

939,784.

C. M. ASKEGREN.
CAR VENTILATOR.
APPLICATION FILED MAY 21, 1909.

Patented Nov. 9, 1909.
2 SHEETS—SHEET 1.

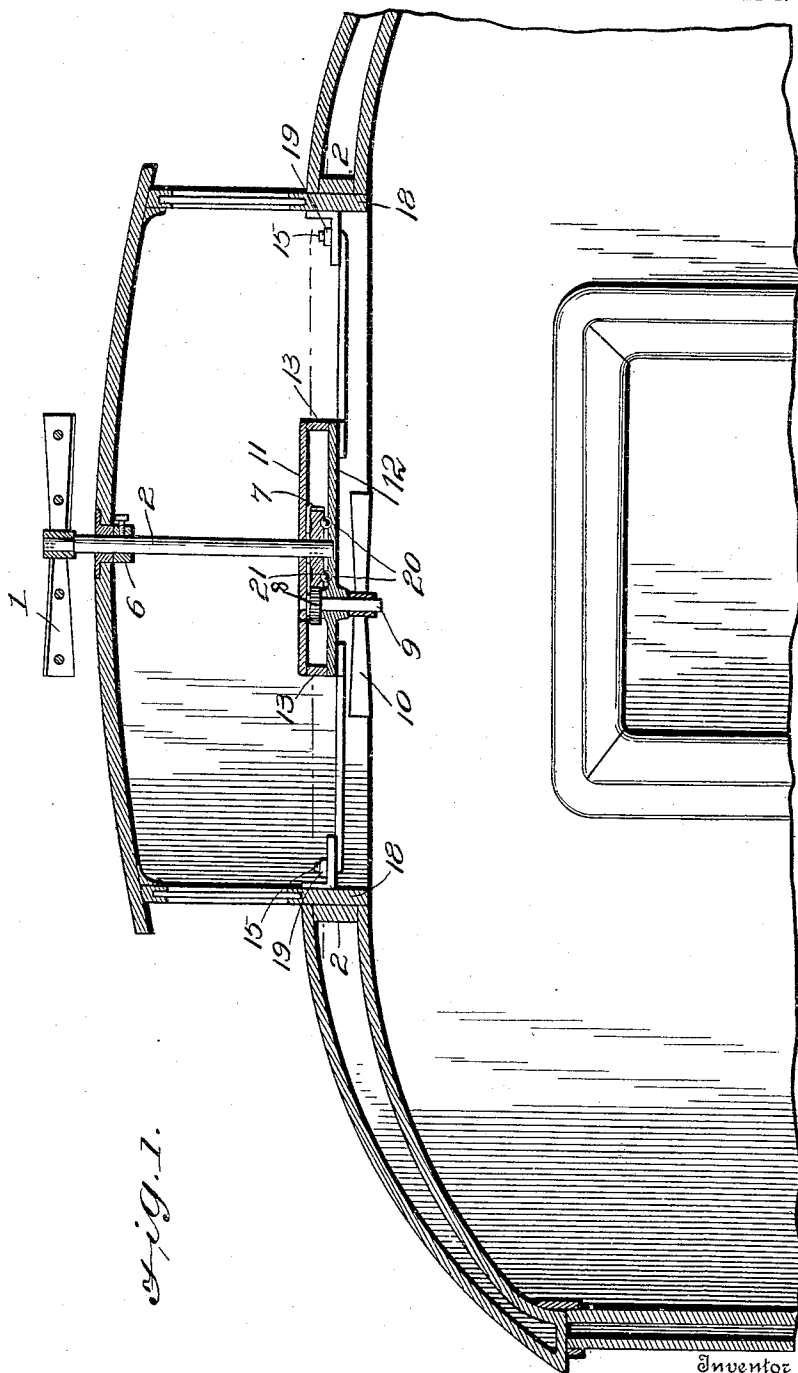


Fig. 1.

Carl M. Askegren

Witnesses
H. B. Barry,
R. M. Smith.

By Victor J. Evans.
Attorney.

939,784.

C. M. ASKEGREN.
CAR VENTILATOR.
APPLICATION FILED MAY 21, 1909.

Patented Nov. 9, 1909.
2 SHEETS—SHEET 2.

Fig. 3.

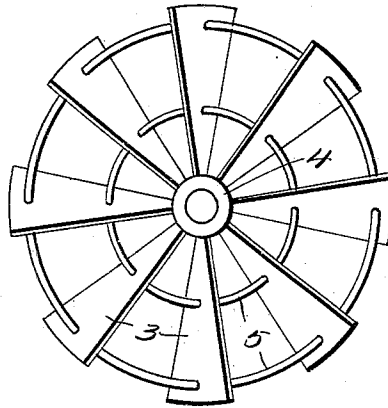


Fig. 2.

