

No. 654,374.

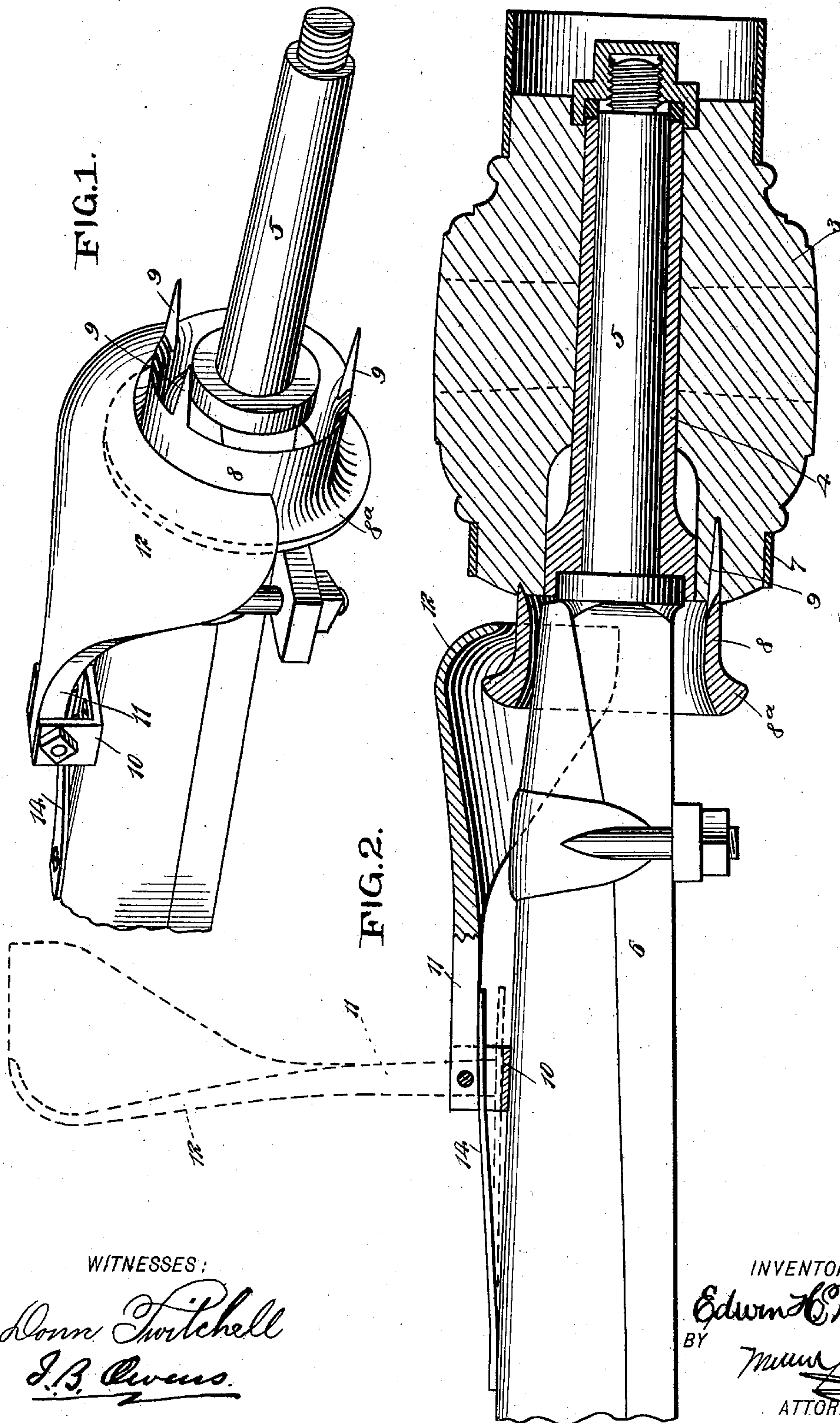
Patented July 24, 1900.

E. H. WILSON.

SAND SHIELD FOR VEHICLE AXLES.

