No. 682,307. Patented Sept. 10, 1901.

F. WRIGHT.

CLOTHES LINE.

(Application filed Feb. 7, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

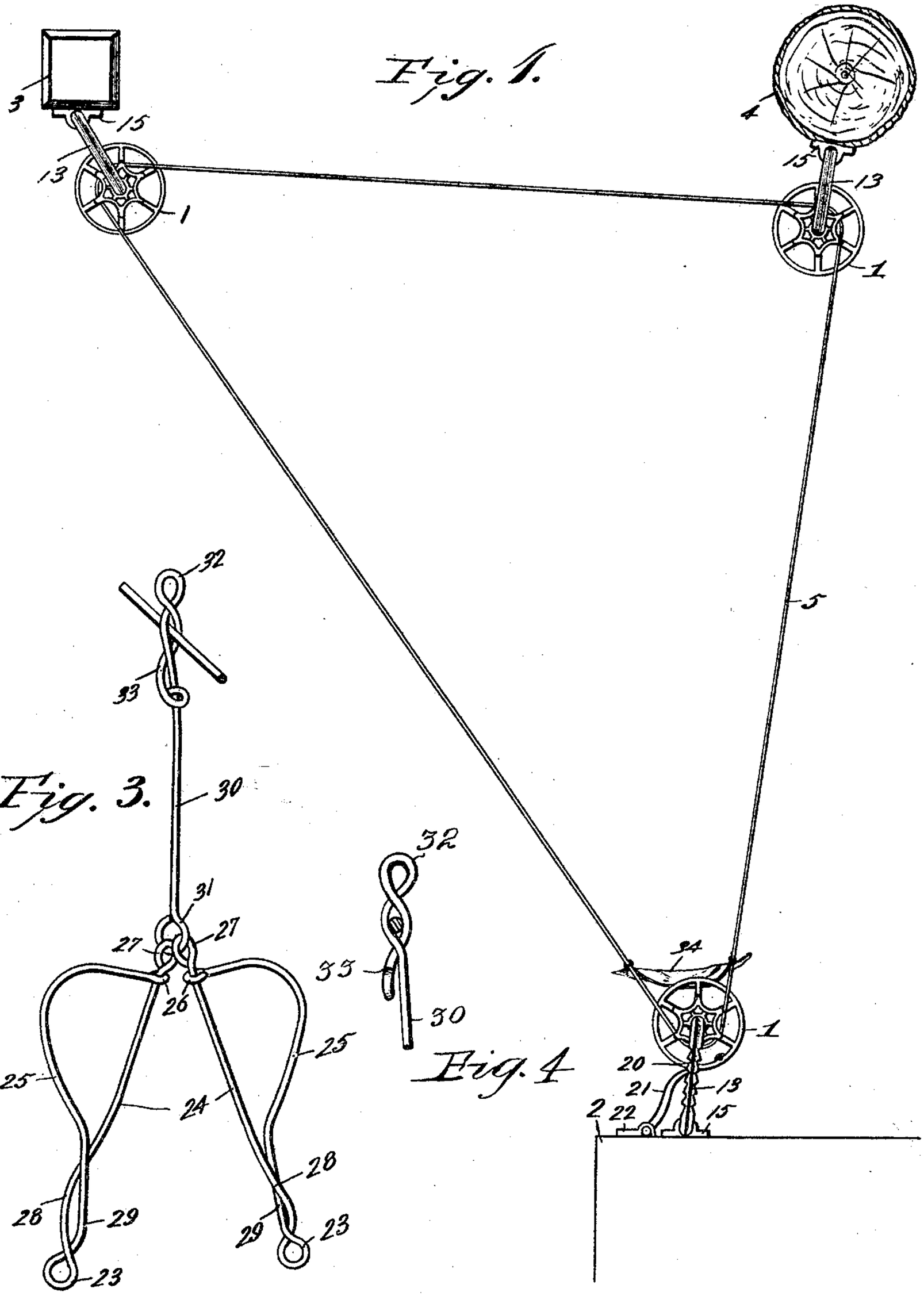

Fig. 3.

