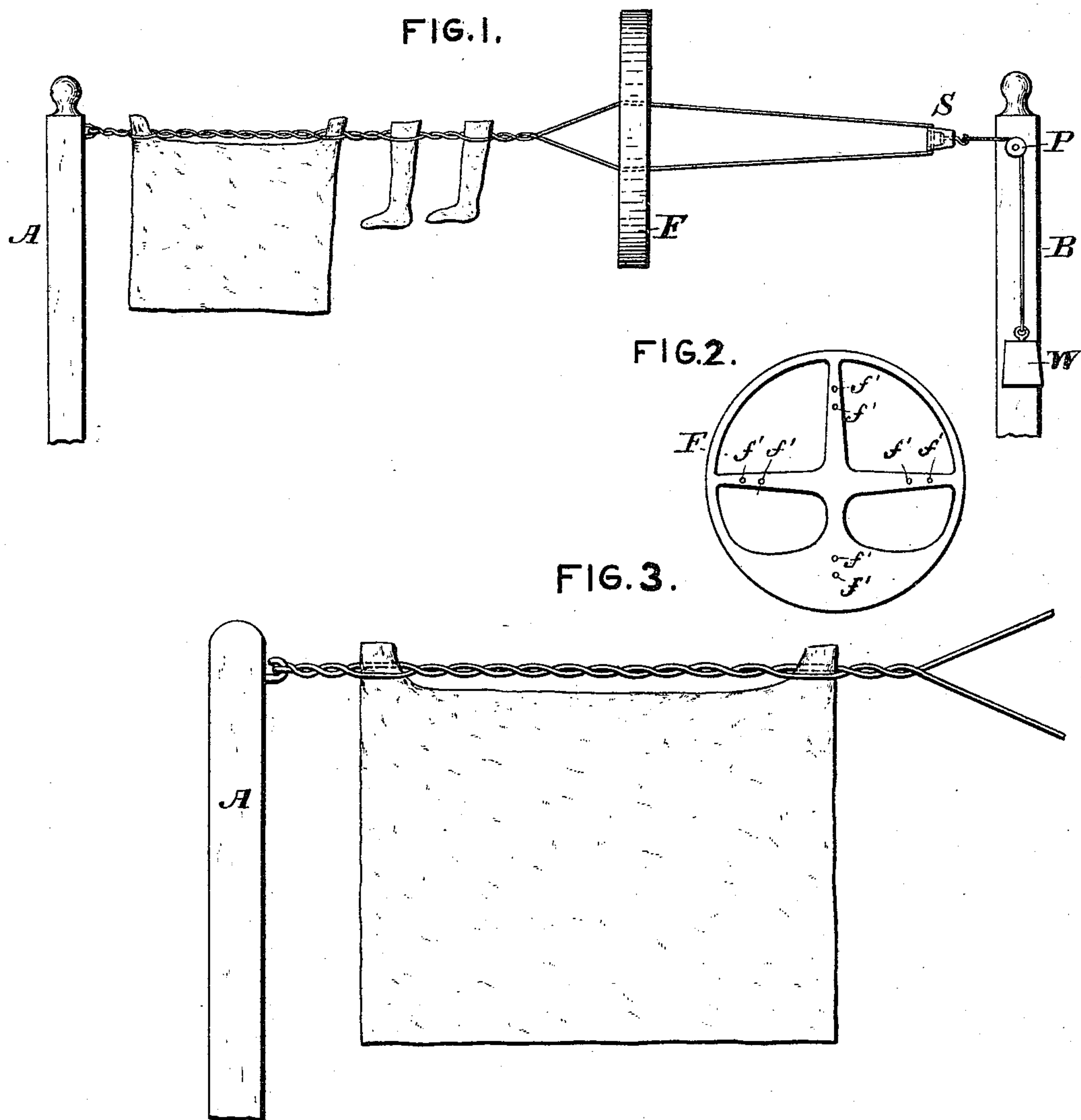


(No Model.)

F. S. McKAY.  
CLOTHES LINE.

No. 451,065.

Patented Apr. 28, 1891.



ATTEST.

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# UNITED STATES PATENT OFFICE.

FREDERICK S. MCKAY, OF HATLEY, CANADA.

## CLOTHES-LINE.

SPECIFICATION forming part of Letters Patent No. 451,065, dated April 28, 1891.

