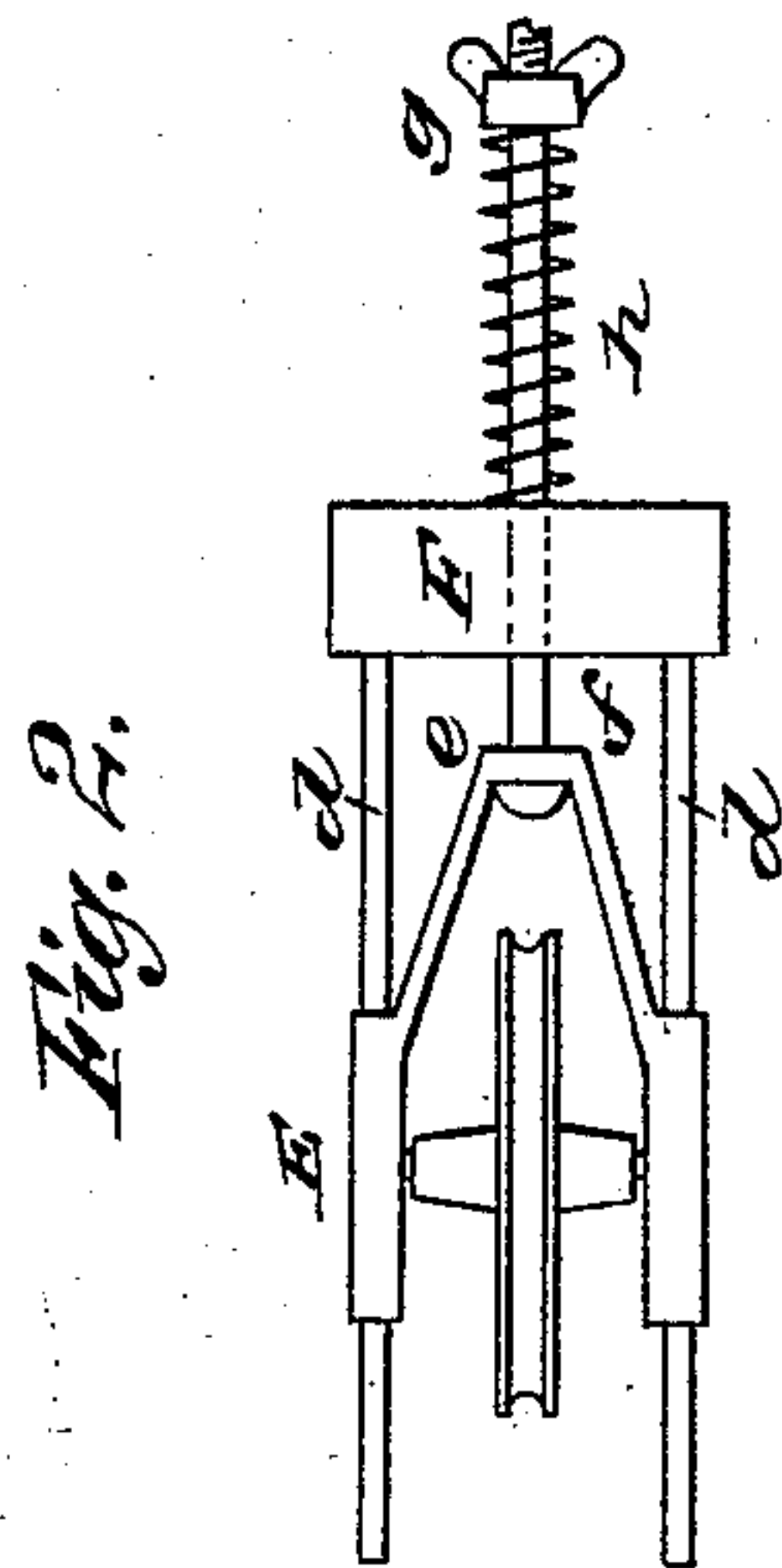
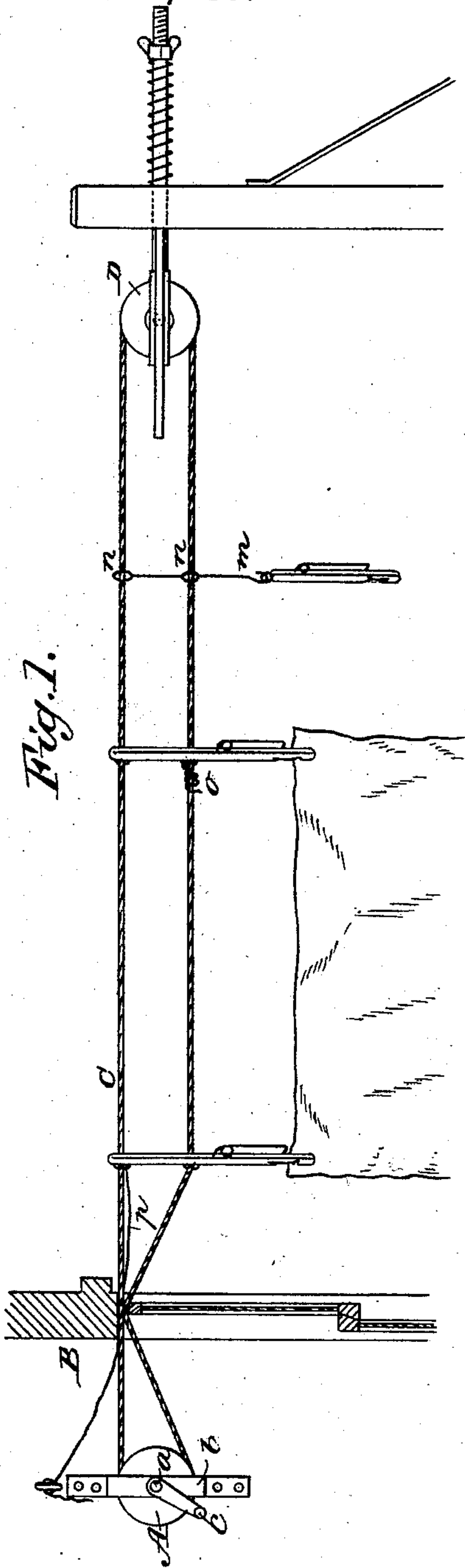


