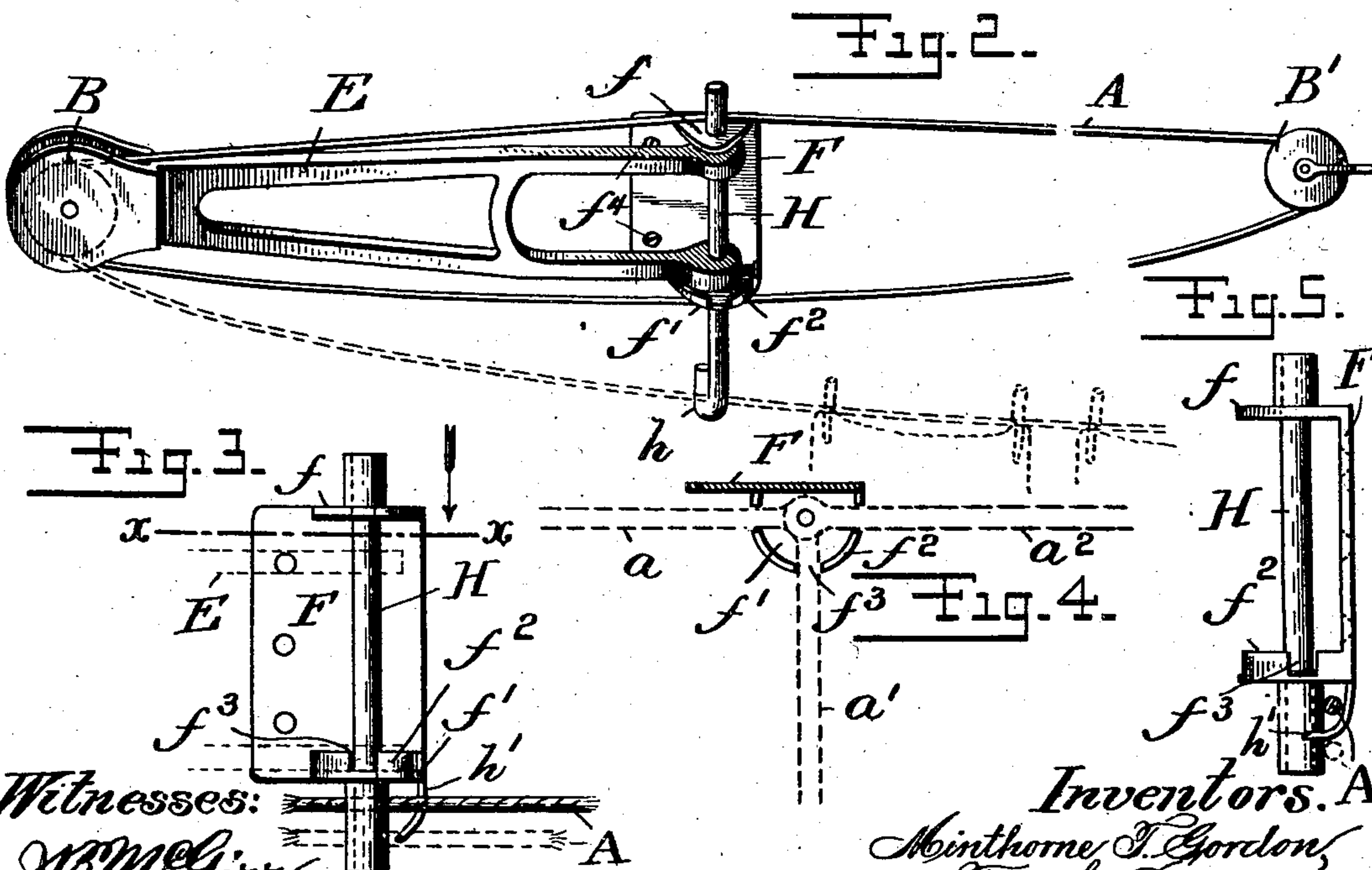
