

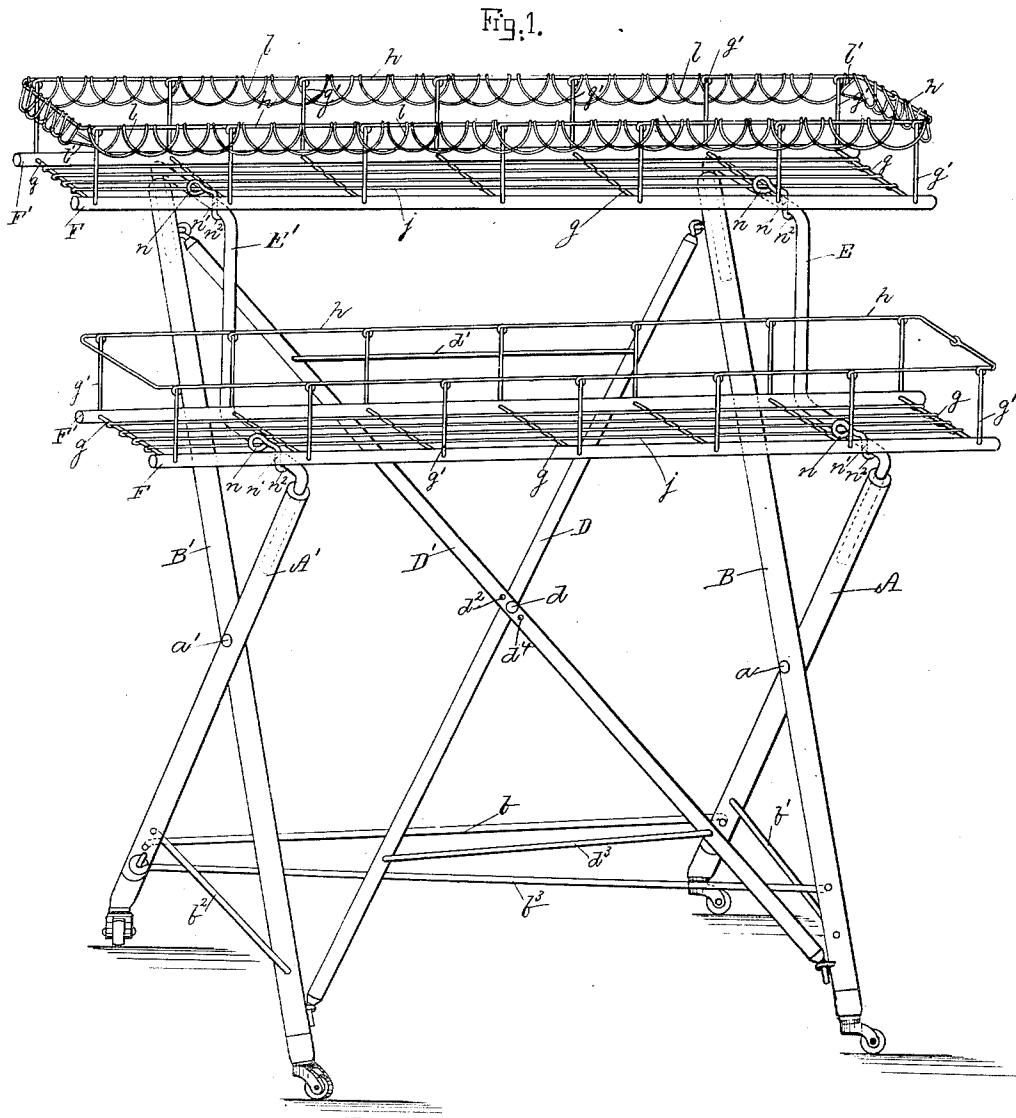
(No Model.)

A. E. WHITEHOUSE.
PLANT STAND.

4 Sheets—Sheet 1.

No. 462,674.

Patented Nov. 3, 1891.



Witnesses.

Francis W. Dean.

Samuel W. Miller.

Inventor.

