March 4, 1930. F. G. KINGSTON 1,749,706

LEG FOR HORSES, ETC

Filed Feb. 27, 1928

Fig. 1.

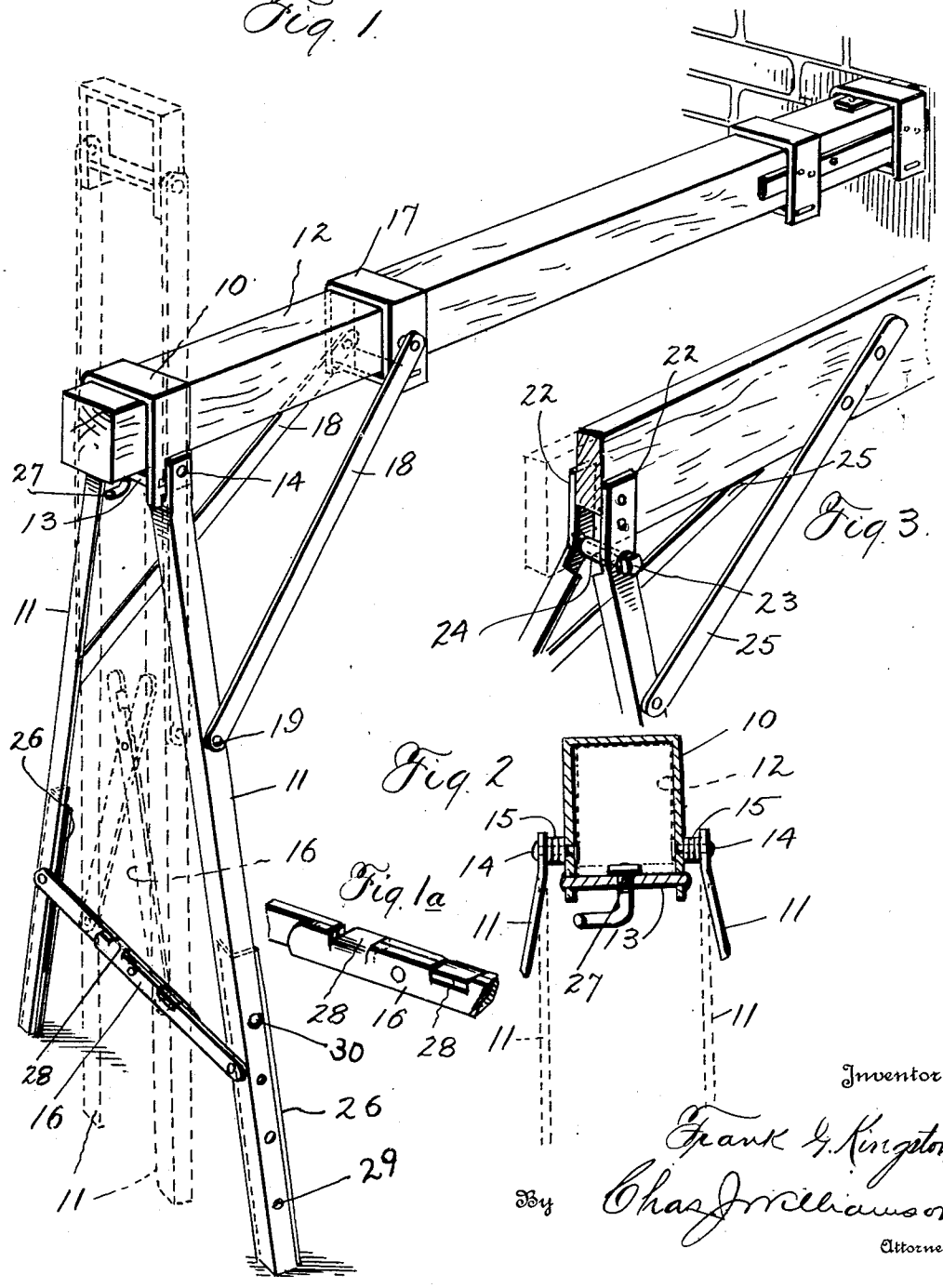


Fig. 3.

