member or section *b*. The legs of the other section of the horse include adjustable parts *a′* and *b′*. These adjustable members or sections of all the legs are exactly alike and are all constructed as shown in Fig. 3. As illustrated in this figure each section consists simply of a wooden piece *a* of suitable dimensions provided at its upper end with a pin 13 which projects rigidly therefrom, the pin having a lateral extension 14 at its ends. Each of the fixed leg sections also is provided

with a series of holes 15, any one of which is adapted to receive the pin 13. Near its lower end each fixed leg section is provided with a metal guide plate 16 of approximately channel section and comprising a flat portion which is secured firmly to the leg and upright flanges at opposite edges thereof between which the part *a* is received, as clearly shown in the drawings.

In the order to hold the section *a* in the guide 16 and to secure the sections of the leg in their overlapping relationship, a clamp 17 is provided which consists simply of a metal bar bent into a rectangular form with the two ends meeting, or nearly so. This clamp is large enough to slide loosely along the leg and embraces both leg sections. It is yieldingly held in its operative position at the lower end of the leg by a latch 18. The construction of this latch will be readily understood from an inspection of the drawings. It is loosely connected to the leg at its upper end by two screws, is pressed outwardly by a coiled spring 19, Fig. 4, and is provided near its lower end with a groove 20 to receive the clamp 17.

In adjusting the length of the leg 2 the clamp 17 is slipped up above the upper end of the member *a* and this member is then removed and the pin 13 is entered in any desired one of the holes 15. The member *a* then is placed in the guide 16 and the clamp 17 is slipped down over both sections 2 and *a* as far as it will go until it snaps into the groove 20 in the latch 18. The removable members *a'*, *b* and *b'* of the other legs are then adjusted so that all the legs are of the same length. The extension 14 on the end of each pin 13 prevents the pin from coming out of the hole, and the clamp 17 on each leg holds the two sections of each leg securely against separation. Since the points at which the clamp 17 and the pin 14 act are relatively remote from each other, and since both act to hold the sections together, any danger of the separation of the sections is avoided, and any possibility of one section slipping on the other is positively prevented. At the same time the sections can be quickly released and adjusted into a different relationship to change the length of the leg.

It will be clear from an inspection of the drawings that any weight placed on the horse will tend to force the fixed leg sections downwardly with reference to the adjustable sections of the legs, and thus will increase the difficulty of withdrawing the pins 13 from the holes 15.

It will now be appreciated that this invention provides a horse of an unusually sturdy construction, which can be manufactured economically, is very convenient to use, and in which an ample range of adjustment for height is provided.

While I have herein shown and described a preferred form of the invention, it will be evident that the invention may be embodied in other forms without departing from the spirit or scope thereof.

Having thus described my invention, what I desire to claim as new is:

1. A horse of the character described having an extensible leg comprising two sections overlapping each other, means for securing said sections together in different positions of adjustment comprising a clamp embracing both sections and slidable on said leg but operative to lock the two sections together, and a latch carried by one of said sections for holding said clamp in its operative position, said latch being operable to release the clamp.

2. A horse of the character described having an extensible leg comprising two sections overlapping each other, one section having a pin projecting therefrom with a lateral extension at the end of said pin, the other section having a series of holes each designed to receive said pin, a clamp embracing both sections and slidable on said leg for locking the two sections together, and a spring actuated latch for locking said clamp in its operative position but operable to release the clamp.

3. A horse of the character described having an extensible leg comprising two sections overlapping each other, one section having a pin projecting therefrom with a lateral extension at the end of said pin, the second section having a series of holes each designed to receive said pin, a clamp loosely mounted on said leg and operative to lock the two sections together at a point spaced from said pin, and means located in a fixed position on said second section for holding said clamp in its operative position, said means being operable to release the clamp.

4. A horse of the character described having an extensible leg comprising a relatively fixed section and a second section overlapping said fixed section and adjustable thereon, said second section having a pin projecting substantially at right angles therefrom with a lateral extension at the end of said pin, the fixed section having a series of holes therethrough each designed to receive said pin, a guide member rigid with said fixed section and partly embracing said second section, a clamp slidable on said leg and embracing both sections adjacent to said guide member and serving to lock said sections together, and a latch for holding said clamp in its operative position, said latch being movable to release said clamp.

5. A horse of the character described comprising two frames hinged together at their upper ends to swing toward and from each other, and a toggle connecting the lower portions of said frames and including a loop shaped member having legs bent toward each other at an intermediate point in the member, the ends of said legs being pivoted to one of said frames, and a link pivoted at one end

to the other frame and at its opposite end to said legs at said intermediate point, a part of said loop shaped member forming a handle for collapsing the toggle.

6. A horse of the character described comprising two rigid framelike sections forming the opposite sides of the horse and each provided with two legs, the ends of which are adapted to rest on the floor, each of said sections including an upper cross member 4 rigid with the two legs of its respective section, and hinge means connecting said cross members of the two sections together and permitting the sections to swing toward and from each other, said means consisting of hinge members rigid with their respective sections but loosely joined together, whereby they permit a substantial but limited relative movement of the rigid frame sections transversely of the plane of said swinging movement and permit the ends of the legs of each section to find a bearing independently of the other section.

CLAYTON M. DEARBORN.