Fig. 4

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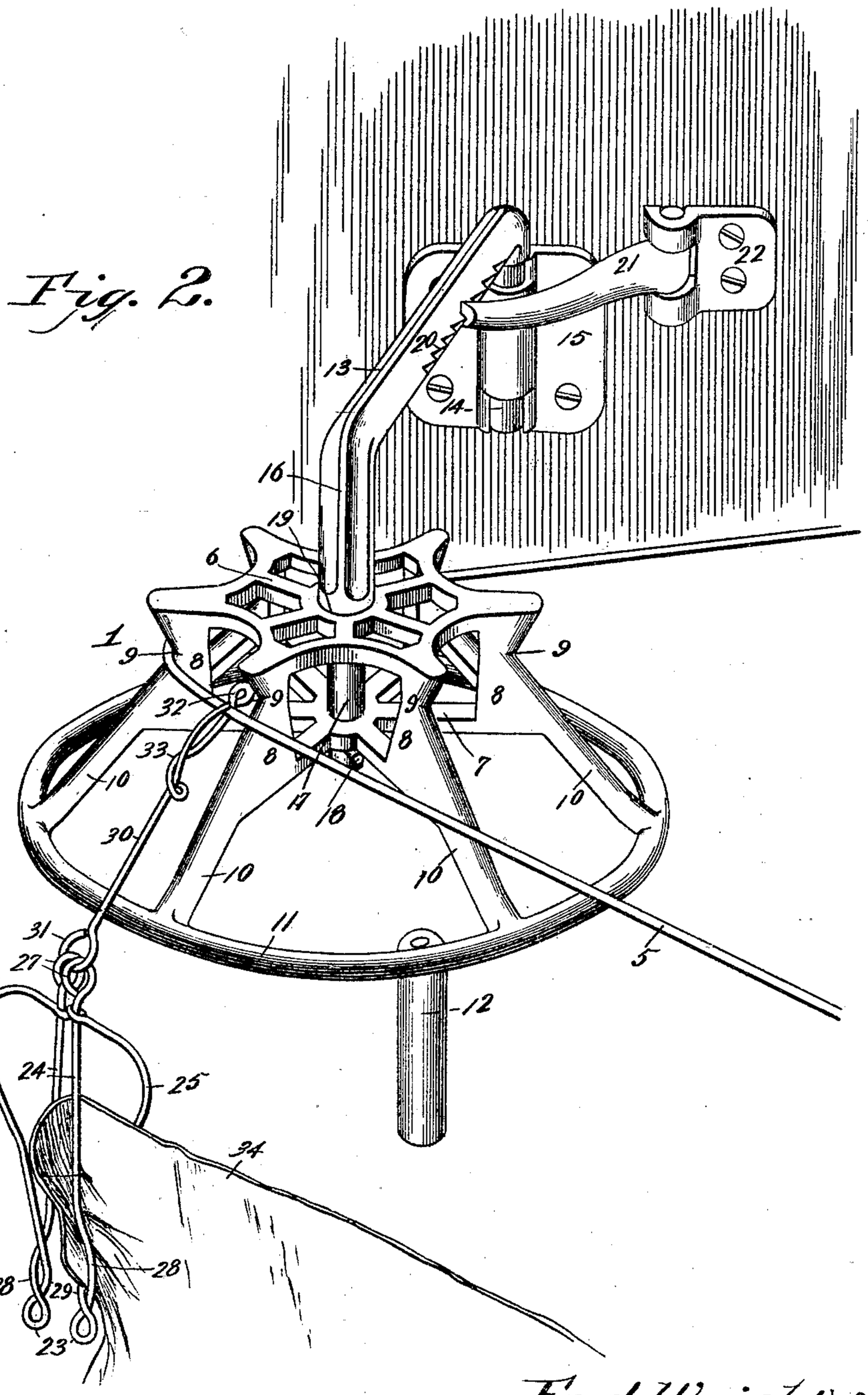
Fig. 2.



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UNITED STATES PATENT OFFICE.

FRED WRIGHT, OF COLDWATER, MICHIGAN.

CLOTHES-LINE.

SPECIFICATION forming part of Letters Patent No. 682,307, dated September 10, 1901.

Application filed February 7, 1901. Serial No. 46,389. (No model.)

To all whom it may concern:

Be it known that I, FRED WRIGHT, a citizen of the United States, residing at Coldwater, in the county of Branch and State of Michigan, have invented a new and useful Clothes-Line, of which the following is a specification.