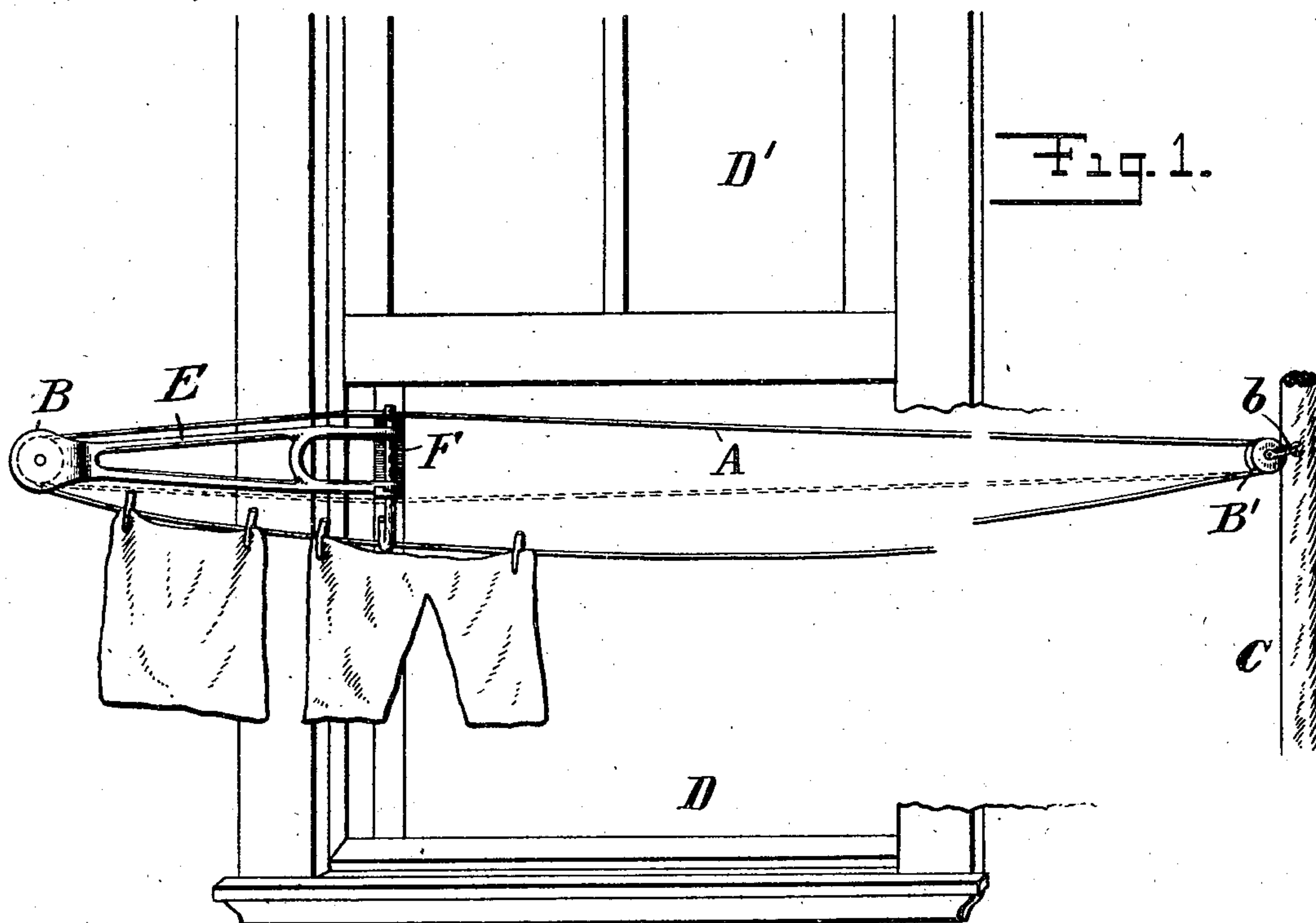