(No Model.)

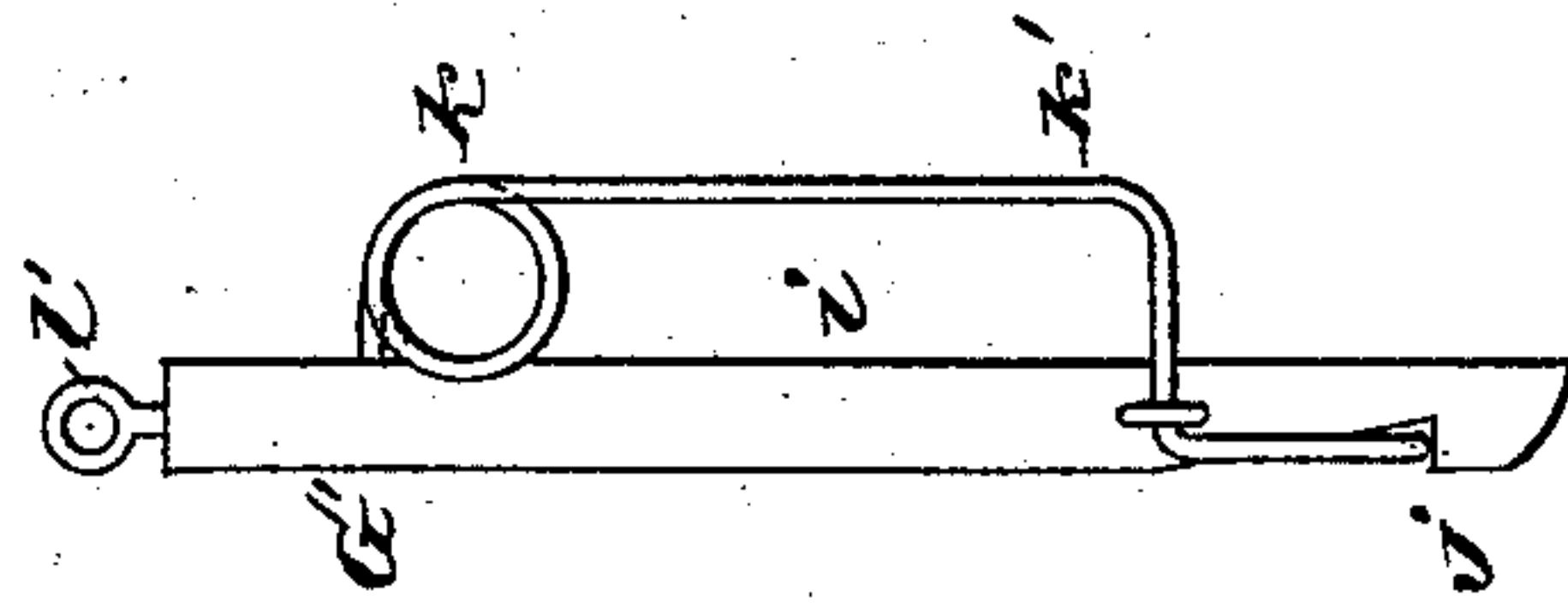
J. W. MILLER.  
CLOTHES DRYING APPARATUS.

