

(No Model.)

S. N. PECK.
TRANSOM LIFTER.

No. 575,982.

Patented Jan. 26, 1897.

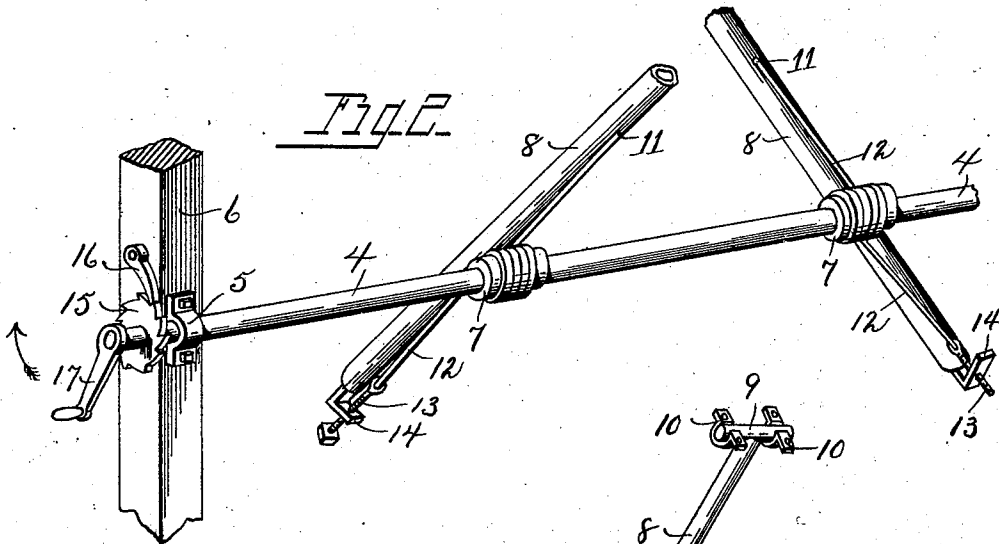
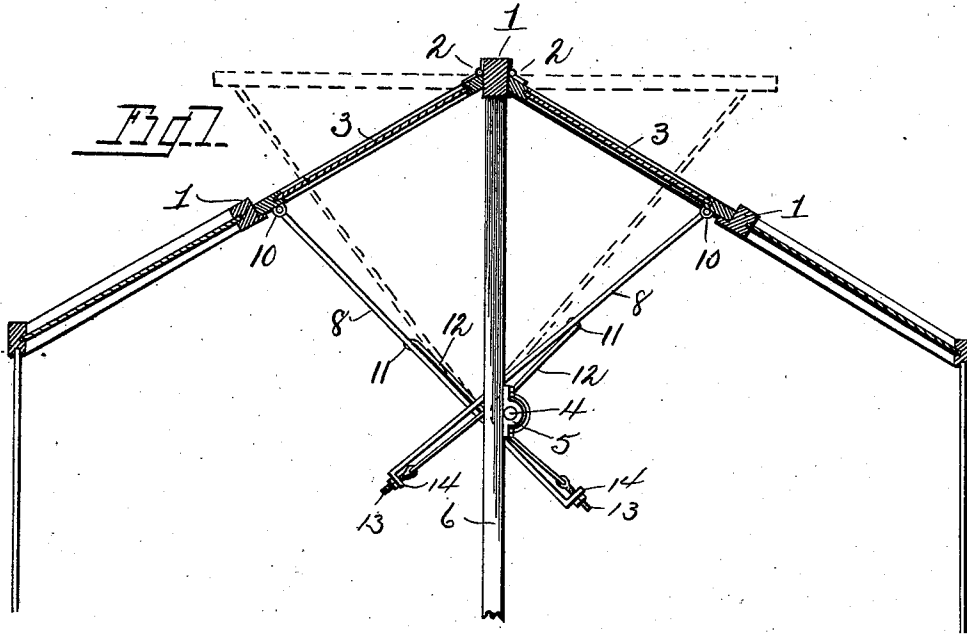
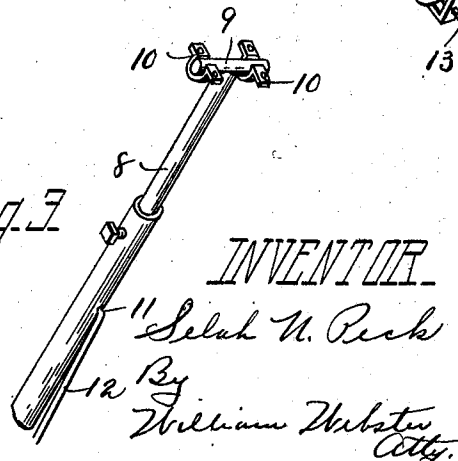


Fig. 3



WITNESSES

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UNITED STATES PATENT OFFICE.