Application filed May 22, 1890. Serial No. 352,704. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK S. MCKAY, a citizen of the Dominion of Canada, residing at Hatley, in the county of Stanstead and Province of Quebec, Canada, have invented certain new and useful Improvements in Clothes - Lines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to clothes-lines; and it consists in the construction set forth in the claims.

Figure 1 is a view of my clothes-line suspended between two points A and B. Fig. 2 shows a side view of twister F; and Fig. 3 shows, enlarged from Fig. 1, an article attached to the line.

Like letters refer to like parts throughout theseveral views.

My clothes-line consists of two strands. By "strands" I mean ropes or lines which lie side by side. It is plain that more than two strands may be employed, if desired. One end of this double line is fixed to a post or other suitable support, as A, and the other end, after passing over pulley P, is attached to weight W, whose function is to exert a pull upon the line and keep it taut or from sagging too much. Intermediate in the line and normally near the support B is the swivel S, whose function is, as hereinafter more fully explained, to relieve the twists of the line. The articles of washing are placed between the strands of the line and are prevented from becoming detached by twists in the line. (Shown in Fig. 3.) The twister F (shown in Fig. 2) is in the form of a wheel, preferably of non-oxidizable metal, with four spokes, each perforated to receive a strand of the line, one spoke being much heavier at its outer end than the others for the purpose of weighting to prevent the revolution of the twister by the power exerted by the twists when under tension. There being four spokes, the line can be rove so as to have its strands lie in either a vertical or horizontal plane, as preferred, while the rim of the wheel enables the operator to form the twists easily by furnishing a hand-hold at all points of its circumference. Holes *f'* at different distances from the center enable the user to separate the strands more or less, as preferred.

In operation the twister is slid to the left hand, so that it approaches support A, stopping at a distance therefrom about equal to the width of the article to be applied, and two or three revolutions are given to produce the same number of twists next the post or support. The strands being separated at the twister end of the opening, the article is inserted between the strands and moved to the left, so that the twists already made engage the edge of the article. The twister is then revolved in the same direction as formerly, and two or more twists are made, which engage the other edge of the article and also form twists for receiving the edge of the next article applied. These operations are repeated till the line is as full as convenient, or may be stopped after applying one or more articles. So long as friction prevents the swivel from revolving it will be understood that the twists made to the left of the twister will be equalled by the same number of twists at the right; but as the twister approaches the swivel S it (the swivel) will revolve and relieve the twisted condition of the line to the right. The weight W or an equivalent spring equalizes the tension on the line and provides for a shortening by reason of the twisting. When the articles are dry and to be removed from the line, it will be readily understood that a reverse revolution or turning of the twister will, step by step, relieve the grip upon the articles, and its movement to the left will separate the strands. As the twister revolves and is moved to the left, it will put as many twists into the right end as it takes out of the left end; but these twists being loose will not overcome the friction of the swivel, so that the line will be in condition for the next application, and the swivel would not be called upon to relieve the twisting if the number or size of articles were always the same; but when one time sheets are to be applied and the next time stockings and such small articles the swivel is necessary as an equalizer. When clothes are blown about by the wind and blown over the line, it will be seen that they cannot come off, as they are always between two strands, and the blowing over of the clothes results only in a transfer of a strand from one side to the other. It will be understood that I do not confine



myself to the exact position of the swivel, pulley, and weight shown and described, as it might be desirable to attach the swivel to the post and to have the other end of the line  
5 run over the pulley to the weight or spring; or the pulley might be dispensed with when a spring is used instead of a weight.

Having thus fully described my invention, what I claim, and desire to secure by Letters  
10 Patent, is—

1. In combination with a clothes-line having two strands, a twister in the form of a wheel having four spokes, each spoke perforated to receive a strand of the line, one spoke  
15 being much heavier at its outer end than the others, as and for the purposes described.

2. In combination with a clothes-line having two strands, a wheel-shaped twister with four spokes having perforations, weighted by

one spoke being heavier than the others, and 20 a swivel operating to relieve the twists in the line, as and for the purposes described.

3. In a clothes-line, the combination of a line having two strands fixed at one end to a suitable support, the other end passing over 25 a pulley and having attached thereto a weight to keep it taut, and a wheel-shaped twister having four spokes, each spoke being perforated to receive a strand of the line, one spoke being much heavier at its outer end than the 30 others for the purpose of weighting, as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK S. MCKAY.

Witnesses:

JOHN B. FREGEAN,  
JAMES D. SHELBY.