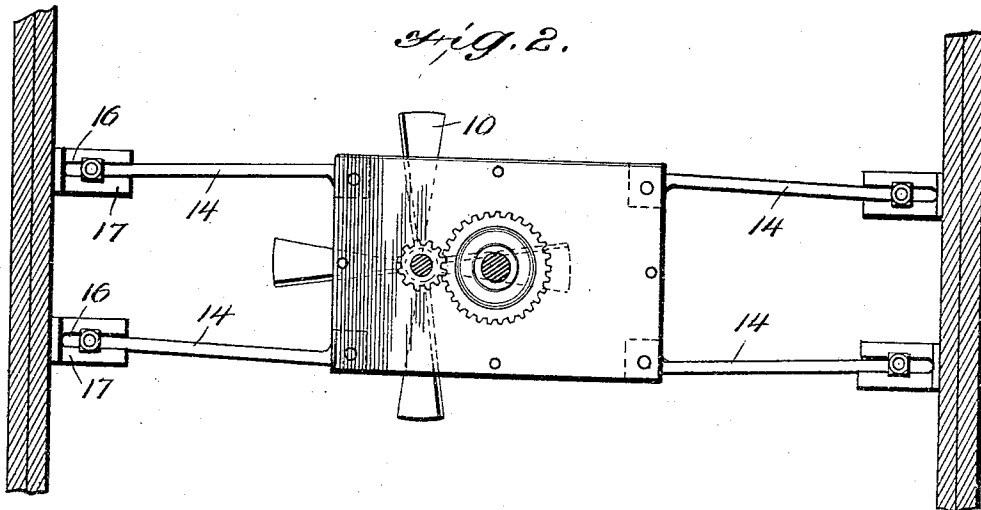
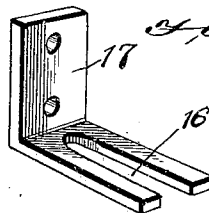


Fig. 4.



Witnesses

H. C. Barry,
R. M. Smith,

Inventor
Carl M. Askegren

By *Victor J. Evans.*
Attorney

UNITED STATES PATENT OFFICE.

CARL M. ASKEGREN, OF PENSACOLA, FLORIDA.

CAR-VENTILATOR.

939,784.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed May 21, 1909. Serial No. 497,499.

To all whom it may concern:

Be it known that I, CARL M. ASKEGREN, a citizen of the United States, residing at Pensacola, in the county of Escambia and State of Florida, have invented new and useful Improvements in Car-Ventilators, of which the following is a specification.

This invention relates to car ventilators, the object of the invention being to provide in combination with a ventilating fan, actuating wind wheel, and gearing connecting the two, a novel and convenient form of housing and hanger whereby the mechanism, as a whole, is adapted to be readily mounted on a car in operative position and as readily removed when not needed for immediate use.

With the above and other objects in view, the nature of which will more fully appear as the description proceeds, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a vertical transverse section through the upper portion of a car, showing the ventilator applied thereto. Fig. 2 is a horizontal section on the line 2—2 of Fig. 1. Fig. 3 is a plan view of the wind wheel. Fig. 4 is a detail perspective view of one of the hanger brackets.

Referring to the drawings, 1 designates a wind wheel mounted just over the roof of the car and fast upon the upper end of a vertical wind wheel shaft 2. The wheel 1 comprises a series of blades 3 connected to a common hub 4 mounted on the shaft 2, the blades being connected by concentric rings 5 forming braces for the blades of the wheel, said rings passing through openings in the blades and being secured therein in any convenient manner.

The shaft 2 passes through a bearing 6 inserted through the roof of the car and at its lower end the shaft 2 is provided with a spur gear 7 which meshes with a spur pinion 8 on the upper end of the shaft 9 of a ventilating fan 10 which is arranged adjacent to the roof of the car as shown in Fig. 1. The gears 7 and 8 are housed between the top and bottom plates 11 and 12, respectively of the gear case of a hanger, one of said plates being flanged as shown at 13 to completely inclose and protect the gears 7 and 8. The hanger, in addition to the gear case referred to, comprises two pairs of op-

positely extending hanger bars 14 which, in the preferred embodiment of the invention, have their outer extremities upturned as shown at 15 adapting said upturned extremities to be inserted in slots 16 formed in L-shaped brackets 17 shown as secured for convenience to the upright side walls 18 of the dome or extension of the car roof as clearly indicated in Fig. 1. The said upturned extremities of the hanger arms are threaded to receive nuts 19 whereby the hanger arms are securely fastened to the brackets 17 and capable of the necessary adjustment to properly aline the shaft 2 with its bearings in the car roof. The gear case also forms bearings for the shafts 2 and 9 and is further provided with a ball race 20 opposite a corresponding ball race in the lower side of the gear wheel 7, 21 designating a circular series of anti-friction balls working in said ball race and supporting the wheel 7, the shaft 2 and the wind wheel 1. This causes the mechanism to operate smoothly with a minimum amount of friction.

The wind wheel 1 is driven by the movement of the car in either direction and corresponding movement is imparted to the ventilating fan within the roof thereby producing a constant agitation of the air while the car is in motion.

The relative sizes of the gears 7 and 8 are, of course, varied to drive the ventilator fan at any desired speed.

I claim:—

A car ventilator, comprising in combination with a wind wheel arranged above the car roof, a fan arranged under the car roof, and gear wheels connecting the shafts of said wheel and shaft, a hanger embodying a gear case comprising top and bottom plates between which the gear wheels are housed and in which said shafts are journaled, hanger arms arranged in pairs extending in opposite directions from said casing, and hanger brackets having slots in which the extremities of the hanger arms are received and held.

In testimony whereof I affix my signature in presence of two witnesses.

CARL M. ASKEGREN.

Witnesses:

FRANK JOHNSON,
PATTELLO CAMPBELL.