

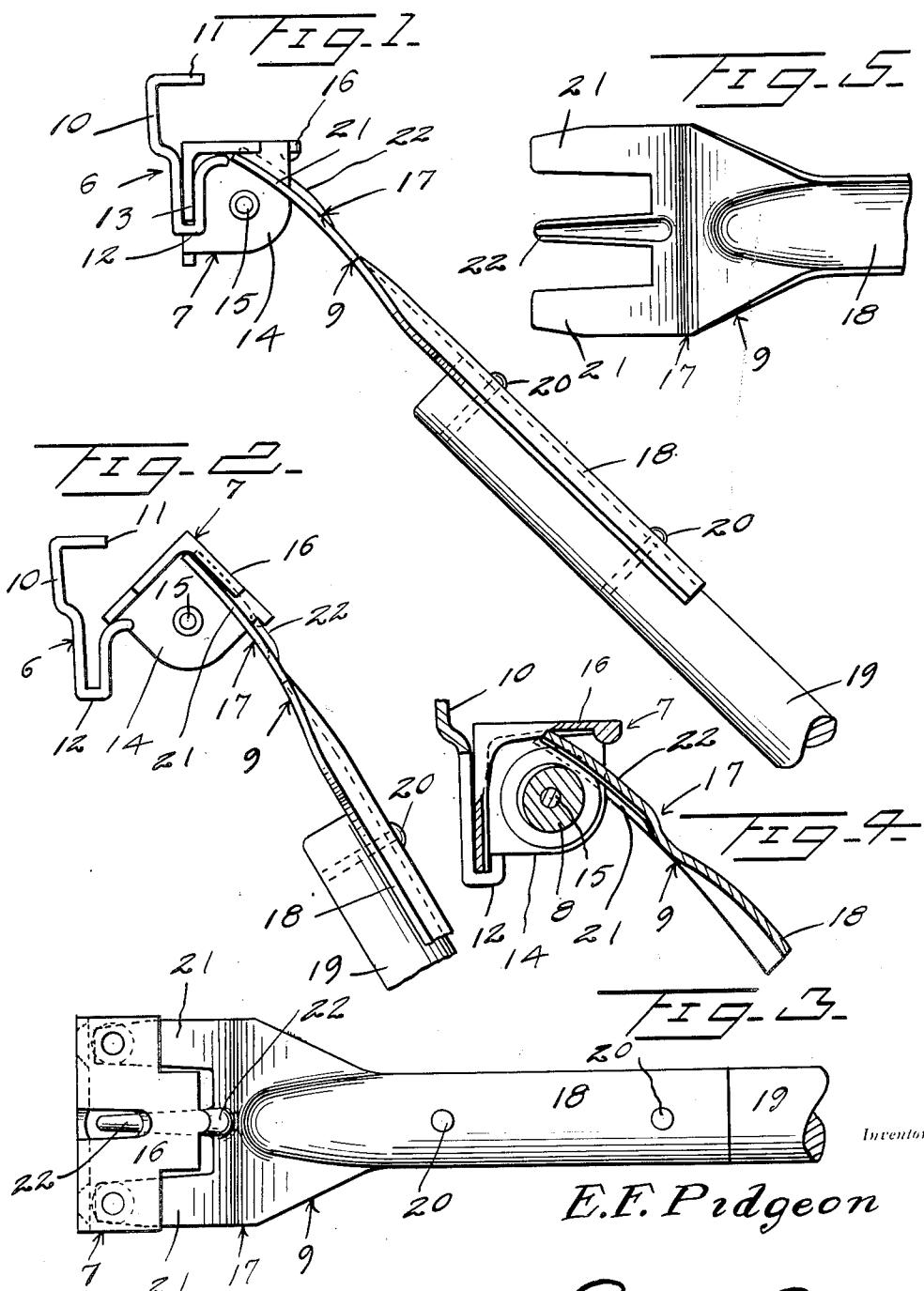
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PULLEY FORK

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2,539,031

PULLEY FORK

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2 Claims. (Cl. 294—19)

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This invention relates to a fork or tool for use in applying and removing shade cord pulleys from their supporting brackets, and is particularly intended and adapted for use in conjunction with the shade cord pulley and bracket as disclosed in United States Letters Patent No. 1,883,627, issued October 18, 1932, entitled "Shade Pulley Holder," granted to Luther O. Draper.

It is a primary object of the present invention to provide a tool or fork adapted to be secured to an end of a pole and which is constructed and arranged to function efficiently for lifting a pulley and supporting frame out of engagement with its supporting bracket or for applying the pulley frame thereto to enable the operation to be accomplished quickly and easily and without the necessity of employing a ladder or other means for reaching a pulley or its supporting bracket.

Other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawing, which illustrates a preferred embodiment thereof, and wherein:

Figure 1 is a side elevational view showing the tool in engagement with a pulley frame, preparatory to removing the frame and pulley from its supporting bracket or at the completion of the operation of applying the frame and pulley to the bracket;

Figure 2 is a similar view showing the frame and pulley supported by the tool or fork and in a partially removed or applied position with respect to its supporting bracket;

Figure 3 is a top plan view of the fork with a frame and pulley shown engaged thereby;

Figure 4 is a fragmentary vertical sectional view showing the fork applied to a pulley frame and with the frame shown engaged with its supporting bracket; and

Figure 5 is a fragmentary bottom plan view of the fork.