Alonso S. Whitehouse
by W. A. Copeland,
his atty.

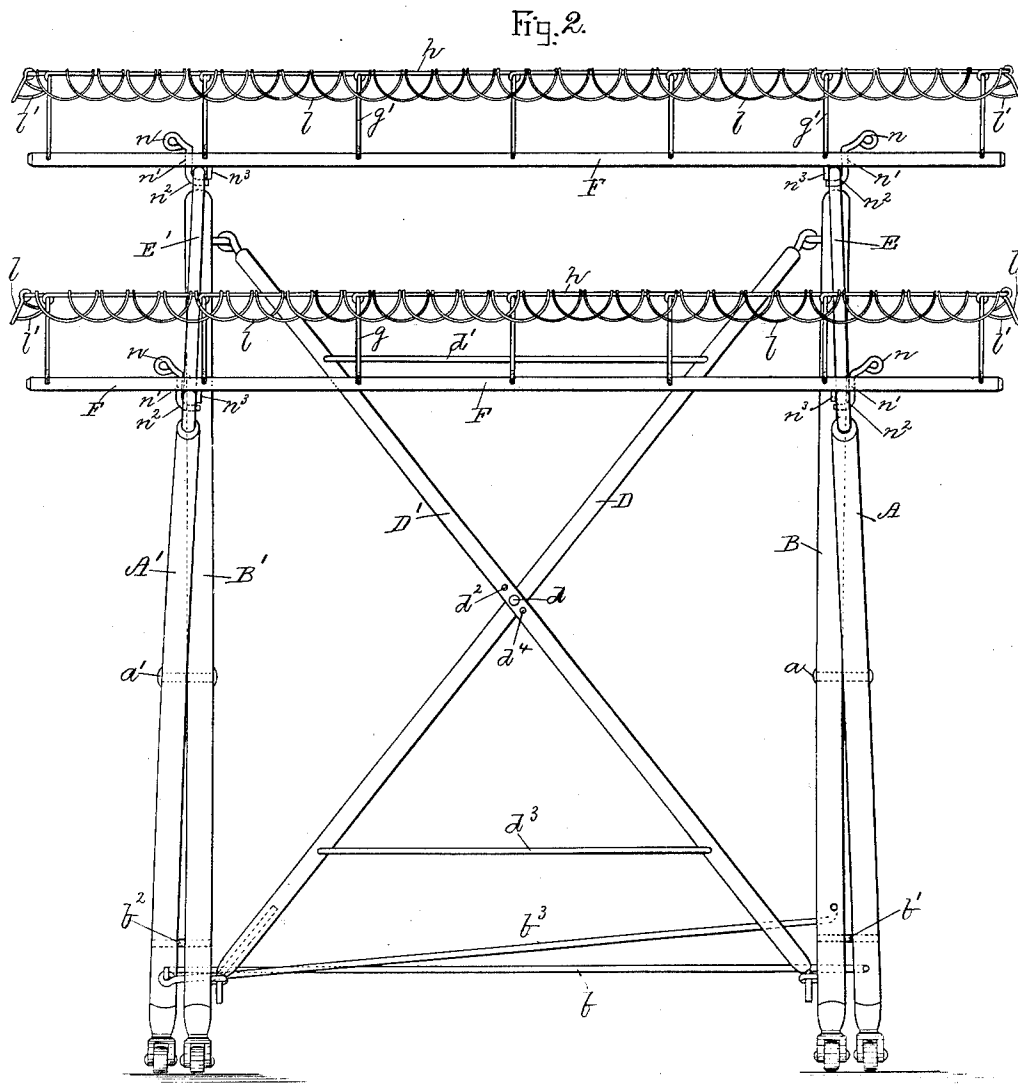
(No Model.)

4 Sheets—Sheet 2.

A. E. WHITEHOUSE.
PLANT STAND.

No. 462,674.

Patented Nov. 3, 1891.



Witnesses.

Francis W. Dean.

Lawrence W. Brown.

Inventor.

Alonso E. Whitehouse
by Wm A. Copeland,
his atty.