No. 704,026.

Patented July 8, 1902.

M. T. GORDON & F. DAVIS.  
CLOTHES LINE SUPPORT.

(No Model.)



Witnesses:

J. B. McGinnis.

R. F. Sweeney.

Inventors. A

M. T. Gordon,  
Frank Davis,

By Wm. K. Appleton,  
Attorney.



# UNITED STATES PATENT OFFICE.

MINTHORNE T. GORDON AND FRANK DAVIS, OF STAPLETON, NEW YORK.

## CLOTHES-LINE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 704,026, dated July 8, 1902.

Application filed January 3, 1902. Serial No. 88,291. (No model.)

*To all whom it may concern:*

Be it known that we, MINTHORNE T. GORDON and FRANK DAVIS, citizens of the United States, and residents of Stapleton, in the county of Richmond and State of New York, have invented certain new and useful Improvements in Clothes-Line Supports, of which the following is a specification.

Our invention relates to that class of clothes-line supports which are employed in connection with clothes-lines that extend from the windows of their respective houses to poles or other appropriate supports located at some distance therefrom, and are availed of more particularly in connection with flats, apartments, and tenements that are superposed the one above another. As ordinarily arranged these clothes-lines are usually made endless and each extend at the end of the reach nearest the house to which it is appropriate around a pulley suspended or otherwise jointed to the side or bottom of one of the windows thereof, and at the end of the reach farthest therefrom it passes around a similar pulley secured to a pole or other appropriate support. With the lines disposed as thus described the clothes or other articles are applied to their under stretches at the ends nearest their respective houses, and as fast as the ends are filled these stretches are moved outward toward their outer ends by moving their respective lines in the proper directions over their supporting-pulleys. As thus applied, the clothes or other articles are allowed to remain until they are dried or otherwise, when their removal from the lines will be effected at the windows where applied by a reversal of these operations, and so on. In applying the clothes or other articles to and removing them from a line when thus arranged it is necessary for the person so engaged to lean out of the window to a considerable distance, which is an act that is accomplished with no little danger and inconvenience when the articles being applied are large or heavy, and it not infrequently happens as a consequence of this that accident and death result to such person by falling from the window, either by being drawn therefrom through the weight of the article being applied or removed or by the action of the wind thereon. To over-

come these dangers and provide for applying the clothes or other articles to the line and for removing them therefrom entirely within the flat or other apartment, it has been essayed to support the pulley over which the end of the line passes nearest the house at the free end of a crane which is hinged or otherwise jointed at its other end to the side of the window and is free to be swung inward to the interior of such flat or apartment with the portion of the line passing over it when it is desired to apply the clothes or other articles thereto or remove them therefrom and outward from its interior when these operations are not required. This arrangement, while overcoming to a certain extent the danger incident to the application of the clothes or other articles to and their removal from the line, has been found objectionable in practice principally because of the fact that as the line is disposed on the side of the crane toward which the latter moves when being swung outward from the flat or other apartment, and the holding of the crane in the different positions to which it may be swung is effected by a hook and eye or other equivalent movable fastening device it is essential that after the clothes or other articles have been applied to the line the top and bottom stretches of the latter be carried by the hand of the operator around a hook or other projection disposed in approximation to the axis of motion of the supporting-crane before such crane is swung outward; otherwise or in case of the accidental release of the hook from its cooperating eye or of the other fastening means the violent swinging outward of the supporting-crane by the weight of the clothes or other articles upon the line will be effected and the breaking of the same or the deposition of the clothes or other articles upon the ground below, or both, will be accomplished as a consequence thereof.

The objects of our invention are therefore to obviate these last-mentioned objections and to provide a support for a clothes-line which while permitting of the clothes or other articles being applied to and removed from the line wholly within the flat or other apartment shall automatically effect the locking of the crane in any of the positions to which it may be adjusted and at the same time be more



simple in construction and efficient in operation than those heretofore in use.

To these ends the invention consists, first, in the peculiar arrangement of the clothes-line with respect to the supporting-crane by which the inner end of the former is supported, whereby the violent swinging outward of such supporting-crane by the weight of the clothes or other articles upon the line is prevented, and, second, in the means by which the locking of this supporting-crane in the various positions to which it may be adjusted is automatically effected, all as will hereinafter more fully appear.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 is an inside front elevation of a portion of a window and a portion of a supporting-pole with our invention applied in connection with them, part of the window-frame being broken away; Fig. 2, a face view of our invention detached from the window and drawn in perspective with portions of the clothes-line broken away; Fig. 3, a side elevation of the hanger by which the supporting-crane is secured to the window detached, showing in addition a modified construction of pivot-pin and portions of the supporting-crane in dotted lines; Fig. 4, a sectional plan of such hanger, taken in the plane  $xx$  in Fig. 3 looking downward and also showing in dotted lines the three several positions into which the supporting-crane may be adjusted; and Fig. 5, an edge view of the crane-supporting hanger looking from the right in Fig. 3.

In all the figures like letters of reference are employed to designate corresponding parts.

