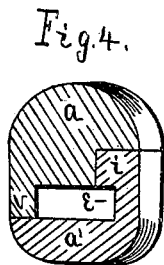
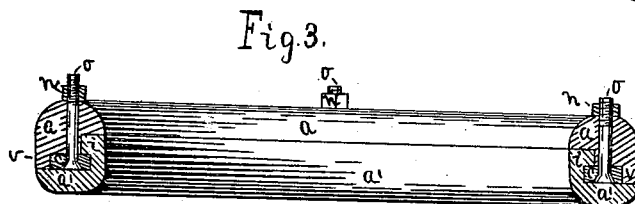
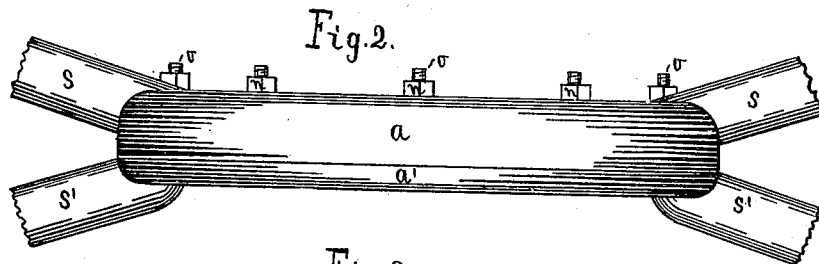
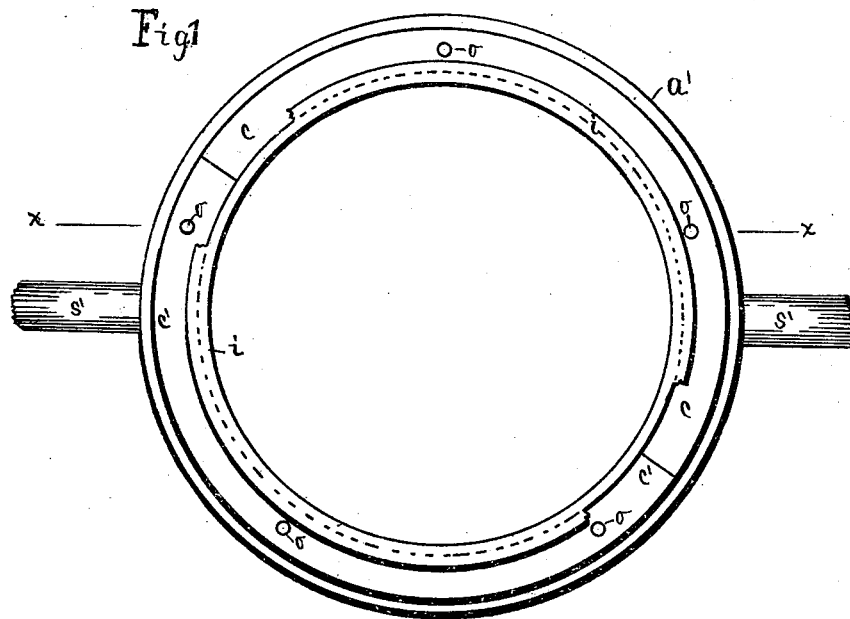


(No Model.)

A. E. HERMANN.
FIFTH WHEEL FOR VEHICLES.

No. 262,669.

Patented Aug. 15, 1882.



Witnesses
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UNITED STATES PATENT OFFICE.

ADOLPH E. HERMANN, OF RAVENNA, OHIO.

FIFTH-WHEEL FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 262,669, dated August 15, 1882.

Application filed June 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH E. HERMANN, of Ravenna, Portage county, Ohio, have invented a new and useful Improvement in Fifth-Wheels for Vehicles, of which the following is a specification.

My invention relates to that class of fifth-wheels in which there is no king-bolt.

In the drawings forming a part of this specification Figure 1 is a plan of the lower section of the wheel with parts broken away. Fig. 2 is an elevation. Fig. 3 is a vertical section of the wheel at line *x* in Fig. 1, and Fig. 4 is a cross-section of one side of the wheel on an enlarged scale and with the ring *c c'* removed.

The wheel is in two sections, *a a'*, forming a ring. Between the two sections *a a'*, and inclosed by them, is a ring in two segments, *c c'*. Ring *c c'* is firmly attached to upper section, *a*, by screw-bolts *o*, which are inserted in the ring and through upper section, *a*, and are fastened on the top of the latter by nuts *n*. Section *a'* has a circular flange, *i*, extending upward and forming the inner side of the section. Flange *i* is formed with an annular groove, *e*, in its circumference to receive the inner side of the segmental ring *c c'*. Section *a* has a circular flange, *v*, forming the outer side of the section, and extending downward at the circumference of ring *c c'* and resting on section *a'*. The inner side of section *a* rests on the top of flange *i*. Sections *a a'* are formed with arms *s s' s'*, which are represented in the drawings as broken off at their outer ends. Arms *s*, on opposite sides of section *a*, connect it with and sustain the box of the vehicle to which the outer ends of the arms are to be attached. Arms *s'*, on opposite sides of section *a'*, are to connect that section with the springs or body of the vehicle to which they are to be attached. When the forward part of the carriage or other vehicle is turning to move in a curve or circle section *a'* turns under and in contact with section *a* and segmental ring *c c'*. The ring is formed in segments *c c'* to facilitate placing it in position in groove *e* and to obviate the inconven-

ience of having to spring the ends apart if the ring be severed only on one side. Their function is to hold sections *a a'* together and at the same time to allow the lower section to turn. They may not be made to extend entirely around sections *a a'*, but it is preferable that they should substantially do so in order to hold the sections firmly together. Flange *i*, by the contact of its circumference with section *a*, prevents lateral displacement of the sections from their proper relative positions. Flange *v*, by inclosing segments *c c'* at their circumference, prevents sand and dirt from entering between the sections and producing friction, and also keeps the segments in position laterally, especially if there be separate short segments, each attached to section *a* by a single bolt, *o*.

It is immaterial which side up sections *a a'* are placed, except that in coaches or the heavier classes of carriages that may require braces to the lower section the position of the parts, as shown in the drawings, should be reversed, that the braces may be attached to the under side of the lower section on bolts *o* by nuts *n*.

I claim as my invention—

1. The circular sections *a a'*, fitted together, and one of them formed with an annular groove, *e*, in combination with segments *c c'*, attached to section *a*, substantially as described.

2. Section *a'*, formed with flange *i* and groove *e*, in combination with section *a*, provided with segments *c c'* attached thereto, substantially as described.

3. Section *a*, formed with flange *v* and provided with segments *c c'*, in combination with section *a'*, having an annular groove to receive the segments, substantially as described.

4. Section *a*, formed with arms *s s*, and section *a'*, formed with arms *s' s'*, and a circumferential groove, *e*, in combination with segments *c c'*, attached to section *a*, substantially as described.

ADOLPH E. HERMANN.

Witnesses:

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