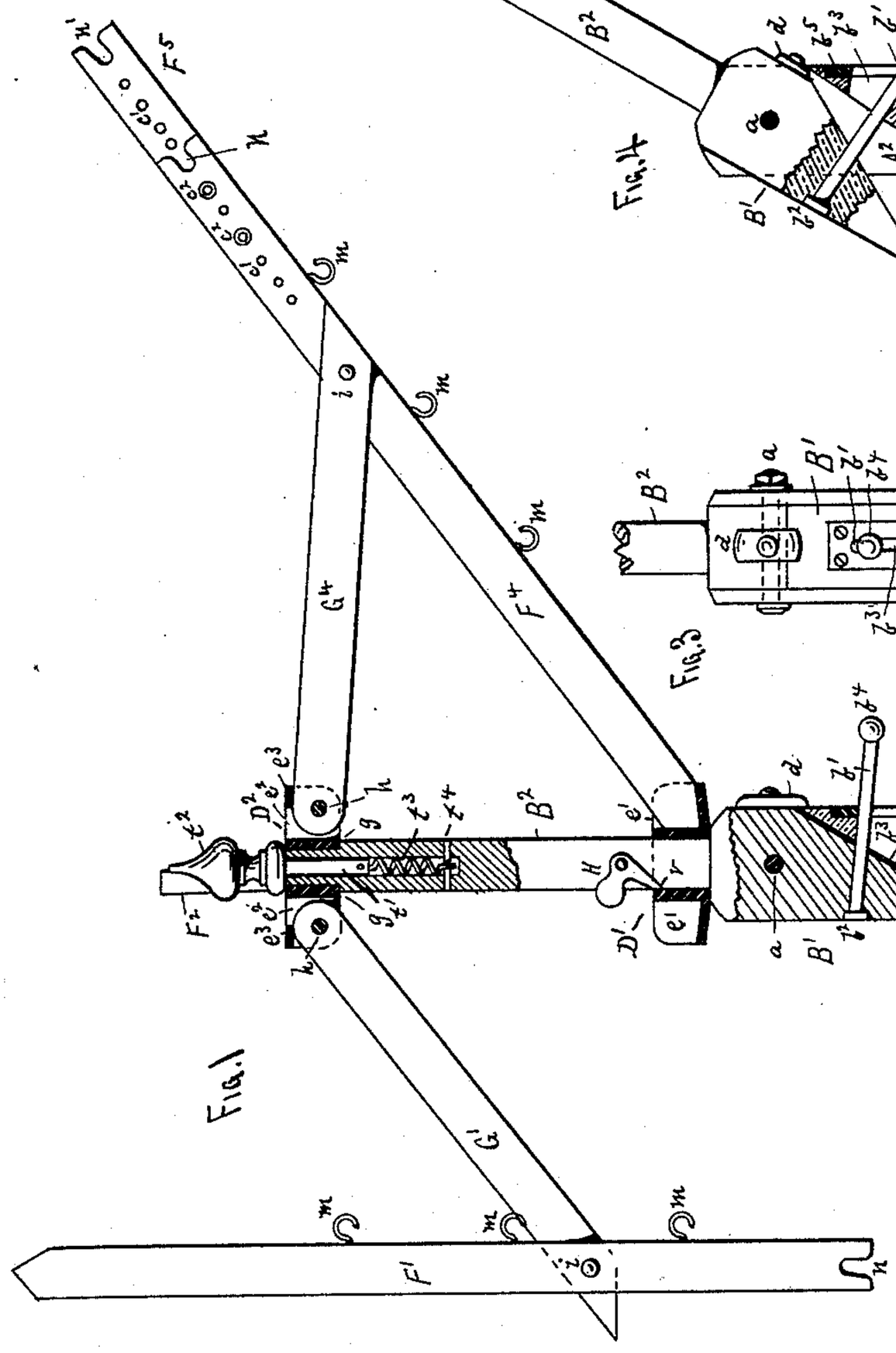
(No Model.)

R. ORR.

CLOTHES DRYING FRAME.