A indicates a clothes-line, which is preferably made endless by uniting the ends, as is now customary, and B and B' the pulleys upon which it is supported. The pulley B' is secured through a block or clevis  $b$  to a pole C or other appropriate support which is located at the proper distance outside of the window D. The pulley B, on the other hand, instead of being secured by a block or clevis to the outside of the window D is journaled in the free end of a crane E, which is hinged or jointed to one side of the outer casing of the same, whereby to be free to be swung into the flat or other apartment when the sash D' is raised, as shown in Fig. 1 and at  $a$  in Fig. 4, or outward into either of the positions illustrated at  $a'$  or  $a^2$  in the latter figure.

For hinging or jointing the crane E to the outer casing of the window D various means may be employed. We prefer, however, to employ for this purpose a stand F, which is provided with two ears  $f$  and  $f'$ , that project outwardly from its face, and to pivot the crane between these ears by a pivot-pin H, which extends downward through the same and through the crane E and extends some distance above and below them, as shown more fully in Fig. 2. As thus arranged, the swinging of the crane into any of its various positions may be readily effected, and in order to

prevent any slack being communicated to the line A when the crane is swung from the inside of the flat or other apartment to the outside thereof the line in extending from the pulley B to the pulley B' has both of its upper and under stretches passed in rear of the pivot-pin H or on the side thereof opposite to that in which the crane is moved in being swung from the position shown in Fig. 1 to either of the positions  $a'$  and  $a^2$ . (Shown in Fig. 4.) By this arrangement, as will be seen, whenever the crane is swung from the inside to the outside of the flat or other apartment the upper and under stretches of the line will be bent around the respective top and bottom end portions of the pivot H, which will permit the outward swinging of the crane without slackening the line.

In some instances the pivot H above and below the ears  $f$  and  $f'$  will be constructed of substantially the same size as the portions thereof that extend downward through the latter, and with this construction only a very small amount of the slack in the line A will be taken up by their peripheral surfaces as the line is bent around them in the outwardly-swinging movement of the crane. On the other hand, when it is desired to take up a considerable amount of the slack in the line when this outwardly-swinging movement takes place we sometimes find it convenient to enlarge these upper and under end portions, as shown in Fig. 3, whereby their peripheral lengths are increased, and thereby a greater amount of line required in bending it around them as the swinging of the crane in an outward direction is being effected.

For locking the crane E in any one of the positions to which it may be swung various expedients may be adopted. We prefer, however, to effect that result automatically, and to that end we provide the lower ear  $f'$  of the hanger F with an upwardly-extending flange  $f^2$  and form through the walls of the same a number of notches  $f^3$ , corresponding in number and location to the positions into which it may be desirable to have the crane E swung. These notches are made of the proper width to receive the lower edge of the crane, and when the latter is engaged with one or the other of them it is firmly locked by it. When the crane is thus locked, its release from the notch in which it is thus engaged will be effected by simply sliding the crane upward on its pivot H until it is raised wholly above the upper edge of the flange  $f^2$ , when it may be readily swung to the next notch and there allowed to descend automatically by its own gravity into the same and become locked thereby. In this position the crane will be positively retained until again raised from its engaging notch, when it will be again free to be swung to any other of its various positions that may be desired, and in order to permit of this upward and downward sliding movement of the crane upon its pivot H the portion of the crane in the vicin-



ity of the pivot is made somewhat less in depth than the distance between the under side of the ear  $f$  and the upper edge of the flange  $f^2$ .