Fig. 2

Fig. 1a

Inventor

Frank G. Kingston

By Chas. J. Williamson

Attorney

Patented Mar. 4, 1930 1,749,706

UNITED STATES PATENT OFFICE

FRANK G. KINGSTON, OF WEST SOMERVILLE, MASSACHUSETTS, ASSIGNOR TO BUILDERS' PATENT SCAFFOLDING COMPANY, OF WEST SOMERVILLE, MASSACHUSETTS, A PARTNERSHIP COMPOSED OF FRANK G. KINGSTON, A. R. KINGSTON, C. C. PIMM, AND MABEL G. KITCHEN

LEG FOR HORSES, ETC.

Application filed February 27, 1928. Serial No. 257,519.

Horses used in building work and for other purposes are shipped or transported from job to job and even from city to city. The cost of shipment makes important reduction to smallest possible bulk, yet safety of life and limb depends upon the strength of the structure and that consideration as well as saving money for transportation must be taken into account. The object of my invention is to provide a leg support for horses and the like having all required strength and yet capable of ready folding into the minimum space.

My invention consists in whatever is described by or is included within the terms or scope of the appended claims.

My invention is capable of being put to a great many uses. It will sufficiently illustrate its application to show it in the drawing and to describe it when employed to provide a horse or staging support for erection of buildings. Accordingly in the drawings:

Fig. 1 is a perspective view illustrating my invention as leg for a putlog, the dotted lines showing the legs in their folded position; Fig. 1ª is a perspective view of a portion of the brace;

Fig. 2 is a detail view in cross section through the joist or horizontal support engaging member;

Fig. 3 is a perspective view of another embodiment of my invention.

Describing the embodiment of my invention shown in Figs. 1 and 2 of the drawing in a general way there are two straps or bands of rectangular form which may be passed over or through which may be thrust a horizontal wood member or joist to opposite sides of one of which metal legs are connected, the connection being such that the legs may be spread apart towards the foot ends to give a wide bearing on the ground or floor, and moved towards one another in substantial parallelism and to the other of which on opposite sides are pivotally connected the upper ends of two straight bars whose lower ends are pivoted to the sides of the leg so that when in use with the legs spread apart the bars will extend upward obliquely and constitute braces and the connection between said bars and their strap or band permitting them to move away from one another towards the legs or towards one another in substantial parallelism when the legs are to be folded up for shipment or storage. The metal of which the legs and brace bars are constructed has a certain amount of spring to allow the described spreading and collapsing or closing movements.

Describing in detail what is shown in the drawings, Figs. 1 and 2, the rectangular strap or clamp, 10, to which the legs, 11, are secured at their upper ends comprises a U-shape part that at the top extends over the joist, 12, and over each side thereof and below the bottom of the joist the sides of the clamp are connected by a horizontal bar, 13, whose opposite ends extend through holes in the sides and are upset on the outside thereof. Each leg 11 at its upper end is secured to the adjacent side of the strap, 10, by a rivet, 14, and spacing means which may be several washers, 15, are placed between the leg and the side of the strap, the washers, being of metal permitting enough play to allow the legs to be spread apart as shown in full lines in Figs. 1 and 2 supplemented by the spring of the metal of the legs. Towards their lower ends the legs are connected by a jointed brace, 16, which straightens out when the legs are spread apart and folds up when the legs are moved into parallelism as shown in dotted line in Fig. 1. The legs are preferably for strength and lightness made of angle iron.

The strap, 17, to which the upper ends of the two brace bars, 18, are pivoted is constructed precisely like the strap, 10, and the connection between the brace bars and the strap side, 17, is a rivet, and spacing washers are used precisely as in the case of the strap, 10, and legs, 11. The lower ends of the brace bars, 18, are secured by pivots, 19, to the outer side of the legs. The full and dotted lines of Fig. 1 show how substantial and rigid a support the legs constitute when in use and yet how compactly the device may be folded up for storage or shipment.