No. 359,275. Patented Mar. 15, 1887.



WITNESSES.

H. B. Webster.

C. B. Gardner

Robert Orr.

INVENTOR. By Charles N. Woodward Atty.

UNITED STATES PATENT OFFICE.

ROBERT ORR, OF ST. PAUL, MINNESOTA.

CLOTHES-DRYING FRAME.

SPECIFICATION forming part of Letters Patent No. 359,275, dated March 15, 1887.

Application filed May 8, 1886. Serial No. 201,601. (No model.)

To all whom it may concern:

Be it known that I, ROBERT ORR, a subject of the Queen of Great Britain and Ireland, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Clothes-Drying Frames, of which the following is a specification.

In the accompanying drawings, which form a part of this specification, Figure 1 is a sectional side elevation of a portion of the frame, and Fig. 2 is a plan view of the same. Fig. 3 is a front view of the lower portion of Fig. 1. Fig. 4 is a side view of the part shown in Fig. 3, and with the radiating arm-supporting staff tilted over to one side. Fig. 5 is an enlarged perspective view of the lower portion of the arm-staff, and with the lower arm-socket in position thereon.

A′ represents an upright post, which may be either permanently fixed in the ground or set into a socket, from which it may be removed when not in use. In the upper part of this post A′ is pivoted, by a bolt, *a*, a staff on which the radiating arms for supporting the clothes-lines are swiveled, as hereinafter set forth.

The upper part of the post A′ is formed with an inclined surface, and the lower end or "butt," B′, of the staff is formed with a correspondingly-inclined surface, so that when the two parts are placed in line perpendicularly, as shown in Fig. 1, the joint between them will be an inclined one. The upper part, B^2, of the staff is in the form of a circular shaft, as shown.

Upon the sides of the post A′ are secured two "cheek-plates," A^2 A^3, projecting above the upper end of the post A′ and embracing the sides of the butt B′ of the staff, and forming supports for the ends of the bolt *a*, as shown.

b′ is a bolt secured by one end, b^2, in the butt B′ of the staff and passing outward through a slot, b^3, in the upper end of the post A′, and provided on its outer end with a head, b^4. This bolt forms a stop to the movement of the staff on the post A′, as shown in Fig. 4.

d is a button secured to the face of the butt B′ and adapted, when turned perpendicularly, as shown in Figs. 1 and 3, to project over the joint between the post A′ and butt B′, and thus hold them both fixed in an upright position. Then, by merely turning the button *d* around in a horizontal position, the staff B′ B^2 may be tilted over to one side until the head b^4 of the bolt *b*′ strikes the post A′, as shown in Fig. 4. The face of the slot b^3 will be surrounded by a metal plate, b^5, to receive the wear and friction of the bolt *b*′.

D′ is a socket encircling the shaft portion B^2 of the staff and resting upon the upper end of the butt B′, on which it is adapted to freely revolve as a step or shoulder. The socket is provided with four "pockets," *e*′, in which the lower ends of four arms, F′ F^2 F^3 F^4, are adapted to rest, these arms radiating outward and upward at angles, as shown.

Upon the upper end of the shaft portion B^2 of the staff is swiveled another socket, D^2, adapted to be revolved on a shoulder, *g*, formed for it on the staff, as shown. This socket D^2 also has four pockets, e^2, similar to the pockets *e*′ in the socket D′, and in which the inner ends of four brace-arms, G′ G^2 G^3 G^4, are pivoted by bolts or rivets *h*, while the outer ends of the brace-arms are each pivoted by bolts or rivets *i* to one of the arms F′ F^2 F^3 F^4, as shown. By this means the arms F′ F^2 F^3 F^4 will be held in the position shown and adapted to freely revolve about the staff as a center.

m m are hooks or eyebolts attached to the under sides of the arms F′ F^2 F^3 F^4, on which the clothes lines or wires will be strung, and in the outer ends of each of the arms F′ F^2 F^3 F^4 will be formed a notch, *n*, to carry the outermost coil of the line.

