(No Model.)

M. H. TRIPPE.

FAN FOR VEHICLES.

No. 491,454. Patented Feb. 7, 1893.

Fig. 1.

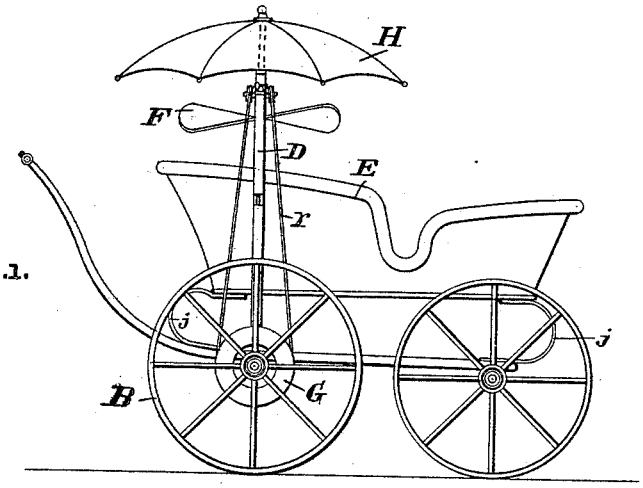


Fig. 2.

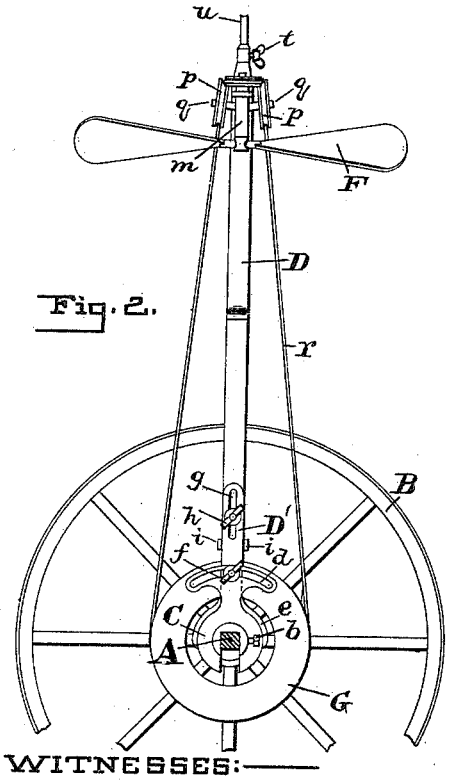


Fig. 3.

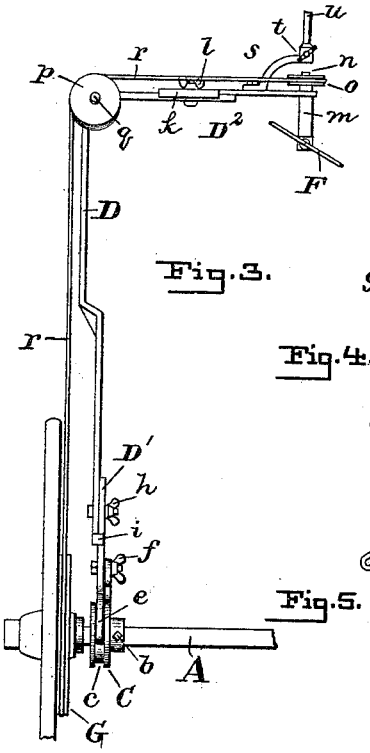


Fig. 4.

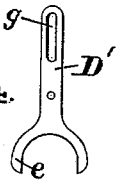
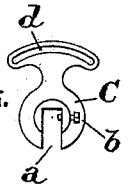


Fig. 5.



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UNITED STATES PATENT OFFICE.

MERRILL H. TRIPPE, OF BALTIMORE, MARYLAND, ASSIGNOR OF TWO-THIRDS TO DALLAS M. HARRISON.

FAN FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 491,454, dated February 7, 1893.

Application filed August 12, 1892. Serial No. 442,908. (No model.)

To all whom it may concern:

Be it known that I, MERRILL H. TRIPPE, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Fans for Vehicles, of which the following is a specification.

This invention relates to a fan attachment for vehicles the object being to provide an arrangement for supporting a fan and setting the same in motion as the vehicle is moved. As here shown and described it is specially designed for children's carriages, and in the accompanying drawings which illustrate the invention,—

Figure 1 shows a side view of a child's carriage with my improvement attached; Fig. 2 an inner side view of the attachment with the axle of the carriage in cross-section; Fig. 3 a view of the parts applied on the axle and a front view of the parts not shown in Figs. 1 and 2. Fig. 4 is a view of the lower end of the supporting arm. Fig. 5 is a view of the bearing-block.

