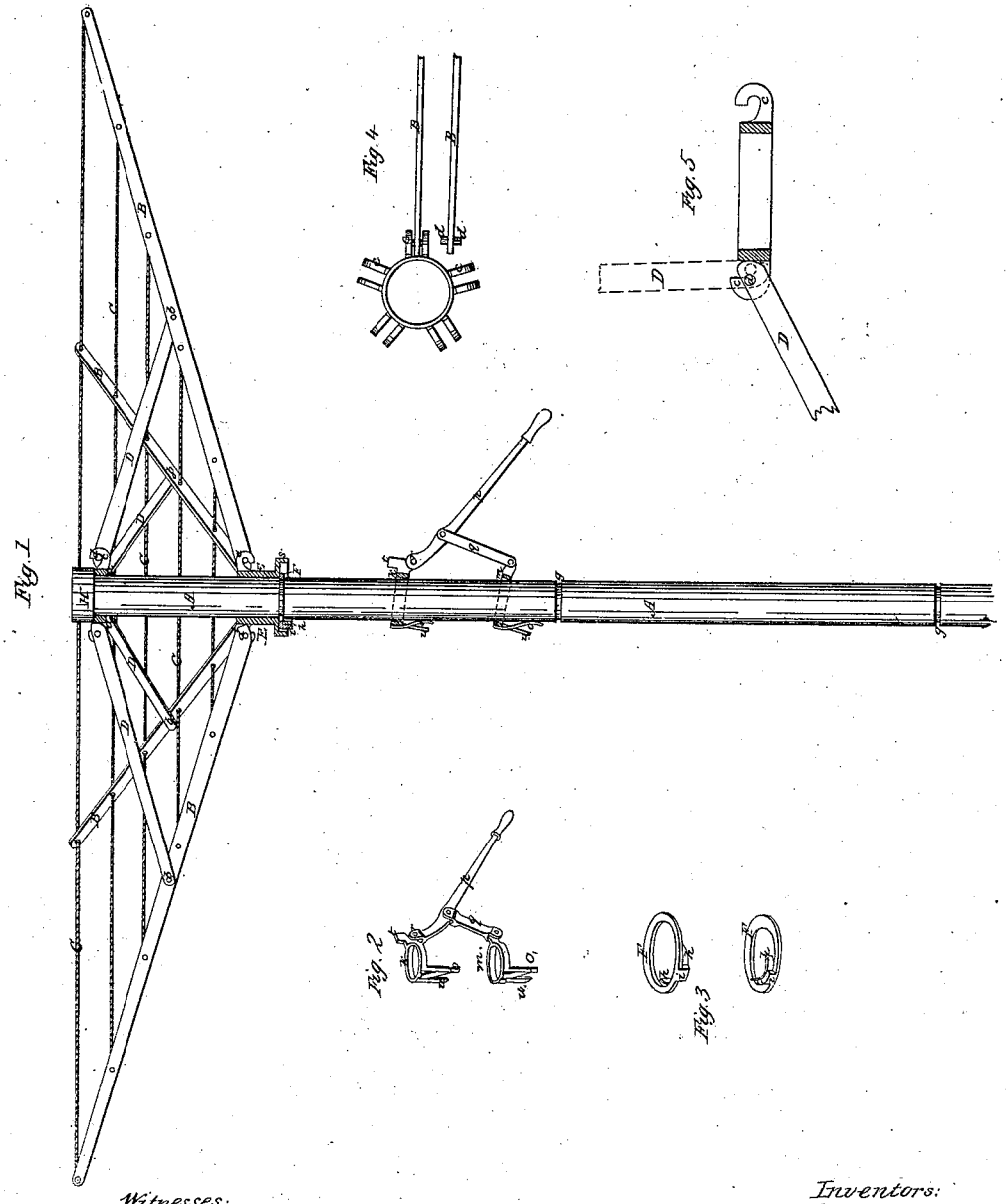
S. W. & J. F. Palmer,

Clothes Drier,

No. 25,868. Patented Oct. 18, 1859.



Witnesses:
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UNITED STATES PATENT OFFICE.

S. W. PALMER AND J. F. PALMER, OF AUBURN, NEW YORK, ASSIGNORS TO S. W. PALMER, N. PALMER, AND JOHN PATTY, OF SAME PLACE.

CLOTHES-FRAME.

Specification of Letters Patent No. 25,868, dated October 18, 1859.

To all whom it may concern:

Be it known that we, S. W. PALMER and J. F. PALMER, of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Clothes-Frames; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1, represents a longitudinal vertical section, through said clothes frame. Figs. 2, 3, 4, and 5, represent detached views to be hereafter described.