This invention relates to clothes-lines, and has for its object to provide for preventing the articles of clothing from coming in contact with the pulleys of an endless clothes-line when the latter is being traveled around the pulleys to facilitate the application and removal of the clothing.

It is furthermore designed to provide an improved form of pulley of the character shown in my former patent, No. 627,563, dated June 27, 1899, and also improved means for connecting the clothing to the line which is designed to coöperate with the respective pulleys in passing around the same for the purpose of holding the clothing out of contact therewith.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a plan view of a clothes-line mounted and arranged in accordance with the present invention. Fig. 2 is an enlarged detail perspective view of one of the pulleys for the clothes-line, showing a portion of the latter passing around the pulley and the means for holding the clothing out of contact with the pulley. Fig. 3 is a detail view of one of the clothes-pins or means for connecting the clothing to the line. Fig. 4 is a detail view to show the manner of engaging the clothes-pin with the line.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

In carrying out the present invention, as best shown in Fig. 1 of the drawings, there is provided a plurality of pulleys 1, which are arranged in substantially the same horizontal plane and are mounted upon suitable supports—as, for instance, the corner of a porch 2, a post 3, and a tree 4. The endless line 5, preferably of wire, is passed around the several pulleys, one of which, preferably the one mounted upon the porch, being provided with a suitable handle whereby said pulley may be turned to travel the line around all of the pulleys, so that the clothing may be applied to and also removed from the line without requiring the attendant to move off of the porch.

For a complete understanding of the pulleys reference is had to Fig. 2, in which has been shown the pulley that is mounted upon the porch, all of the pulleys being alike, except that the porch pulley has an adjustment not possessed by the other pulleys. Each pulley comprises upper and lower spiders 6 and 7, having radial arms of skeleton formation and having their outer peripheral edges connected by means of a plurality of upright webs 8 and also provided with corresponding central openings for the reception of the spindle upon which the pulley is to be mounted. The outer edge of each vertical web is inclined or beveled inwardly in opposite directions from its top and bottom ends, so as to form an inwardly-directed substantially V-shaped notch or seat 9 for the reception of the clothes-line 5, so as to prevent the latter from slipping upwardly or downwardly upon the pulley. From the outer peripheral edge of the lower spider and forming continuations of the lower inclined portions of the respective webs are the downwardly-inclined and outwardly-directed radial arms 10, which carry at their outer ends the marginal ring or rim 11, whereby the pulley has a substantially conical shape and is surmounted by an enlarged head formed by the upper spider, the intersection of the outer sides of the conical body and the enlarged head forming a plurality of spaced seats that produce a marginal way for the reception of the clothes-line. It will be observed that the lower wall of the way forms an outwardly and downwardly flared marginal portion, which terminates at its outer edge in the circular rim 11. A suitable handle 12 is pendent from the marginal ring or lower edge of the pulley for convenience in rotating the same. To mount the pulley upon a sup-

port, there is provided an inverted substantially U-shaped swinging bracket 13, one arm of which is formed into a spindle 14 for mounting within a suitable socket 15, to be connected to the support in any suitable manner. The opposite arm 16 is somewhat longer than the inner arm and has its lower extremity formed into a spindle 17 to project downwardly through the corresponding central perforations of the pulley, so as to pivotally or rotatably mount the pulley upon the outer end of the bracket. Any suitable means may be provided for holding the pulley upon the spindle—as, for instance, a pin or key 18, passed transversely through a perforation in the lower extremity of the spindle 17 and extending across the lower side of the lower spider 7. In forming the spindle 17 the outer arm of the bracket is reduced, thereby forming an annular shoulder 19, which fits against the top of the pulley to prevent upward displacement thereof. One or both sides of the body portion of the swinging bracket is provided with a plurality of ratchet-teeth 20 for engagement by the free outer end of a dog or keeper 21, that is pivotally connected to the support and in the same plane with the bracket by means of a suitable attaching socket or device 22. By this arrangement the bracket may be swung laterally or horizontally upon its pivotal connection with the support, so as to take up any slack in the clothes-line, the dog being used to hold the bracket in any adjusted position.

It will be understood that all of the other brackets are pivotally connected to their respective supports, so as to automatically accommodate themselves to any adjusted position of the adjustable bracket, but are not provided with ratchet-teeth and dogs, as it would then be necessary to manually adjust each bracket.