SELAH N. PECK, OF TOLEDO, OHIO, ASSIGNOR OF ONE-HALF TO ALBERT Q. BRITTON, OF SAME PLACE.

TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 575,982, dated January 26, 1897.

Application filed July 20, 1896. Serial No. 599,798. (No model.)

To all whom it may concern:

Be it known that I, SELAH N. PECK, of Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Sash-Operators for Greenhouses; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to a sash-operator for greenhouses, and has for its object to provide a device of this character which will operate all of the sash in a greenhouse either upon one side or upon both sides of the roof simultaneously in one operation and which shall be inexpensive in its construction and effective in its operation.

The invention consists in the parts and combination of parts, as shown, described, and claimed.

In the drawings, Figure 1 is a sectional end view of a portion of the greenhouse, illustrating my invention as applied to the sash. Fig. 2 is a detail view of the operating-shaft and a plurality of sash-operators secured thereto, also illustrating the means for operating the shaft to raise or lower the sash. Fig. 3 is a detail view of the upper end of the operating-arm.

1 designates the framework of a greenhouse, to which is pivotally secured at 2 the hinged sash 3.

As is well known, it is necessary in order to secure the proper temperature within a greenhouse that the sections of hinged sash be raised that the outside atmosphere will penetrate within the greenhouse; also, that under a sudden change of temperature it is often necessary that the sash be lowered to prevent a sudden change within the greenhouse, which would be attended with great injury to the plants housed therein.

This invention relates to the means for raising and lowering of the sash in the greenhouse simultaneously, and consists in a longitudinal shaft 4, secured in the hangers 5, which are attached to risers 6, which support

the top of the house. Arranged upon the shaft immediately beneath each hinged sash are drums 7, and secured to the sash at their upper ends are the arms 8. The preferred means for securing the arms to the sash is to form the upper end of the arms with a T-shaped head 9, the ends of which are journaled in hangers 10, attached to the hinged section of sash. The lower end of arms 8 extend downwardly at one side of the shaft adjacent to the drums 7 thereon.

Secured to the upper end of the arms, as shown at 11, is a rope or cable 12, which is wound around the drums, the opposite end being secured to a screw-bolt 13, which passes through an angled end 14 in the lower end of the arms 8.

Arranged upon one end of the shaft 4 is a ratchet-wheel 15, and arranged upon the riser 6, adjacent thereto, is a pawl 16, which, engaging with the ratchet-wheel, holds the shaft 4 in any desired adjustment. Secured to the extreme end of the shaft is an end lever 17, by which the shaft is revolved.

In a greenhouse the hinged sections of sashes are usually arranged upon alternate sides of the ridge of the house. Therefore to arrange the arms 8 and their connection with the shaft to raise or lower the sections of sash simultaneously the arms are alternately angled in different directions, as shown in Fig. 1.

In operation, to raise the sash, end lever 17 is revolved in the direction of the arrow, which revolves the shaft, and consequently the drums secured thereto. The rope or cable 12, which is frictionally engaged upon the drum-tension, being secured by means of the screw-bolt 13, will tend to wind around the drum, and consequently raise the arms 8 and lift the sash, the pawl 16 holding the same in their adjusted position. To lower the sash, pawl 16 is lifted from engagement with the ratchet-wheel 15 and the shaft revolved in an opposite direction, when the rope or cable winding in an inverse direction upon the drum will cause a downward pull upon the arms 8, which lowers the sash.

If desired, the arms may be adjusted as shown in Fig. 3, which will allow them to be applied to any height of house.

What I claim is—

1. In a sash-operator for greenhouses, a longitudinal shaft, means for revolving the same, drums secured thereon, arms secured to the sash and depending therefrom in proximity
5 to the drums, ropes or cables wound around the drums and secured to the arms above and below the drums.

2. In a sash-operator for greenhouses, a longitudinal shaft, means for revolving and hold-
10 ing the same in any desired adjustment, drums secured upon the shaft, arms pivotally secured to the sash and depending therefrom

in close proximity to the drums, ropes or cables wound around the drums, the upper ends thereof being secured to the arms, and the
15 lower ends secured to screw-bolts adjustably arranged in the lower end of the arms.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

SELAH N. PECK.

Witnesses:

WILLIAM WEBSTER,
CARROLL J. WEBSTER.