No. 347,248.

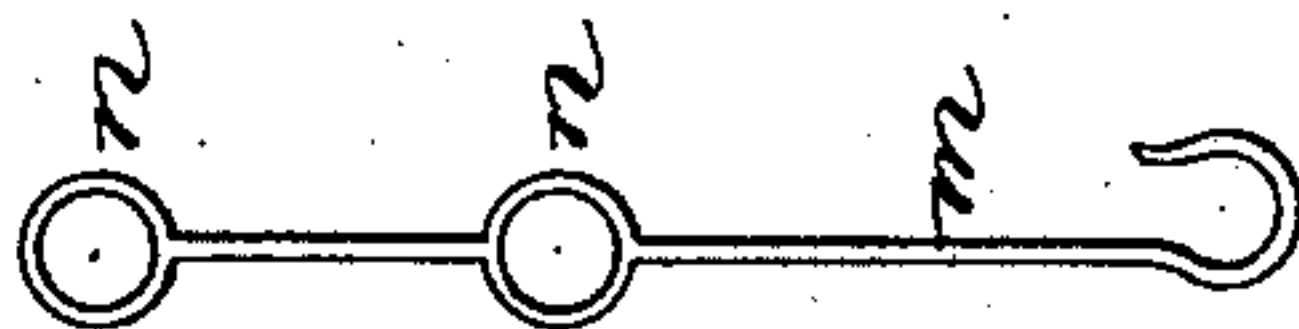
Patented Aug. 10, 1886.



*Fig. 4.*



*Fig. 5.*



*Fig. 3.*



WITNESSES:

*H. W. Miller*  
*C. Bedgwick*

INVENTOR:

*J. W. Miller*

BY

*Munn & Co.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JAMES W. MILLER, OF CENTRAL CITY, NEBRASKA.

## CLOTHES-DRYING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 347,248, dated August 10, 1886.

Application filed February 27, 1886. Serial No. 193,483. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES W. MILLER, of Central City, in the county of Merrick and State of Nebraska, have invented a new and useful Improvement in Clothes-Drying Apparatus, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a side elevation. Fig. 2 is a plan view of the clothes-line tightener. Figs. 3 and 4 represent the clothes-pins. Fig. 5 is a detail view of the wire hook placed on the clothes-line, and adapted to receive the clothes-pin.

Similar letters of reference indicate corresponding parts in the different figures of the drawings.

The object of my invention is to provide a convenient apparatus for arranging and supporting clothes for outdoor drying.

My invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

The grooved pulley A is supported by a shaft, *a*, journaled in the fixed frame *b*, and the shaft *a* is provided with a crank, *c*, by which it may be turned.

The grooved pulley A is designed to be placed within the walls of the building B, in such a position as to permit of the endless clothes-line C, which extends around the pulley A and distant pulley D, passing through a window, the window sash and stops being notched to receive the clothes-line when the window is closed. The pulley D is journaled in a frame, E, which slides upon rods *d*, projecting horizontally from the post F, parallel with the clothes-line C. The two sides of the frame E are connected by a yoke, *e*, which is attached to a screw-threaded rod, *f*, extending through the post F, and provided on its outer extremity beyond the post with a wing-nut, *g*, between which and the post a spiral spring, *h*, is placed on the rod. The spring *h* tends to draw the frame E toward the post F, and thus maintain the clothes line C under tension.

