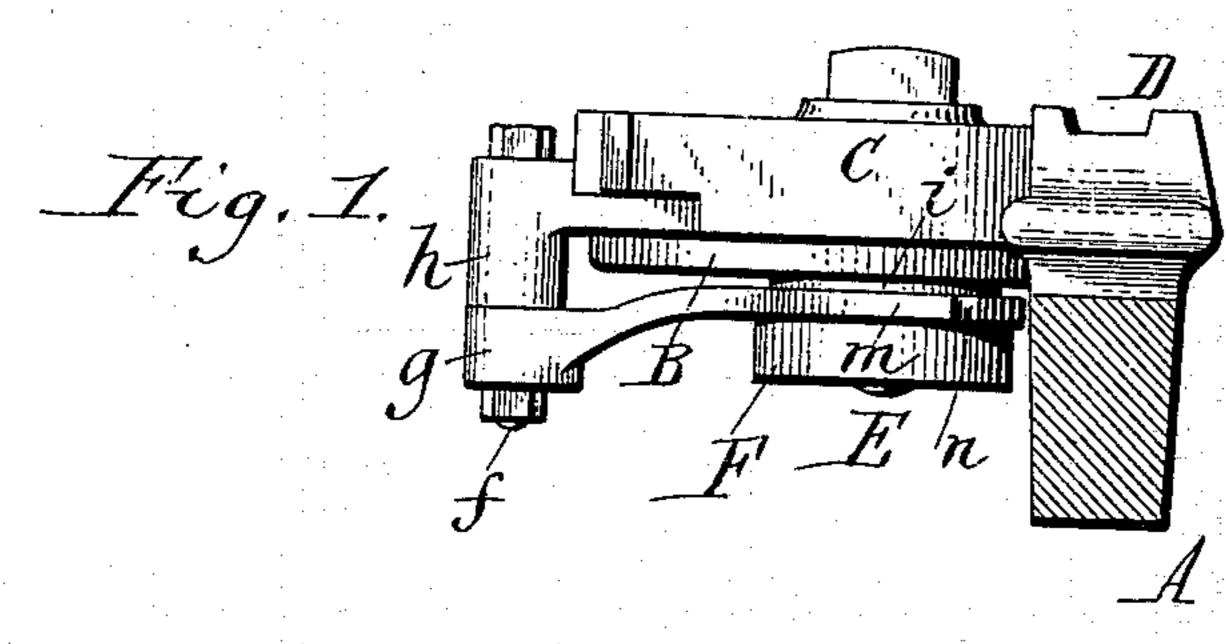
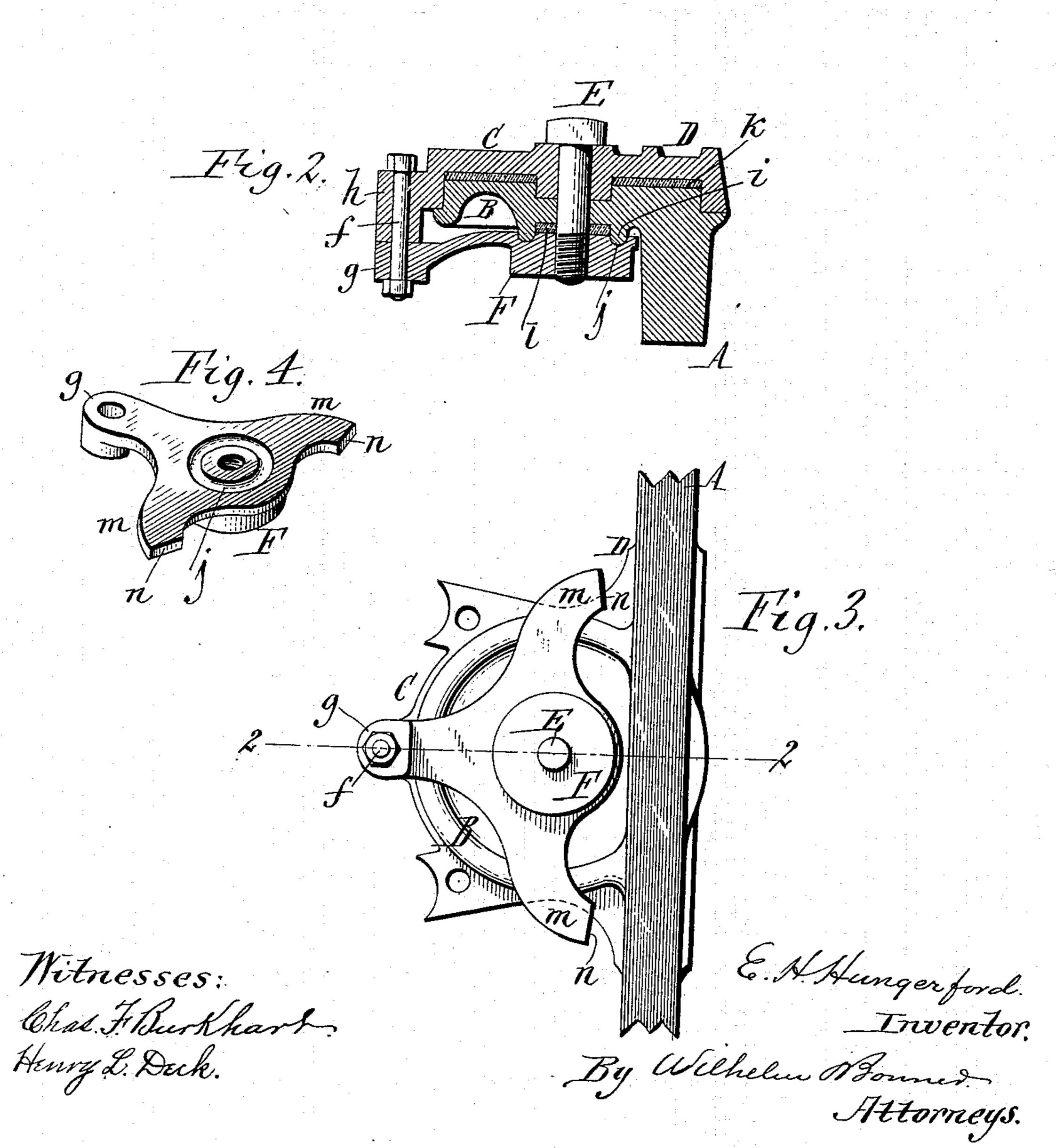
## E. H. HUNGERFORD. FIFTH WHEEL.