For the connection of the clothing to the line there is provided a plurality of clothes-pins, one of which has been shown in Figs. 2 and 3 of the drawings. Each pin comprises a pair of clothing-engaging members and a hanger or link loosely connected thereto and constructed for engagement with the clothes-line. Each clothes-engaging member of the pin is formed from a single length of spring-wire, which is bent intermediate of its ends into an eye 23 and a shank and opposite side portion or member, as indicated at 24 and 25, respectively, the shank being intermediately straight and the side member being bowed outwardly therefrom. The portions of the shank and side member are crossed and recrossed adjacent to the eye 23, so as to form the spring-jaws 28 and 29. The outer end of the shank is provided with a terminal eye 27, and the outer end of the bowed side member 25 is directed inwardly and provided with an outer terminal eye 26, which embraces the shank adjacent to the outer end thereof. The pin thus formed is connected to the clothes-line by means of a link 30, which is provided at its lower end with an eye 31, engaged with the eye 27 of the pin, whereby the latter is loosely or pivotally connected to the link. The opposite end portion of the link is bent into an eye 32, so as to form the spring-clip 33, which is loosely twisted upon the shank of the link and has its free end bent slightly outward therefrom, so that the upper end of the link may be hooked downwardly upon the line, with the latter received between the spring-clip and the link, whereby the latter is clamped upon the line and will be held against accidental slidable movement thereon. By having the clip coiled or twisted upon the link the latter will be turned upon its axis when being applied to the line and will require a reverse turning to be removed therefrom. Thus when two pins are applied to opposite portions of an article of clothing the latter forms a connection between the pins to prevent turning of the pins, whereby accidental displacement of the pins is prevented. In connecting an article of clothing 34 (shown in Fig. 2) to one of the pins one corner thereof is passed through the loop formed by the outwardly-bent member 25 and then drawn inwardly between the spring-jaws 28 and 29, which grip the clothing and connect the pin thereto. When the clothes-line is caused to travel around the pulleys and a clothes-pin approaches one of the pulleys, the link thereof strikes the lower marginal edge or rim of the pulley, as shown in Fig. 2, and travels around the pulley in an inclined position corresponding to the inclination of the adjacent face of the pulley, the link being longer than the distance between the clothes-line and the lower marginal edge of the pulley, whereby the pin proper is disposed outwardly from the pulley and the clothing is suspended below the same, and therefore does not come into contact with the pulley. By this arrangement there is no danger of the clothing being soiled or torn by engagement with the revolving pulleys, and it is impossible for the clothing, especially when frozen, to become entangled with the pulley, and thereby interfere with the movement of the clothes-line.

In practice it is preferred to have a pair of clothing-engaging members carried by each link, whereby a single pin is designed for engagement with the opposite ends of adjacent articles of clothing, the said members being loosely connected, so that they may separate slightly in passing around a pulley in order to accommodate the pin to the separate articles of clothing.

What is claimed is—

1. The combination with an endless clothes-line, of a plurality of supporting-pulleys therefor, each pulley having an intermediate marginal way for the reception of the line, the lower wall of the way forming an outwardly and downwardly flared marginal portion terminating in an outer circular rim, and one or more intermediately and loosely jointed

clothes-pins hung from the line, the upper portion of each pin being longer than the distance from the back of the way to the outer edge or rim of the lower wall thereof, whereby said edge or rim is located in the path of the intermediate portion of the upper part of the clothes-pin.

2. The combination with an endless clothes-line, of a plurality of supporting-pulleys therefor, each of the latter comprising upper and lower spiders having corresponding central openings for the reception of a pivotal support, upright webs connecting the outer edges of the spiders, and having their outer edges provided with corresponding notches forming seats for the reception of the clothes-line, outwardly and downwardly inclined radial arms extending from the webs, and a marginal rim carried by the lower ends of the arms, and one or more clothes-pins hung from the line and having an intermediate pivotal joint, the upper portion of the pin being arranged for engagement with the rim of the reel and also longer than the distance between the notched portion of a web and the rim, and the lower portion being constructed for connection with an article to be suspended from the line.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRED WRIGHT.

Witnesses:
THOMAS B. HERRMAN,
S. EDGAR HERRMAN.