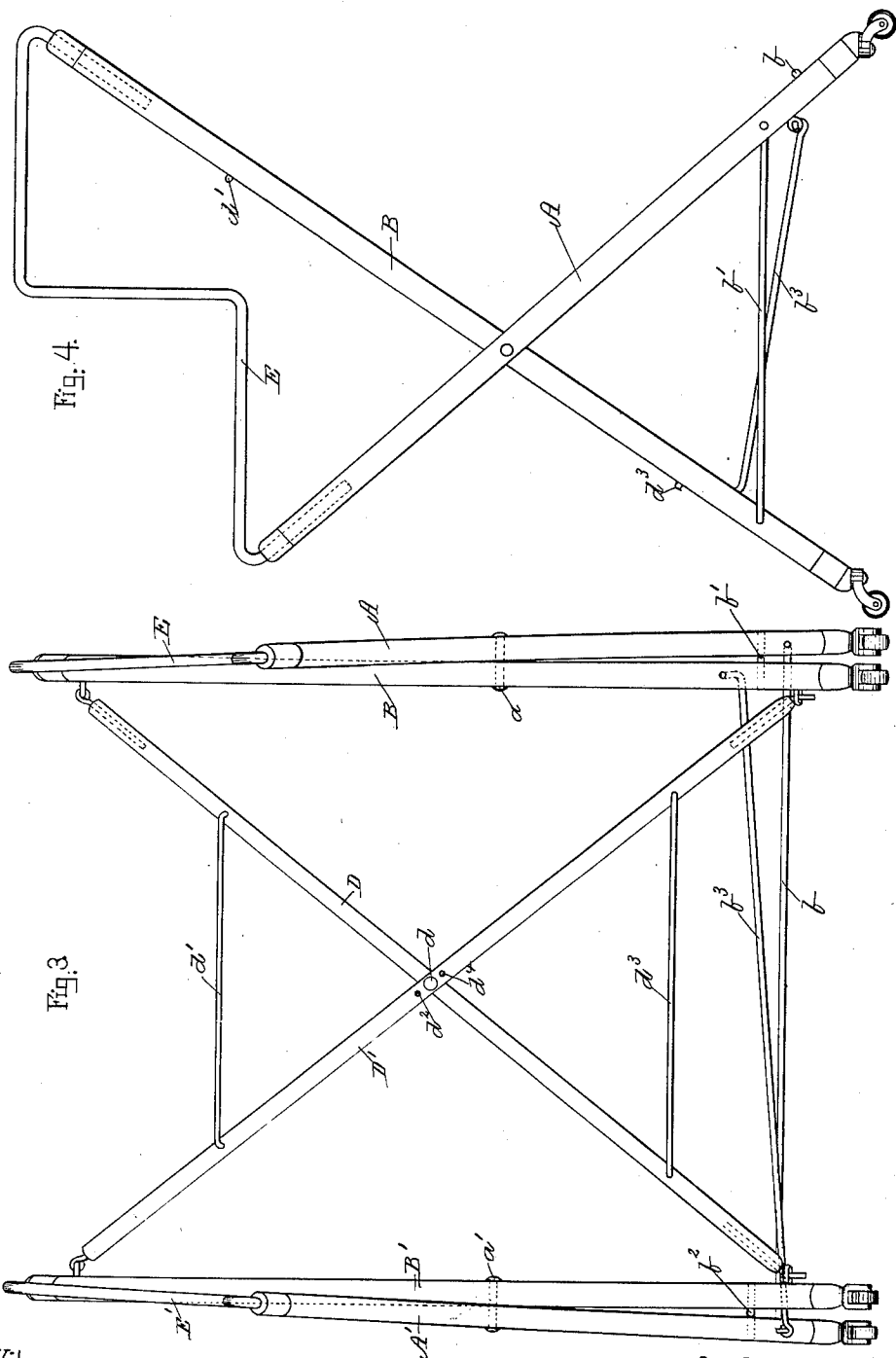
(No Model.)

4 Sheets—Sheet 3.

A. E. WHITEHOUSE.
PLANT STAND.

No. 462,674.

