Feb. 25, 1930. S. PILLA 1,748,899

DEVICE FOR CLEANING CLOTHESLINES

Filed May 23, 1928

Fig. 1,

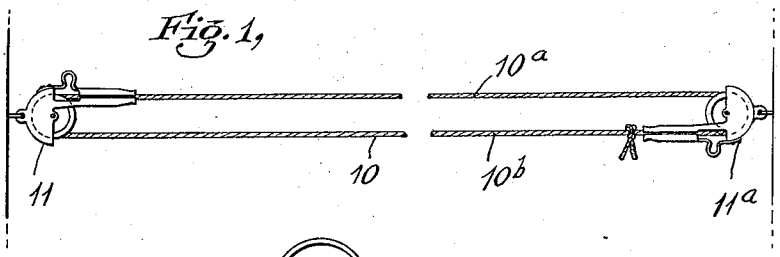


Fig. 2,

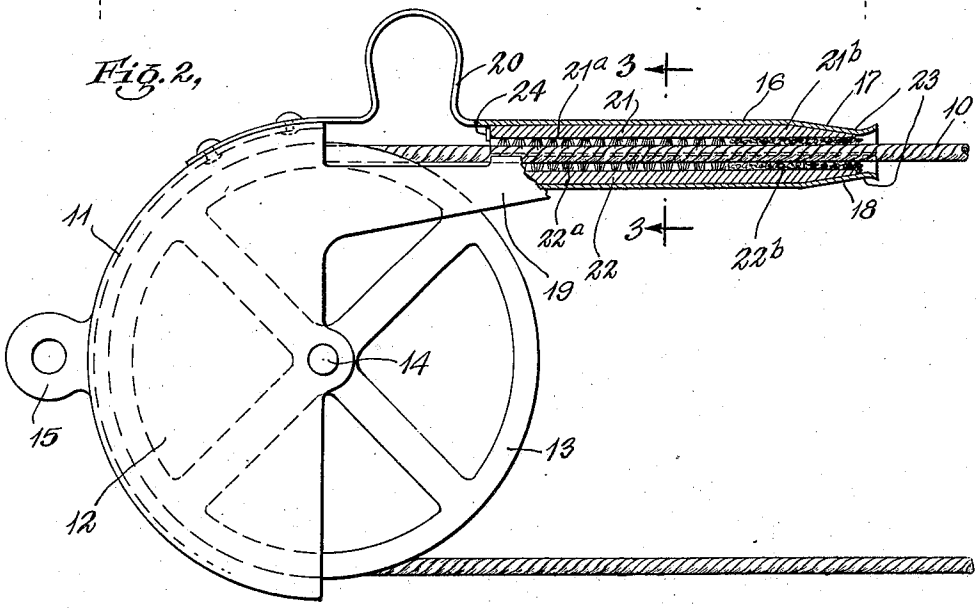


Fig. 3,

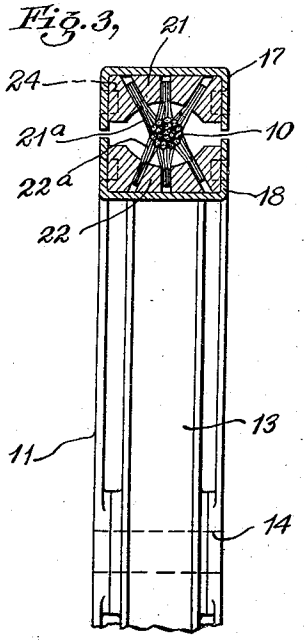


Fig. 4,

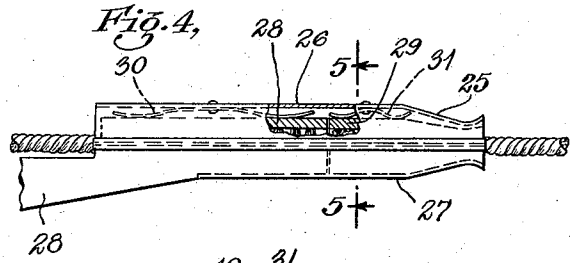
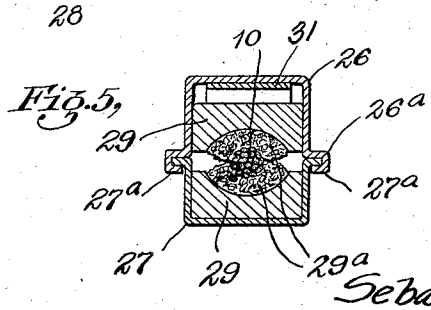


Fig. 5,



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UNITED STATES PATENT OFFICE

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DEVICE FOR CLEANING CLOTHESLINES

Application filed May 23, 1928. Serial No. 280,095.