Our invention pertains to that class of clothes frames, which are hung to a center shaft, on which they can be raised or lowered, and the arms of which can be expanded or folded up at pleasure, and relates to the devices by means of which said frame may be expanded and raised on its center shaft, and be retained thereon in its expanded position, and also relates to the peculiar manner of hinging the arms to the sliding hubs of the frame.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

A, represents the center shaft of the frame; B, represents the arms to which the clothes lines are attached, and C, represents the clothes lines.

D, represents hinged arms or braces, which are pivoted at *b*, to the arms B, and which tend to keep the latter in their proper positions. The inner ends of the arms B, and D, are respectively hinged to the sliding hubs E, and *a*, which can be moved at pleasure over the shaft A. These hubs are formed at their peripheries with hook shaped lugs *c*, of the form represented in Figs. 1, and 5, which serve as the bearings of the pins *d*, of the arms B, and D, the exact shape of the end pieces of these arms is represented in Fig. 5; the end is rounded off in the line of a circle, which has the point *d*, as its center, and which touches the outer periphery of the hub, thus keeping the pin *d*, within the lugs, and preventing it from slipping through their openings. When the arm is to be attached to the hub, it is placed in the position shown in red lines in Fig. 5, when the pins *d*, can be readily entered through the openings of the lugs, and by then turning the arm to the position shown in black lines, the pins *d* cannot escape through the openings of the lugs owing to the eccentric form of the ends of the arms and thus making a good and strong hinge which permits the arms to be attached or detached with the greatest facility while they are perfectly secure against displacement from any ordinary cause.

F, represents a catch ring; it is of the shape represented in Fig. 3, the inner diameter of which is somewhat larger than the diameter of the shaft A; this catch ring, when slipped over said shaft will drop into one of the circumferential grooves *g*, and will be held therein by the action of the spring *h*, which presses on the shaft A; the hub E, is supported by this catch ring, resting thereon by means of its extended flange *s*, and thus the frame is held in any of its adjusted positions; the catch ring can be released by pressing on the thumb-piece *i*, when it will glide over the shaft.

The hoisting apparatus consists of two clutch rings *k*, and *m*, which are retained in their positions on the shaft A, by means of the springs *o*, their inner diameters are somewhat larger than the diameter of the shaft A, and therefore when pressed by the springs their positions are inclined; they are connected together by means of a hinged lever *p*, and link *q*, in the manner represented in Figs. 1, and 2, and their operation is as follows: When the end of the lever *p*, is raised, the clutch ring *m*, is raised with it, while the ring *k*, is kept stationary; on then depressing the lever *p*, the ring *m*, is held in its position by the spring *o*, while the ring *k*, is raised, and thus by operating the lever *p*, on its fulcrum *r*, the clutch rings are raised alternately, and when the flange *s*, of the hub E, rests on the projection *t*, of the ring *k*, the entire frame will be raised by operating the lever *p*. The clutch rings can be slipped with ease over the shaft A, by pressing on the thumb pieces *u*, whereby the springs *o*, are compressed.

The operation of the entire apparatus is as follows: The expanded frame with its clothes lines is adjusted to such a position on the shaft A, as is most convenient for hanging the clothes on the lines, and it is held in this position by means of the catch ring F, which is sprung into one of the grooves *g*; when the clothes are hung to the lines, the catch ring is released, and the lever *p*, may be operated until the hub *a*, is pressed against

the head H, of the shaft A, whereby the arms are expanded to their fullest extent, and in this position the catch ring F, is sprung into its groove *g* by the action of the spring *h*, and the apparatus is thus retained in its expanded position.

The advantage of these open hinges consists in the facility with which the frame may be set up or taken down, as with the exception of the pins *b*, there are no pieces or parts to be removed or inserted, they being permanently fixed in their places. The braces cannot by any sudden rising or turning around on the central shaft, be thrown out of their places.

The openings in the hooks *c* may be on top instead of underneath and effect the same purpose. The ring F, is somewhat oval in its form—that is one of its diameters is small enough to hug the post or its grooves snugly, while the other diameter is large enough to allow it to slip over the post freely when being slid up or down thereon.

Having thus fully described the nature of our invention, what we claim therein as new, and desire to secure by Letters Patent is,

1. Hinging the arms of a clothes frame to the sliding hubs, by means of the pins *d*, which are supported by the open lugs *c*, when said arms are constructed, and the several parts arranged, substantially in the manner, and for the purpose described.

2. We also claim in combination with the shaft and its grooves the sliding catch ring F, with its spring *h*, and projection *i*, for retaining the frame in its position, substantially as described.

3. We also claim in combination with the central post or shaft, and sliding frame, the hoisting apparatus, consisting of the clutch rings *k*, and *m*, with their springs *o*, lever *p*, and link *q*, substantially in the manner, and for the purpose described.

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