Aug. 16, 1932. A. S. LUFF 1,871,625

SUPPORT

Filed May 11, 1931

Fig-1-

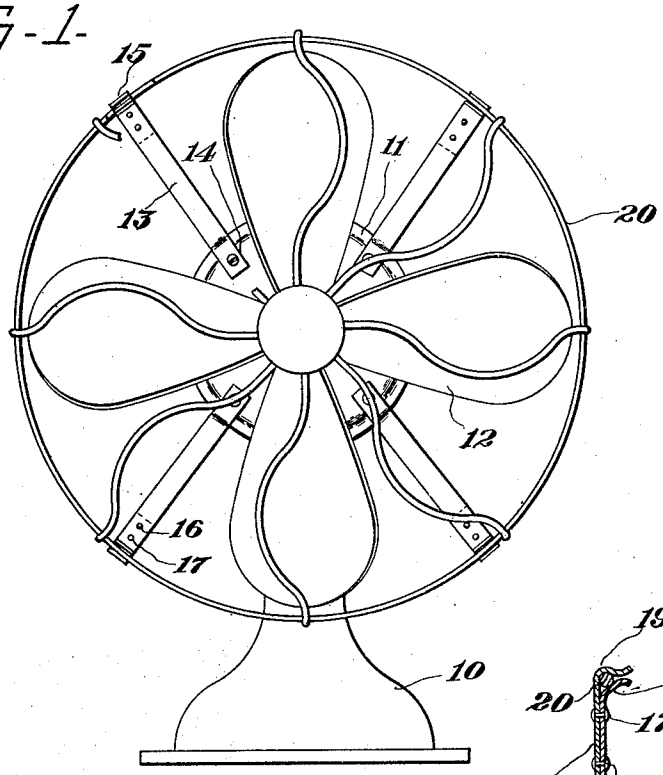


Fig-2-

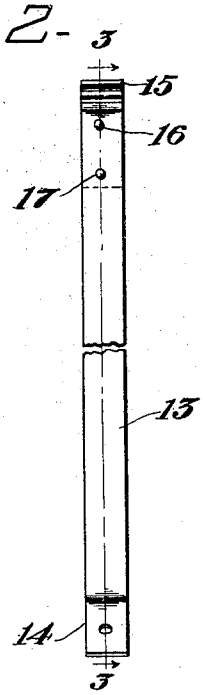
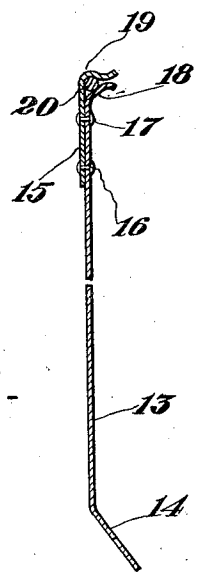


Fig-3-



Arthur Seymore Luff

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Patented Aug. 16, 1932 1,871,625

UNITED STATES PATENT OFFICE

ARTHUR SEYMORE LUFF, OF NEW ORLEANS, LOUISIANA

SUPPORT

Application filed May 11, 1931. Serial No. 536,627.

This invention relates to supports of a type having special application upon electric fans and the like to retain the fan blade guard against accidental displacement.

One of the principal objects of the invention consists of the provision and arrangement of supports of this character having yieldable portions for grippingly retaining the rim of the guard.

More specifically stated, the yieldable portions are provided with restricted entrance openings to obviate accidental displacement and undue vibration of the guard.

With the above and other objects in view, the invention further consists of the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawing and pointed out in the appended claim.

In the drawing:—

Figure 1 is a front elevation of an electric fan disclosing the relative arrangement of the present invention thereon for supporting a blade guard in position for use.

Figure 2 is a front elevation of the present invention.

Figure 3 is a longitudinal sectional view taken on line 3—3 of Figure 2.

Referring to the drawing in detail wherein like characters of reference denote corresponding parts, the reference character 10 indicates generally the base of a form of an electric fan, 11 the motor housing and 12 the fan blades; all of the above being of the usual and well known construction followed in the manufacture of electric fans and which form no part of the present application for Letters Patent but are mentioned merely for purposes of illustration in bringing forward the novel advantages of the present invention.

The invention primarily resides in the provision of arm members 13 of strip-like formation having obliquely arranged attaching ends 14 disposed in the manner shown in Figure 3 of the drawing and secured to the outer side of the motor housing 11 in the manner suggested in Figure 1.

As generally known, fans of the character described require guards to prevent persons from being injured by the rapidly revolving fan blades. These guards are usually provided with an annular frame structure having connection with the ends of arm members constructed along the lines of the arm members 13, by detachably secured forms of retaining elements. These retaining elements when improperly applied, either through negligence or faulty construction, permit the frame to vibrate, become loosened and sometimes allowed to come into direct contact with the fan blades.

In order to overcome the aforementioned difficulties, it is my intention to arrange novel forms of retaining means at the outer ends of the supporting arms devoid of any form of detachable securing means. In carrying out this phase of the invention, I provide plate members 15 rigidly secured, as at 16 and 17, at intervals upon the supporting arms and upon the rearmost sides thereof. The outermost extremities of the supporting arms 13 and plate members 15 dispose flat portions 18 and semi-circular portions 19 in confronting relation and at right angles to the supporting arms 13, substantially as illustrated in Figure 3 of the drawing, to conveniently accommodate portions of the annular frame structure 20 therebetween. The terminals of the aforementioned extremities are oppositely flared to provide a restricted guide entrance by means of which the frame, when stressed, will force the yieldable ends of the supporting members and plate members apart. The resiliency of the aforementioned extremities will be sufficient to grippingly retain the frame guard against accidental displacement and undue vibration or buzzing.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is herein reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention, what is claimed is:

A fan guard comprising arm members positioned to dispose the outer terminals thereof in concentric alignment, plate members immovably positioned on the rear face of the arm adjacent the mentioned ends thereof, the adjacent extremities of the arm members,

the plate members having semi-circular portions yieldably disposed in confronting relation, said portions having the terminals thereof outwardly flared and extending at right angles to the arm members to provide a guide entrance for the guard.

In testimony whereof I affix my signature.

ARTHUR SEYMORE LUFF.