Patented Nov. 3, 1891.



Witnesses.

Francis W. Dean.
Henry M. Miller.

INVENTOR.

Wm. E. Whitehouse.
by Wm. A. Copeland.
his atty.

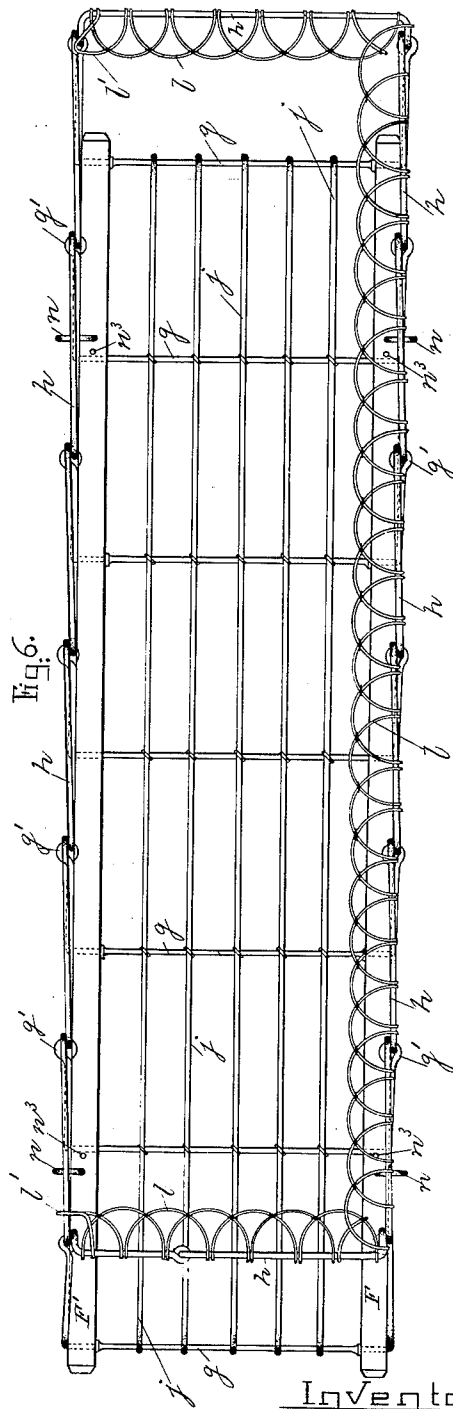
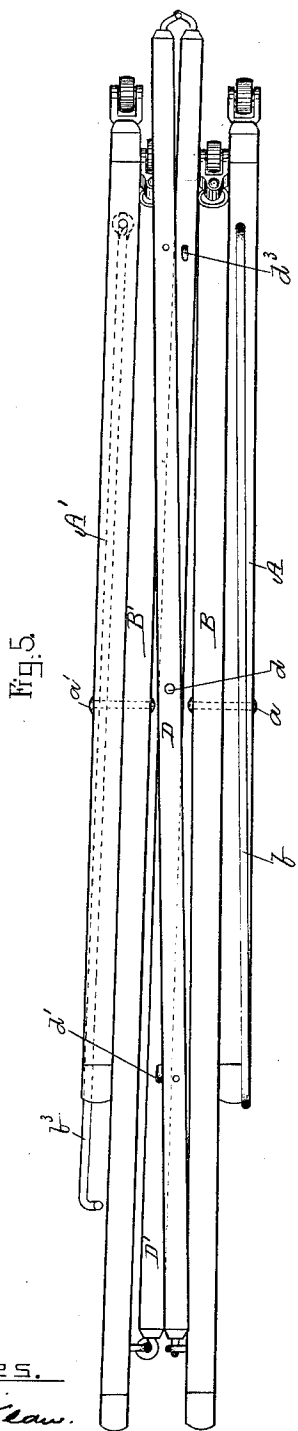
(No Model.)

4 Sheets—Sheet 4.

A. E. WHITEHOUSE.
PLANT STAND.

No. 462,674.

