No. 884,894. PATENTED APR. 14, 1908.

H. M. CARROLL

FAN DEFLECTOR.

APPLICATION FILED OCT. 19, 1907.

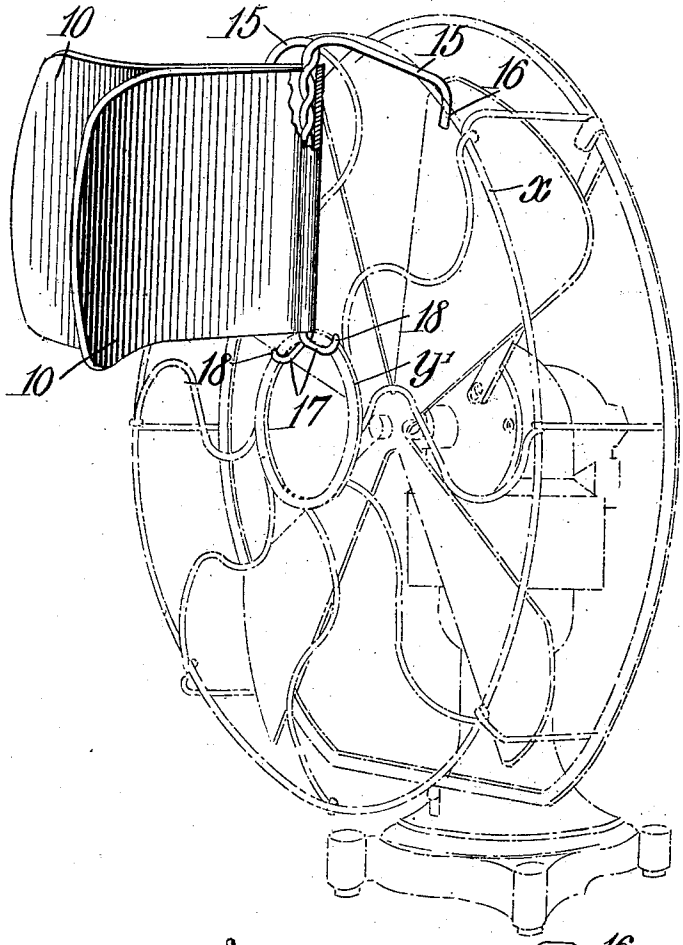


Fig. 1.

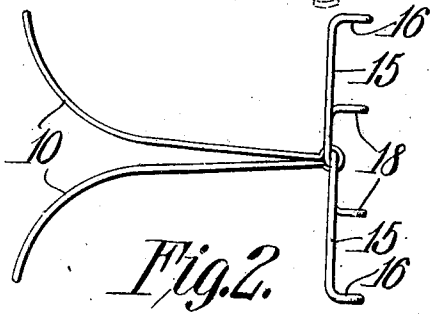


Fig. 2.

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UNITED STATES PATENT OFFICE.

HOUSTON MONROE CARROLL, OF SAN ANTONIO, TEXAS.

FAN-DEFLECTOR.

No. 884,894. Specification of Letters Patent. Patented April 14, 1908.

Application filed October 19, 1907. Serial No. 398,208.

To all whom it may concern:

Be it known that I, HOUSTON MONROE CARROLL, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Fan-Deflector, of which the following is a specification.

This invention relates to deflectors for electric and other fans, and has for its principal object to provide a device in the nature of an attachment which may be applied to any ordinary fan structure and employed for the purpose of deflecting a portion of the current of air, so that the air may be distributed throughout a room.

A further object of the invention is to provide a deflector of very simple construction and of such nature as to insure equalization of the strain when subjected to the action of the current.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 1 is a perspective view of a deflector constructed in accordance with the invention, showing the same applied to the wire guard of an ordinary fan. Fig. 2 is a plan view of the deflector showing the means for attaching to a fan guard frame.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

In practically all electric fans the current of air developed is forced outward in a direction parallel with the axis of rotation of the fan and is not thoroughly distributed throughout a room.

In order to overcome this objection, I have provided a novel form of deflector that preferably is formed of a single strip of sheet metal centrally bent to form two parallel blades 10, the free ends of which are turned outward on gradually curved lines, so that the current of air striking the blades will be gradually deflected and forced in a direction approximately at a right angle to the axis of rotation of the fan.

Through the centrally bent portion of the strip extends a carrying device, which, in the present instance, comprises a pair of wires having their central portions intertwisted, the upper ends of the wires being bent outwardly to form a pair of arms 15 which terminate in hooks 16 that are arranged to embrace the outermost ring of the usual wire guard *x*. The lower ends of the wire are, also, bent to form a pair of arms 17 having terminal hooks 18 that engage with the inner ring *y'* of the guard, and in practice it is preferred to employ spring wire which will yield sufficiently to enable the hooks to be snapped over the inner and outer rings of the guards for the purpose of confining the deflector in place without the employment of screws or other auxiliary fastening devices.

The device is preferably arranged at the upper portion of the fan, so as not to interfere with the direct outflow of the current of air from the lower portion of said fan. The two deflecting blades are preferably of the same area and arranged on the same curvature, so that they will offer equal resistance to the current, and, therefore, will impose no lateral strain on one side of the deflector which can not be equalized by corresponding strain on the other side. With a device of this type, a portion of the current of air may be deflected laterally of the fan for the purpose of promoting circulation throughout the room.

I claim:—

1. In a device of the character described, a centrally bent body portion, deflector blades extending therefrom, said blades being of corresponding area and curvature, and an arm secured to said body portion arranged to connect the same to the guard of a fan.

2. In a device of the character described, a tubular formed body portion, a pair of blades oppositely curved and held on said body portion, and an attaching arm carried by said blades.

3. In a deflector of the class described, a sheet of metal centrally bent and having its ends curved outwardly to form a pair of de-

flecting blades of corresponding area and curvature, and an attaching device extending through the centrally bent portion and composed of a pair of intertwisted wires, the ends of which are bent outwardly to form arms that terminate in attaching hooks.

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

HOUSTON MONROE CARROLL.

Witnesses:
THOS. O. MURPHY,
H. M. CARROLL, JR.