This invention relates to devices for cleaning clothes-lines and particularly to a device of this class constituting part of a clothes-line pulley device; and the object of the invention is to provide a device of the class described involving two elongated, substantially trough-shaped members having brush and wiper elements oppositely disposed therein for engagement with a clothes-line passed between said elements; a further object being to provide tensional means for moving at least one set of elements into firm engagement with the clothes-line to insure the cleaning thereof; and with these and other objects in view, the invention consists in a device of the class and for the purpose specified, which is simple in construction, efficient in use, and which is constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:—

Fig. 1 is a diagrammatic view, showing a clothes-line mounted upon two pulleys and illustrating two of my improved cleaning devices.

Fig. 2 is a side and sectional view of one of the pulleys and devices shown, in Fig. 1.

Fig. 3 is a partial section on the line 3—3 of Fig. 2.

Fig. 4 is a side view of a modified form of device which I employ; and,

Fig. 5 is a section on the line 5—5 of Fig. 4.

In Fig. 1 of the drawing, I have shown at 10, a clothes-line mounted upon two pulleys 11 and 11^a, said pulleys being substantially of the same construction and being simply inverted in the two uses so as to engage the upper strand 10^a as well as the lower strand 10^b of the clothes-line as diagrammatically seen in Fig. 1.

In that both pulleys 11 and 11^a are of similar construction, the following brief description and application of reference numerals will apply to both pulley devices. As seen in Fig. 2 of the drawing, the pulley comprises a box-shaped casing 12, in the side walls of which the pulley wheel 13 is rotatably mounted as seen at 14. Said box-shaped casing 12 is provided with a coupling ring or eye 15 at its rear end by means of which the pulley may be secured to a suitable support.

At 16, I have shown one of my improved wiping devices which constitutes a part of the pulley structure. Said device consists of two channel or trough-shaped parts 17 and 18, the part 18 being integral with the casing 12 by side arms 19, whereas the part 17 is supported in connection with the casing 12 through a spring member 20, the tension of which normally serves to hold the part 10 in engagement with or to move the same in the direction of the part 18.

The channels of the parts 17 and 18 of the wiping device are directed toward each other as clearly seen in Figs. 2 and 3 of the drawing. Mounted in said channels are cleaning elements 21 and 22 respectively, one end of said elements having brush bodies 21^a and 22^a whereas the other ends thereof are provided with wiper bodies 21^b and 22^b, in the form of felt or other fabric which will be suitable for the purpose intended having sufficient body to withstand the frictional engagement with the clothes-line 10. Said brush bodies as well as the wiper bodies are of such cross sectional form as to encircle the clothes-line 10 as will be apparent, the brush body engagement with the clothes-line being shown in cross section in Fig. 3 of the drawing.

The outer ends of the parts 17 and 18 with respect to the pulley 11 are preferably contracted as seen at 23 and the inner ends are provided with clips 24 which serve to retain the elements 21 and 22 against displacement. However, it will be understood that any suitable means may be provided for supporting the elements 21 and 22 in the parts 17 and 18, it being preferred that said elements may be detached whenever desired for cleaning, repair or replacement. It will be understood that the part 17 may be raised by hand under the tension of the spring 20 and the clothes-line 10 removed from said parts in the operation of cleaning or replacing the elements 21 and 22.

In Figs. 4 and 5 of the drawing, I have shown a modified form of cleaning device 25 which consists of two parts 26 and 27, the part 27 being formed integral with a pulley structure by side arms 28 in the same manner as the construction of the part 18 shown in Figs. 1 to 3 inclusive. But, the part 26, instead of being coupled with the pulley through a spring as in said first named figures slidably engages the part 27, this result being accomplished by providing outwardly projecting side flanges 27^a on the part 27 and corresponding inwardly directed channel portions 26^a on the part 26. In this construction, I mount in each part 26 and 27, a brush element 28 and a wiper element 29. The wiper elements 29 are shown in cross section in Fig. 5 of the drawing having fibrous bodies 29^a engaging the clothes-line 10 as will be apparent.