As shown in Fig. 1 the legs are used to support a putlog, which consists of a joist or

timber 12, rectangular in cross-section passed through the two straps and which at one end is provided with means to engage and be supported by a building wall in course of erection.

To make an ordinary horse it is necessary merely to use two pairs of legs with a suitable joist or horizontal member.

It will be evident that legs embodying my invention are admirably suited for a variety of purposes including road-barriers for use on roads in course of construction.

The construction shown in Fig. 3 dispenses with the joist or plank engaging loop at the top of the legs and the upper ends of the legs themselves are extended to engage opposite sides of the joist or plank with a clamping action when the legs are spread apart at the bottom and the clamps or jaws thus provided are released when the legs are moved together at the bottom to collapse the legs. In the construction shown in Fig. 3, the legs are preferably made of angle iron and one of the flanges at the top is cut away to leave the other flange to form the clamping jaw, 22, and the pair of legs are connected by a cross bolt, 23, with a spacer, 24, between them. Said bolt connection is a pivotal one which allows the above described action of the legs in clamping, and releasing an inserted board or joist. Brace bars, 25, are pivoted at one end to the legs and at the other end have holes for nails to attach brace bars to the joist or plank. It will be seen that the operation of setting up a staging involves merely dropping a joist or plank between the open jaws of the legs then spreading the legs to clamp the joist or plank and then nailing the braces and jaws to the plank and the taking down operation is quite as easily performed. A leg, 22, may be provided with holes as shown in Fig. 3 for driving nails into the plank between the two jaws. In Fig. 3 the end portion of the plank is shown broken away in full lines to disclose the parts that would be hidden by showing the complete plank, and the break is above the lowermost nail-hole. The legs provide powerful levers to operate the jaws.

Preferably, as indicated in Fig. 1 the height of the legs may be adjusted by providing an angle iron extension, 26, for each leg, the leg and the extension being provided with a vertical series of bolt holes to adjust the vertical position of the extension. The holes in the leg flange are designated, 29, and the bolt is designated, 30, in Fig. 1.

Nails may be used to secure the strap, 10, or a screw-clamp 27, may be used that engages a threaded hole in the bar, 13, and bears against the underside of the wood members or joist, 12, as shown in Fig. 2.

The bars of the brace, 16 are preferably locked or held in horizontal bracing position as by means of a lug, 28, on each bar that is adapted to overhang the adjacent top edge of the other bar which is preferably notched to receive said lug.

What I claim is:

1. A support for a horizontal member comprising a pair of member-engaging devices for separable connection with the member, a pair of legs connected to one of said devices movable to diverge in opposite directions or towards one another and a pair of brace bars extending between the other device and the legs and pivoted to the legs for movement with said other device towards and from the legs.

2. A support for a horizontal member comprising a pair of member-engaging devices for separable connection with the member, a pair of legs connected to one of said devices movable to diverge in opposite directions or toward one another and a pair of brace bars extending between the other device and the legs and pivoted to the legs for movement with said other device towards and from the legs, said devices being each in the form of a member encircling strap and the legs and braces being attached to the sides thereof.

3. A support for a horizontal member comprising a pair of member-engaging devices for separable connection with the member, a pair of legs connected to one of said devices movable to diverge in opposite directions or towards one another and a pair of brace bars extending between the other device and the legs and pivoted to the legs for movement with said other device towards and from the legs, said devices being in the form of similar straps that extend about said member and the legs and braces being flexibly connected with the strap sides.

4. A support for a horizontal member comprising a pair of legs movable towards and from one another, a transverse connection between the legs forming a center of motion, said connection being rigid between the legs, and means carried by the legs above said connection to receive the horizontal member.

In testimony whereof I hereunto affix my signature.

FRANK G. KINGSTON.