(No Model.)

(Application filed Aug. 29, 1898.)





## United States Patent Office.

ERNEST H. HUNGERFORD, OF WATERTOWN, NEW YORK, ASSIGNOR TO THE H. H. BABCOCK COMPANY, OF SAME PLACE.

## FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 615,391, dated December 6, 1898.

Application filed August 29, 1898. Serial No. 689,767. (No model.)

To all whom it may concern:

Be it known that I, ERNEST H. HUNGER-FORD, a citizen of the United States, residing at Watertown, in the county of Jefferson and State of New York, have invented new and useful Improvements in Fifth-Wheels, of which the following is a specification.

This invention relates to that class of fifthwheels in which the king-bolt is arranged in rear of the axle, and has the object to provide simple and convenient means for limiting the turning movement of the axle in order to prevent the front wheels from striking the body of the vehicle. When the wheels are provided with pneumatic tires, the latter are liable to be injured by striking the body or the usual wear-plate thereon in turning, and it is therefore desirable to stop the turning movement of the front axle before the wheels strike any part of the vehicle.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of a fifth-wheel embodying my improvement. Fig. 2 is a vertical longitudinal section in line 22, Fig. 3. Fig. 3 is a bottom plan view of the fifth-wheel. Fig. 4 is a perspective view of the screw-nut at the lower end of the king-bolt.

Like letters of reference refer to like parts

in the several figures.

A represents the front axle, and B the lower part of the fifth-wheel, which has the form of a disk and projects rearwardly from the upper portion of the axle and has its center arranged in rear of the axle. The lower part of 35 the fifth-wheel may be welded to the front axle, as indicated in the drawings, or it may be secured to the same by any other suitable means. C represents the upper part of the fifth-wheel, which corresponds in form with 40 the lower part and projects rearwardly from the bolster D, to which it is secured by welding or otherwise. E represents the king-bolt, which is arranged in rear of the axle and bolster and passes downwardly through both 45 parts of the fifth-wheel. All of these parts may be of any ordinary or well-known construction.

F represents a collar which is arranged un-

derneath the lower part of the fifth-wheel and held in position against turning by a vertical 50 bolt f, which passes through an ear g, projecting rearwardly from the collar, and through a corresponding ear h on the rear portion of the upper part of the fifth-wheel in a wellknown manner. This collar is preferably pro- 55 vided with an internally-threaded opening, into which the threaded lower end of the king-bolt is screwed, as shown in the drawings, so that the collar forms the screw-nut for the king-bolt. The collar or screw-nut is 60 centered on the lower part of the fifth-wheel by an annular rib i on the fifth-wheel, projecting into a groove j in the upper surface of the screw-nut, the lower part of the fifthwheel turning between the upper part and 65 this collar or nut.

k and l represent washers interposed, respectively, between the two parts of the fifth-wheel and between the lower part of the fifth-wheel and the collar or screw-nut.

m represents projections or wings formed on the screw-nut and projecting from opposite sides thereof in rear of the axle. The outer blunt ends n of these wings are arranged at such a distance in rear of the axle that 75 they will allow the necessary turning movement of the axle, but will stop the same before the wheel strikes any part of the body of the vehicle. These wings or lateral projections prevent the tires of the front wheels 80 from striking the body of the vehicle or the wear-irons on the same, and so prevent injury to the tires, which is often caused, especially in the case of pneumatic tires, when the tires come in contact with the body or wear-irons 85 in turning.

I claim as my invention—

1. The combination with the frontaxle, the fifth-wheel, and the king-bolt arranged in rear of the axle, of a collar arranged on the under 90 side of the fifth-wheel at the lower end of the king-bolt and rigidly secured to the upper part of the fifth-wheel, said collar being provided with stops which limit the turning movement of the axle, substantially as set 95 forth.

2. The combination with the front axle, the fifth-wheel, and the king-bolt arranged in rear of the axle, of a screw-nut applied to the threaded lower end of the king-bolt on the under side of the fifth-wheel and provided in rear of the axle with laterally projecting wings which limit the turning movement of the front axle, and means whereby said screw-

nut is held against turning, substantially as set forth.

Witness my hand this 23d day of August, 1898.

ERNEST H. HUNGERFORD.

Witnesses:

615,391

F. G. DAVIS, HARRIET OBERLY.