(Application filed Jan. 20, 1900.)

(No Model.)



WITNESSES:

*Donn Twitchell*  
*J. B. Owens.*

INVENTOR

*Edwin H. Wilson*

BY

*Mum*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

EDWIN H. WILSON, OF GLOBE VILLAGE, MASSACHUSETTS.

## SAND-SHIELD FOR VEHICLE-AXLES.

SPECIFICATION forming part of Letters Patent No. 654,374, dated July 24, 1900.

Application filed January 20, 1900. Serial No. 2,148. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN H. WILSON, a citizen of the United States, and a resident of Globe Village, in the county of Worcester and State of Massachusetts, have invented a new and Improved Sand-Shield, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide a superior means for excluding sand from the journal-boxes of vehicle-hubs, which end I attain by providing two peculiarly-constructed shield-sections, one of which is attached to the hub and the other of which is attached to the axle, the parts coacting, so as to prevent the possibility of sand and like matter entering the journal-box of the hub.

This specification is the disclosure of one form of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a perspective view of the invention, showing the hub removed; and Fig. 2 is a sectional view illustrating the parts in place.

The hub 3 of the wheel, with its journal-box 4, is mounted, as usual, on the journal 5 of the axle 6, and to this hub 3, between the journal-box 4 and the hub-band 7, a collar or annulus 8 is attached. This collar or annulus has a sharpened inner edge adapted to be driven slightly into the hub, as indicated at the top of Fig. 2, and the collar 8 also has spurs 9, which serve to enter the hub to secure the collar in engagement therewith, as shown. The inner edge of the collar is thickened and flared outward to form a flange 8<sup>a</sup>, as shown. It will thus be seen that the collar is attached to the hub to turn therewith around the axle and also that, owing to the sharpened outer edges of the collar 8, a sand-tight connection is effected between the collar and the hub.

On the stock of the axle 6 is secured an approximately U-shaped bearing 10, on which is pivotally mounted the shank 11 of a shield 12. A spring 14 is attached to the axle and

bears against this shank 11, so as to hold the shield in the position indicated by dotted lines in Fig. 2 or in that indicated by full lines in said view. In the operative position of the shield 12 (see full lines in Fig. 1) the shield lies over the flanged inner portion of the collar 8, almost in contact with the outer sides of the collar, the spring 14 serving to uniformly hold the shield supported in this position and preventing it from bearing against the collar. The shield 12 is approximately semicircular in form, so as to lie over the top half of the collar and so as to shed the sand down around the sides of the same, preventing the sand from passing inward between the shield and the flange 8<sup>a</sup> of the collar. As will be understood, the shield 12 may be readily thrown up to the operative position (shown in dotted lines in Fig. 1) when it is desired to remove the vehicle-wheel from the journal or to effect any other operation with which the shield would otherwise interfere.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of an annulus adapted to be secured to the inner end of a vehicle-hub and to encircle the axle, a shield curved to lie over the upper portion of the annulus and provided with a shank extending inwardly from the annulus longitudinally of the axle, a bearing in which the shank is pivotally mounted, and a spring attached to the axle and engaged with the shank of the shield to sustain the shield yieldingly in position.

2. The combination of a sand-shield having a shank, a bearing in which the shank is pivotally mounted to move on the pivot toward and from the wheel-hub, and a spring extending longitudinally of the shank and bearing against the same to yieldingly sustain the shield in operative position.

3. The combination of an annulus adapted to be attached to the inner end of a vehicle-hub, a pivotally-mounted sand-shield lying over the annulus and movable on the pivot

toward and from the annulus, and a spring bearing between the shield and the axle and actuating the sand-shield to sustain it yieldingly in position out of contact with the annulus.

5 4. The combination of a pivotally-mounted sand-shield arranged to move on its pivot toward and from the wheel-hub, and a spring bearing between the axle and the shield to

yieldingly sustain the shield in operative position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN H. WILSON.

Witnesses:

WILLIAM P. PLIMPTON,  
J. C. A. WHEELLOCK.