Patented Nov. 3, 1891.



Witnesses.

Francis W. Deane.

Samuel W. Miller.

Inventor.

Alonso E. Whitehouse,
by Wm. A. Copeland,
his atty.

UNITED STATES PATENT OFFICE.

ALONZO E. WHITEHOUSE, OF BOSTON, MASSACHUSETTS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF TWO-THIRDS TO GEORGE L. HENDER, OF WEYMOUTH, MASSACHUSETTS, AND RUFUS A. TILTON, OF SALEM, NEW HAMPSHIRE.

PLANT-STAND.

SPECIFICATION forming part of Letters Patent No. 462,674, dated November 3, 1891.

Application filed January 30, 1891. Serial No. 379,630. (No model.)

To all whom it may concern:

Be it known that I, ALONZO E. WHITEHOUSE, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Plant-Stands, of which the following is a specification, reference being had to the accompanying drawings, which form a part hereof.

My invention relates to a plant-stand composed of detachable portions, which can be easily taken apart and folded compactly for shipment or storage, and which are easily set up when desired for use; and it consists in forming the two end portions of the frame of pivoted cross-rods connected by other pivoted cross-rods, the two sets of end rods serving as legs, each set being connected at the top from front to rear by detachable rods, forming steps which receive the trays, the three sets of cross-rods being capable of folding when the step-bars are detached, also in the other devices and combinations more particularly described and claimed hereinafter.

In the drawings I have shown a two-step stand; but with slight modification of form the invention is adapted for three or more steps.

Figure 1 is a perspective of a stand embodying my invention, the border being shown only on the upper tray and entirely omitted from the lower tray in order that the other parts may be shown more clearly. Fig. 2 is a front elevation of the same with border on both trays. Fig. 3 is a front elevation, and Fig. 4 an end elevation, of the stand with tray removed. Fig. 5 shows the frame folded after the step-bars are removed. Fig. 6 is a top plan view of a tray when "knocked down" for packing.

The ends of the stand are composed of two pairs of cross-rods A B and A' B', pivoted together at the point of crossing *a a'*, so that each pair can be folded parallel when detached from the stand. These cross-rods also form the legs of the stand, the legs A A', which incline to the front, being shorter than the legs B B', which incline to the rear. Another pair of cross-rods D D', pivoted together at *d*, form braces to connect the legs B B'. The

upper end of brace D is linked to leg B and the lower end is hooked in an eye in leg B'. The upper end of brace D' is linked to leg B' and the lower end is hooked to leg B. Thus the lower ends of the braces may be easily disconnected. A wire brace *d'* extends between the two braces D D' above the point of crossing, one end of which is hinged to the brace D' and the other end is bent so as to hook in the brace D to keep the braces D D' from spreading and to strengthen the frame. This can be readily unhooked when the stand is to be taken down and will swing around alongside the brace D', hooking in the hole *d*². A screw-eye might be substituted for the hole *d*². A similar wire brace *d*³ connects the lower portion of the braces D D' and swings up to hook in brace D' at *d*⁴ when taken down. A wire brace *b*, hinged to leg A near the lower end, is detachably connected at the other end with leg A' and swings up parallel with leg A when disconnected from A'. Detachable wire brace *b'* connects the end legs A B, and a similar brace *b*² connects legs A' B' near the bottom. Wire brace *b*³ extends diagonally from the lower part of leg B to the lower part of leg A' and is detachable at one end. The exact number and disposition of these wire braces is immaterial, the purpose being to have enough to properly steady the frame and to have at least one end detachable. They are preferably hinged or linked at the other end, so that when the parts are folded together the wire braces will not be entirely detached and become confused together. If preferred, however, they may be detachable at both ends. The step-bars E E' are bent over at the ends to fit in sockets in the upper ends of the legs, as shown in Fig. 3. The step-bars need no other fastening to secure them in position, and at the same time they serve also as connecting-braces for the legs.