In the construction shown in Figs. 4 and 5, at least one of each of the elements 28 and 29 are backed up by springs 30 and 31 secured to the crosshead of the parts 26 and 27 which are also channel-shaped in cross sectional form. These springs serve to force one of the elements 28—29 in the direction of the other of said elements to firmly engage the clothes-line arranged between the brush and wiper bodies thereof. It will be understood that both of the elements may be backed up by springs, if desired, but one set of springs should be sufficient.

In the use of my improved cleaning device, it will be understood that as the lower part 10^b of the clothes-line is moved outwardly from one of the pulleys 11—11^a in the operation of hanging clothes thereon, the clothes-line is first brushed and then wiped clean. At the same time, the upper line 10^a is also being wiped and cleaned by the other device so that when a full line of clothes has been hung, both the line in connection with which the clothes are coupled and the line arranged above the clothes will be thoroughly clean, preventing any possibility of soiling the laundered clothes by coming into engagement with either the upper or lower part of the clothes-line.

From the foregoing, it will be apparent that I preferably use two of my improved devices, one in conjunction with each of the pulleys employed in supporting a clothes-line, but it will be understood that only one of these devices may be employed if desired.

It will be understood that my invention is not necessarily limited in use to clothes-lines or clothes-line pulleys, as the same may be applied to any kind or class of strand passed around pulleys of any desired structure, for example in the use of metallic strands such as wire, cabling and the like, nor is my invention necessarily limited to the specific elements disclosed constituting part of the device.

While I have shown certain details of construction for carrying my invention into effect and have illustrated my improved devices as constituting part of a pulley structure of specific construction, it will be understood that my invention is not limited in these respects and various changes therein and modifications of the construction herein shown and described, may be made within the scope of the appended claims without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. A pulley, a supporting frame which is provided with an extending portion composed of separate parts, one of said parts being integral with the frame and the other part coupled therewith, said parts being arranged in parallel relation, and cleaning elements arranged on the inner faces of said parts and adapted to engage said strand.

2. A pulley, a supporting frame which is provided with an extending portion composed of separate parts, one of said parts being integral with the frame and the other part coupled therewith, said parts being arranged in parallel relation, cleaning elements arranged on the inner faces of said parts and adapted to engage said strand, and the second named part being joined to said frame by means of a loop-shaped spring tensionally supporting said part upon the other part and said strand.

3. A pulley, a supporting frame which is provided with an extending portion composed of separate parts, one of said parts being integral with the frame and the other part coupled therewith, said parts being arranged in parallel relation, cleaning elements arranged on the inner faces of said parts and adapted to engage said strand, and means for supporting said parts in adjacent relation to tensionally engage said cleaning elements with the strand passed therebetween.

4. A pulley, a supporting frame which is provided with an extending portion composed of separate parts, one of said parts being integral with the frame and the other part coupled therewith, said parts being arranged in parallel relation, cleaning elements arranged on the inner faces of said parts and adapted to engage said strand, means for supporting said parts in adjacent relation to tensionally engage said cleaning elements with the strand passed therebetween, and the cleaning elements being of different texture in each of said parts.

5. A pulley of the class described comprising a supporting casing, a pulley wheel rotatably mounted in said casing, said casing having an integral elongated part arranged in front of the pulley and in alinement with a strand to be passed around said pulley wheel, and strand cleaning elements sup-

ported in said part and through which the strand is adapted to pass.

6. A pulley of the class described comprising a supporting casing, a pulley wheel rotatably mounted in said casing, said casing having an integral elongated part arranged in front of the pulley and in alinement with a strand to be passed around said pulley wheel, strand cleaning elements supported in said part, and another part coupled with the pulley casing and in which other cleaning elements are supported to cooperate with said first named elements and between which the strand is adapted to pass.

7. A pulley of the class described comprising a supporting casing, a pulley wheel rotatably mounted in said casing, said casing having an integral elongated part arranged in front of the pulley and in alinement with a strand to be passed around said pulley wheel, strand cleaning elements supported in said part, another part coupled with the pulley casing and in which other cleaning elements are supported to cooperate with said first named elements and between which the strand is adapted to pass, and said last named part being fashioned to form a spring loop to tensionally support said part upon the first named part.

In testimony that I claim the foregoing as my invention I have signed my name this 14th day of May, 1928.

SEBASTIANO PILLA.