The letter, A, designates the rear axle of the carriage,—which axle is preferably square in cross-section,—and the letter, B, designates one of the rear wheels on the rounded end of said axle.

A bearing block, C, has a circular head and a radial slot, *a*, and the slot sets astride of the square axle, A; it is fastened thereto by a set-screw, *b*, which extends through a projection of said block and takes firmly against the axle. The block has a circumferential groove, *c*, which serves as a bearing for the supporting arm. The circumferential groove, *c*, is concentric with the axis of the axle.

The bearing block, C, has an arc-shaped slot, *d*, at its upper side; the curve of this slot is concentric with the axis of the axle; the supporting arm, D, D′, has at its lower end, D′, a curved crotch, *e*, which sets astride of the block whereon it may partly turn, thus serving as a pivot to allow the upper part, D, of the arm to tilt forward or back,—the center or pivoting-point being the axis of the axle. To provide for confining the arm to its position, with the crotch, *e*, in the groove, *c*, a set-screw, *f*, is on the lower part of the arm and passes through the curved slot, *d*, on the block; this set-screw will hold the supporting arm to any desired position,—either straight up or tilted. As described up to this point the supporting arm may be one piece, or obviously it may be made of two pieces as shown, so as to be extensible. To provide the extensible feature the arm is made in two separate parts—the upper part, D, and lower part, D′; the lower part has a slot, *g*, and the upper part has a set-screw, *h*, which occupies this slot and also has two lugs, *i*, one at each edge which take on opposite edges of the lower part; thus the upper part of the supporting arm may be adjusted higher or lower to the extent of the slot, *h*. The vertical parts, D, D′, of the supporting arm have position alongside of the carriage body, E, but do not interfere with the up-and-down motion of the said body on its springs, *j*. A lateral or horizontal part, D^2, projects from the top of the supporting arm directly over the carriage body, E; this horizontal part is made in two pieces which have an extensible slide, *k*, and set-screw, *l*. At the extremity is a tubular bearing, *m*, and a vertical shaft, *n*, fits in this bearing and carries at its upper end a pulley, *o*, and at its lower end a blade fan, F;—the revolution of the vertical shaft, *n*, causes the fan to revolve. Two grooved rollers, *p*, are mounted on studs, *q*, attached to the top of the supporting-arm, and a grooved driver-pulley G, is suitably attached to the wheel, B; a cord or belt, *r*, passes around the drive pulley, up and over the rollers, *p*, and thence around the fan-pulley, *o*.

It will now be seen that the rotary motion of the carriage wheel, B, as the carriage moves along, is transmitted to the fan, F. The fan may be brought to the desired position over the carriage body by shifting the supporting arm, D, which by loosening the set-screw, *f*, may be turned on the bearing block, C, as a center, and adjusted at any position desired by again tightening the said set-screw. It will be seen the center on which the arm turns is concentric with the driving-pulley, G, and the above-described adjustment may be made without affecting the tension of the belt, *r*.

As the vertical portion of the supporting

arm is adjustable lengthwise, and the lateral part is likewise adjustable the fan-attachment may be suited to carriages of different styles and proportions. Such an arrangement as here described will be found very useful and effective in protecting children from the heat, and also from being annoyed by insects.

The horizontal part, D^2, of the fan-arm has a bracket, *s*, provided with a suitable clamp, *t*, for holding the stick, *u*, of a parasol, so that the parasol, H, will be above and the revoluble fan, F, below the said supporting part, D^2.

Having thus described my invention what I claim as new and desire to secure by Letters-Patent is:—

1. In a wheeled vehicle, the combination of a supporting arm pivoted on an axle of the vehicle concentric with a wheel on said axle, and extending vertically alongside the body of the vehicle to the top thereof where it has a lateral extension projecting over the said body; a vertical shaft in a bearing on said lateral extension and carrying horizontal fan-blades at the lower end and a pulley at the upper end; suitable pulleys at the angle of the supporting arm; a driving pulley fast with the vehicle-wheel and concentric therewith; and a belt connecting said driving pulley and the fan-shaft pulley and passing over the pulleys at the angle of the supporting arm.

2. In a wheeled vehicle, the combination of a bearing-block fastened on an axle of the vehicle and having a radial slot entering one side to receive the said axle, and a circular head concentric with the axis of the axle; a supporting arm having an arc-shaped crotch engaging said circular head and adjustably fastened thereto; a rotary fan carried by said supporting arm; a driving pulley mounted to rotate with a wheel of the vehicle which is concentric with the circular head of the bearing-block; and a belt connecting said pulley with the rotary fan.

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

MERRILL H. TRIPPE.

Witnesses:
MOSES NORRIS,
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