The tray consists of two longitudinal rods F F', with cross-wires *g*, which pass through holes in the rods F F' and are turned up on the outside, forming the standards *g'*. The upper ends of these standards *g'* are linked to a wire rail *h*, which forms the upper rim of the tray. The cross-wires *g* are capable of turning in the rods F F', so that by pushing

at one end of the rim *h* the tray may be flattened out, as shown in Fig. 6. They should fit sufficiently snug, however, to retain their position when set up. The standards *g'* are preferably integral with the cross-wires *g*, but may be made in separate portions, in which case the cross-wires *g* need not turn at all; but the standards will be hinged or bent and inserted in holes, so as to be capable of being turned down in the same manner, as already described. Wires *j* extend lengthwise, which, with the cross-wires *g*, form the bottom of the tray to support the flower-pots. The longitudinal wires *j* may be dispensed with by increasing either the number of cross-wires *g* or the longitudinal rods *F F'*. A border *l* is formed with eyes, through which the rail *h* passes, so that the whole border on each side or end which is complete in itself can be turned on the rail as on a hinge and turned in, as shown in Fig. 6, when the tray is flattened. The scallop at the end of each border has a projecting bent portion *l'*, as shown in Fig. 6, which serves as a stop to prevent the border being turned down farther than desired for proper adjustment. On the top tray the body extends entirely around the rail. On the other trays the rail on the rear is not provided with a border, as it would interfere with the step-bar, and is not conspicuous when the stand is full of pots.

The trays are secured to the step-bars by keys at front and rear. This key is simply a bent wire with the upper portion bent to form a finger-piece *n*, a shank *n'*, which passes through the rods *F F'*, and a foot-piece *n²* at the lower end to hook under the step-bar. By turning the finger-piece *n* the hook is opened. When all of the keys are opened, the tray may be readily removed. A pin *n³*, which remains stationary, forms in connection with the hook *n²* an eye, which holds the tray securely in position.

What I claim as my invention is—

1. A plant-stand having a frame composed of pivoted cross-rods at each end, pivoted cross-rods connecting the two sets of end rods, the end rods serving as legs, each set being connected at the top from front to rear by detachable bars forming steps which receive the trays, the three sets of cross-rods being capable of folding together when the step-bars are detached, substantially as described.

2. A plant-stand having a frame composed of pivoted cross-rods at each end, pivoted

cross-rods connecting the two sets of end rods, the end rods serving as legs, those which incline toward the front being shorter than those which incline toward the rear, each set of end rods being connected at the top from front to rear by detachable bars bent to form steps, the ends of the step-bars fitting in sockets in the end rods, the three sets of cross-rods being suitably braced by braces which are detachable at one end, the three sets of cross-rods and the braces being capable of folding together when the step-bars are removed and the braces detached at the detachable end, substantially as described.

3. A knockdown tray for a plant-stand, consisting of two or more longitudinal rods, cross-wires connecting the longitudinal rods, upturned standards, and a continuous rail to which the standards are linked at their upper ends, the lower ends of the standards being hinged to the longitudinal rods, so that the standards and rail may be knocked down upon the rods, substantially as described.

4. A knockdown tray for a plant-stand, consisting of two or more longitudinal rods, cross-wires connecting the longitudinal rods, upturned standards and a continuous rail to which the standards are linked at their upper ends, the lower ends of the standards being hinged to the longitudinal rods, so that the standards and rail may be knocked down upon the rods, and a scallop border of wire having eyes through which the rail passes, the border for each side and end being detached from each other and capable of folding when the tray is knocked down, substantially as and for the purpose described.

5. A plant-stand having a frame with side rods forming steps to support a tray, a tray with a longitudinal rod forming a part of the bottom of the tray and resting crosswise of the step-bars, and keys for securing the tray to the step-bars, each key having a shank which passes through the longitudinal rod of the tray and is free to turn on its axis, and a foot portion which extends under the step-bar, and a pin projecting from the longitudinal rod of the tray, which, together with the key, is adapted to form an eye to hold the tray in position, substantially as described.

ALONZO E. WHITEHOUSE.

Witnesses:

FREDK. J. RAULETT,
WM. A. COPELAND.