Across the outer ends of the pockets e^2 are formed bars e^3, to prevent the bars G′ G^2 G^3 G^4 from being raised upward above a horizontal line.

In Fig. 1, on the left-hand side, the arm F′ is shown disconnected from the socket D′ and reversed and partially folded down against the post A′ and staff B′ B^2, to illustrate the manner in which the whole apparatus may be folded up for removal or when not in use. In the upper end of the shaft portion B^2 of the staff is formed a cavity, in which the pin *t*′ of a head, t^2, is inserted, the head not only forming a finish to the upper end of the staff, but also serving to hold the socket D^2 down in place upon the shoulder *g*. Connected by one

end to the lower end of the pin t' is a spring, t^3, the other end of the spring being secured to the staff by a pin, t^4, or other means. By this means the head t^2 will be held with some degree of force down upon the staff and socket D^2, but at the same time will "give" and allow the socket to be raised upward if a sufficient pressure be brought to bear beneath it.

When rope is used as a clothes-line, its shrinkage, when wet, will draw the arms F' F^2 F^3 F^4 toward each other, and if some such relief as that furnished by the spring t^3 were not afforded, the line would frequently be broken; but by the simple expedient of the spring the strains of the rope cause the arms F' F^2 F^3 F^4 to raise the brace-arms and overcome the resistance of the spring, and thus the strains upon the rope are relieved by reducing the diameter of its coils on the arms F' F^2 F^3 F^4.

When the clothes are being hung upon the ropes, the frame will be tilted over, as shown in Fig. 4, to lower the coils of ropes on one side, so that they can be easily reached from the ground. Then, when the ropes are full, the frame will be returned to its upright position, which will elevate the clothes to a safe distance above the ground.

While hanging the clothes upon the tilted frame, as above described, of course the weight of the clothes will cause the lowermost side to remain in the lowermost position, and to support this heavy side I provide the socket D' with a small cavity, r, opposite each of its pockets e', and pivot on the shaft portion B^2 of the staff a pawl, H, adapted to fit into these cavities, one after the other, as the socket is revolved beneath them. By this simple means, when one side of the frame is filled with clothes, it may be turned one-fourth around until the pawl H catches into one of the cavities r, and thus the frame will be held in whatever position it may be left without reference to the difference in weight of the clothes upon it. When the frame is filled and replaced in its upright position, the pawl H will be thrown over out of contact with the socket D', so that the frame will be left free to revolve in either direction.

It sometimes happens that a greater length of line will be required, and I provide a very simple and effective means for securing this extra length of line by placing upon the ends of each of the bars F' F^2 F^3 F^4 an extension-strip, F^5, which is adapted to be extended to any desired extent by a series of holes, c', and bolts c^2, and provided with notches n' (similar to the notches n) for carrying the line. By this means one or more additional coils of rope may be placed upon the frame, and when not required the extension-arms may be removed, or moved inward until their notches n' come in line with the notches n on the main arms. In this position they do not interfere with the ordinary operation of the arms.

Having thus described my invention, what I claim as new is—

1. In a clothes-drying frame, a stationary post, A', having an inclined upper surface and a slot, b^3, extending therethrough, in combination with a staff supporting the clothes-line arms, having a butt, B', pivoted to the said post, and which has an inclined lower surface corresponding with the inclined surface of said post, a stop-bolt, b^2, attached to said butt and extending through said slot b^3, a retaining-head, b^4, on the free end of said bolt, and a locking-button, d, substantially as set forth.

2. In a clothes-drying frame, a central staff, sockets D' D^2, supported thereby, said sockets having pockets e' e^2, radiating arms F' F^2 F^3 F^4, stepped by their inner ends in said pockets e', brace-arms G' G^2 G^3 G^4, pivoted by their inner ends in said pockets e^2 and pivoted by their outer ends to said radiating arms, head t^2, having pin t', and spring t^3, adapted to connect said socket D^2 flexibly to said staff, substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ROBERT ORR.

Witnesses:
C. N. WOODWARD,
H. S. WEBSTER.