The clothes-pins G G' are each formed of a wooden bar, *i*, having a notch, *j*, formed in one edge near one end. In the edge of the bar *i* is inserted one end of a wire, which is formed of the spiral, *k*, and extended along parallel with the bar *i*, bent forward toward the notched edge of the bar at right angles,

thence downward parallel with the side of the bar, then across the edge of the bar in the notch *j*, then upward parallel with the side of the bar, forming the clamping-spring *k'*, as shown in Fig. 3.

The clothes pin or clamp G is provided with two eyes, *l*, inserted in the notched edge thereof, the distance between the eyes *l* being about the same as the distance between the two parallel strands of the clothes-line C. The bar *i* of the clothes-pin G' is shorter than that in the clothes-pin G, and the screw-eye *l'* is inserted in the end of the bar, as shown in Fig. 4.

The eyes *l* of the clothes-pin G are received upon the strands of the clothes-line, as shown in Fig. 1; but the clothes-pin G' is supported by the hook *m*, provided with two eyes, *n*, which are received on the strands of the clothes-line.

A number of clothes-pins, G, or hooks *m* are placed on the clothes-line in the manner already described, and when the clothes-pins G are used the clothes are clamped in the notches *j*, near their lower ends, by the wire spring *k'*, and the outer clothes-pin, G, is secured to the lower strand of the clothes-line by a cord, *o*, attached to the clothes-pin and tied round the clothes-line. The inner clothes-pin, G', is connected with a cord, *p*, extending through the window, and which is drawn tight and tied to some fixed support when it is desired to stretch the clothes upon the line.

When the clothes-pins G' are used, a number of the double-eyed hooks *m* will be received on the two strands of the endless clothes-line C, and the clothes-pins G will be secured to the clothes in the manner already described, while they are detached from the line. They may then be carried to the line, and the eyes *l'* of the clothes-pins will be placed on the hooks *m* in succession until the entire washing is suspended from the line. In either case the washing is attached to the line inside of the building, and is carried to its place in the open air by turning the grooved pulley A in a direction to carry the lower strand to which the cord *o* is attached outward and the upper strand inward. This operation carries the washing out of the window and spreads it, when the inner clothes-pin, G', is drawn toward the building by the cord *p* and secured. When the action of the wind upon the clothes



is too great, the tie-cord *p* may be loosened, when, by turning the grooved pulley *A* in the opposite direction, the clothes will be gathered together, so as to expose less surface to the  
5 action of the wind.

I am aware that endless clothes-lines have had weights connected to them to hold the line taut; also that an ordinary clothes-pin has had one leg slotted to receive the lower bent end  
10 of a spring secured at its upper coiled end to the pin; also that a wire clothes-pin has been formed of a frame having a clamping-spring at each end to receive the clothes-line and clothes, and provided with a wire having an  
15 eye at its outer end to receive the clothes-line, the said wire extending under the frame above the clothes and between the clamping-springs, and I do not claim the same. In my construction the clothes pin is suspended from the line,  
20 and the clothes are held by it, but are not clamped on the line, so that articles may be suspended and moved freely along the line without actually coming in contact with it.

Having thus described my invention, what  
25 I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with an endless clothes-

line, of the support *F*, having two parallel guides, *d d*, the frame *E*, sliding thereon and having the yoke *e*, the pulley mounted in the  
30 frame, the rod *f*, secured to the yoke and passed through the support *F*, the nut *g* on the outer end of the rod, and the spring *h* on the rod between the nut and the support, substantially as set forth.

2. A clothes-pin formed of a bar, *i*, notched transversely on one outer face near its lower end and provided with upper and lower rope-receiving eyes, and the spring *k*, secured to  
35 the bar, bent at its lower end transversely to the bar and extending through and across the notch in the bar, substantially as set forth.

3. The combination, with the endless clothes-line *C*, of the double-eyed hook *m*, received on the clothes-line, and the clothes-pin  
40 *G'*, formed of the notched bar *i*, clamping-spring *k*, and eye *l'*, for receiving and supporting the clothes, substantially as herein shown and described.

JAMES W. MILLER.

Witnesses:

G. M. BURLINGAME,  
W. A. PORTER.