5 With the clothes-lines supported as thus described the upper stretch in extending from the pulley  $B'$  to the pulley  $B$  in rear of the pivot  $II$  will pass above the ear  $f$ , and when free from clothes or other articles the  
10 under stretch in extending from the pulley  $B$  to the pulley  $B'$  in rear of this pivot will pass below the ear  $f'$  in close relationship thereto, as shown by dotted lines in Fig. 1 and by full lines in Fig. 2. On the other hand, when  
15 clothes or other articles are applied to the under stretch whatever slack there may be possessed by the line will be communicated thereto, and the stretch will thereby sag downward more or less away from the under side  
20 of the ear  $f'$ . When the weight of the clothes or other articles thus applied is slight, the sag of the stretch will not be sufficient to carry it below the lower end of the pivot  $II$ . On the contrary, when this weight is consid-  
25 erable the sag will be increased—as shown, for instance, in full lines in Fig. 1 and in dotted lines in Fig. 2—and in order to prevent it from carrying the stretch below the lower end of the pivot when the crane  $E$  is  
30 about to be swung outward we sometimes provide the lower end of the pivot with an underturned hook  $h$ , into which the line will pass on the crane being swung outward or into which it may be passed by the hand of  
35 the operator before such swinging operation is effected. The same result may also be accomplished when the hook  $h$  on the lower end of the pivot  $II$  is dispensed with by employ-  
40 ing in lieu thereof a hook  $h'$ , which depends from the under side of the ear  $f'$  to the proper distance and is bent outward at its lower end beneath and across the line of the stretch as the latter extends from the pulley  $B$  to the pulley  $B'$ , as illustrated in Figs. 3 and 5, and  
45 either of these forms of construction may be employed as preferred and the apparatus operate with equal efficiency. When the clothes or other articles are to be applied to the line, the under stretch, if not already in that re-  
50 lationship, will be removed from the inside to the outside of the hook  $h$  or  $h'$ , as shown in Figs. 1 and 3, and in that position it will be retained until they are applied thereto; but immediately that operation is completed  
55 the stretch, if it sags sufficient, will be returned to the inside of the hook, as shown in Figs. 2 and 3, when the crane may be swung outward into either of the positions  $a'$  or  $a^2$  in Fig. 4 and the sash  $D'$  lowered. On the  
60 contrary, if the sag is not sufficient to carry the stretch downward to near or below the lower end of the pivot  $II$  when thus supplied with clothes or other articles then the stretch need not be returned to the interior of the  
65 hook when the crane is swung outward, but be left outside of the same to bend around the pivot above it as the crane is carried out-

ward in the swinging operation. With the crane swung outward into either of the posi-  
70 tions  $a'$  or  $a^2$  it will remain locked until the application of other clothes or articles to or their removal from the line is required, when the sash  $D'$  may be raised, the crane again  
75 swung into the flat or apartment, and the application or removal of the clothes or articles effected.

For securing the stand  $F$  to the window-casing screws  $f^4$  may be employed or any other equivalent means adopted for the purpose  
80 that may be preferred.

When the crane  $E$  and other parts are made of iron or other material that would soil the clothes or other articles with rust if brought  
85 in contact with them, they may be coated with paint or japan, or the same may be galvanized with zinc, tin, or other appropriate material usually employed for this purpose.

With the crane and its supporting devices constructed and arranged as above described and the upper and under stretches of the  
90 clothes-line disposed in rear of the pivot-pin  $II$  not only may the inner portion of the line be swung into the flat or other apartment to receive the clothes or other articles to be ap-  
95 plied thereto or to be removed therefrom and afterward be swung outward from the same, but all slack in the line prevented when this inner portion is swung from the interior of  
100 the flat or apartment to the exterior of the same, and the strain incident to the weight of the clothes or other articles is so commu-  
nicated to the crane by the line as to prevent any tendency to a violent outwardly-swing-  
ing movement of the same thereby.

Although in the foregoing we have de-  
105 scribed the best means contemplated by us for carrying our invention into practice, we wish it distinctly understood that we do not limit ourselves strictly thereto, as it is obvious that we may modify the same in various  
110 ways without departing from the spirit of the invention.

Having now described our invention and specified certain of the ways in which it is or  
115 may be carried into effect, we claim and desire to secure by Letters Patent of the United States—

1. The combination in a clothes-line support, with a stand adapted to be secured to the window-casing or other support and pro-  
120 vided with an upper and an under ear projecting from its face, the under of which ears is equipped with an upwardly-extending notched flange, of a crane pivoted between  
125 such ears and not only adapted to engage with the notches in such flange, but constructed of a depth slightly less than that between the upper ear and the upper edge of  
130 this upwardly-extending flange on the under ear, substantially as described.

2. The combination in a clothes-line support, with a stand adapted to be secured to the side of a window or other support and pro-  
vided with an upper and an under ear extend-



ing outward from its face, a crane carrying a pulley at its free end, a pivot by which this crane is pivoted between such ears provided with ends that extend both above and below  
5 these ears, a pole or other support provided with a second pulley, of an endless clothes-line extending over and from one of these pulleys to and over the other on the side of the pivot opposite to that toward which the crane will  
10 move when being swung from the interior of a flat or other apartment to the exterior there-

of and means for locking the crane in adjusted positions, substantially as described.

In witness whereof we have hereunto set our respective hands this 31st day of December, 1901.

MINTHORNE T. GORDON.  
FRANK DAVIS.

Witnesses:

WM. H. APPLETON,  
R. F. SWEENEY.