Referring more specifically to the drawing, 6 designates generally a pulley frame supporting bracket which is adapted to support a pulley frame, designated generally 7, in which a shade cord pulley 8 is journaled. The parts 6, 7 and 8 are disclosed in the aforementioned Letters Patent No. 1,883,627 and form no part of the present invention but will be described briefly in order to afford a better understanding of the fork or tool, designated generally 9 and comprising the invention, which is particularly designed and adapted for use in conjunction therewith.

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The supporting bracket 6 is provided with portions 10 and 11, each of which is provided with openings, not shown, for receiving fastenings for securing said bracket 6 to suitable supporting surfaces. The lower portion of the bracket 6 is bifurcated, as seen in Figure 4, and the furcations 12 thereof are turned back upon themselves to engage laterally projecting wings or flanges 13 of the frame 7. The frame 7 is provided with spaced walls 14 through which extend a pin 15 which forms a journal on which the pulley 8 is turnably mounted. The frame 7 is provided with an outwardly projecting top wall 16 which is disposed in spaced apart relationship above the periphery of the pulley 8 and the side edges of which project laterally beyond the walls or webs 14.

The applying and removing fork or tool 9, comprising the invention, includes a head, designated generally 17, having a shank 18 which projects from one end thereof and which is arcuate in cross-section. The shank 18 is adapted to be connected to an end of an elongated pole or handle 19 by suitable fastenings 20; the handle 19 being of any desired length depending upon the height at which the fork 9 is adapted to be utilized.

The fork 9, including the head 17 and shank 18, is adapted to be formed from a single piece of material cut and pressed to the desired shape. The head 17 at its opposite, free end is provided with outer corresponding tines 21 and a central tine 22 which is laterally spaced from the outer tines 21. The central tine 22 is relatively narrow and to increase the rigidity thereof is preferably bowed transversely throughout its length. The underside of the head 17 is slightly concave, being bowed both longitudinally and transversely.

Assuming that the bracket 6 is supported in an elevated position and that the pulley frame 7 is mounted therein, to remove the frame 7 from the hook shaped furcations 12 the tines 21 and 22 are inserted into the frame 7. The head 17 is applied to the frame 7 as illustrated in Figure 1 so that the center tine 22 enters the space between the webs or walls 14 and between the top wall 16 and the pulley 8, as clearly illustrated in Figures 3 and 4. The outer tines 21 are spaced apart sufficiently so that they are disposed on the outer sides of the webs or walls 14 and with their upper-sides bearing against the side edge portions of the top wall 16. By then lifting upwardly on the fork 9 the frame 7 with the pulley 8 supported thereby will be lifted out of engagement with the hook shaped furcations 12 and thus disengaged

entirely from the supporting bracket 6. To apply the frame 7 to the bracket 6, the fork 9 is applied to the frame 7 as previously described and thereafter raised and positioned in engagement with the hook shaped furcations 12 after which the fork 9 is withdrawn outwardly.

Various modifications and changes are contemplated and may obviously be resorted to without departing from the spirit and scope of the invention as hereinafter defined by the appended claims.

I claim:

1. In a tool for removing a shade pulley and supporting frame from a supporting bracket or for applying the parts thereto, a tool head adapted to be connected to an elongated handle or pole and disposed at one end thereof, said tool head having a fork shaped free end provided with outer tines and an inner tine, said inner tine being laterally spaced from the outer tines and being adapted to engage in a pulley frame between laterally spaced walls of the frame and between the pulley and a top wall of the frame, and said outer tines being adapted to engage the frame on the outer sides of said side walls and with portions of said outer tines bearing against portions of the top wall and combining with the inner tine for supporting the frame and pulley for applying it to its supporting bracket or for removing the frame and pulley therefrom, said outer tines each being substantially flat and substantially wider at its narrowest part than the widest part of the intermediate tine, and said inner tine being tapered throughout its length and toward its outer free end and being bowed transversely throughout its length.

2. In a tool for removing a shade pulley and supporting frame from a supporting bracket or for applying the parts thereto, a tool head adapted to be connected to an elongated handle or pole and disposed at one end thereof, said

tool head having a fork shaped free end provided with outer tines and an inner tine, said inner tine being laterally spaced from the outer tines and being adapted to engage in a pulley frame between laterally spaced walls of the frame and between the pulley and a top wall of the frame, and said outer tines being adapted to engage the frame on the outer sides of said side walls and with portions of said outer tines bearing against portions of the top wall and combining with the inner tine for supporting the frame and pulley for applying it to its supporting bracket or for removing the frame and pulley therefrom, said outer tines each being substantially flat and substantially wider at its narrowest part than the widest part of the intermediate tine, and said inner tine being tapered throughout its length and toward its outer free end and being bowed transversely throughout its length and having its upper convex side extending to above the plane of said outer tines for engaging an opening of the pulley frame.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,121,657	Parker	Dec. 22, 1914
1,417,901	Hembree	May 30, 1922
1,621,715	Eckley	Mar. 22, 1927
1,857,500	Davison	May 10, 1932
1,919,469	Keizer	July 25, 1933

FOREIGN PATENTS

Number	Country	Date
212	Italy	of 1866
517,142	Great Britain	Jan. 22, 1940