

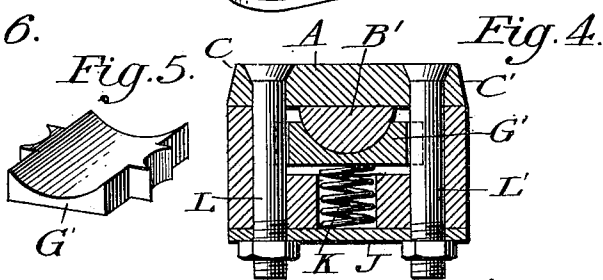
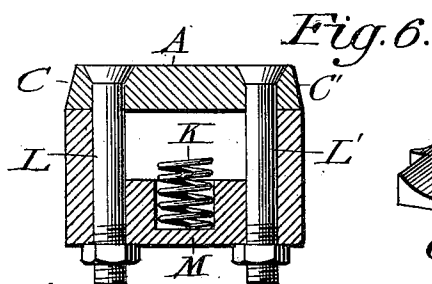
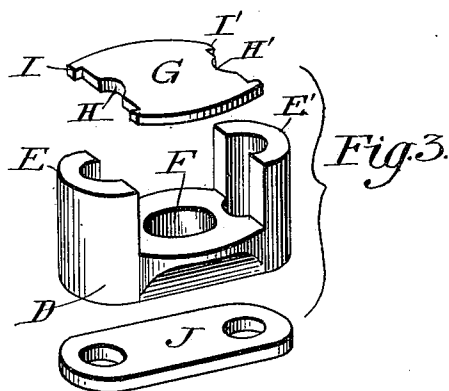
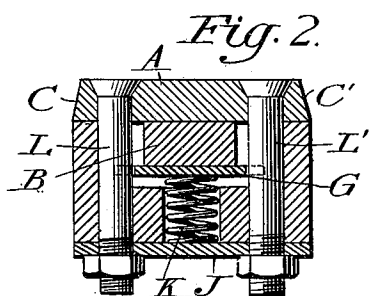
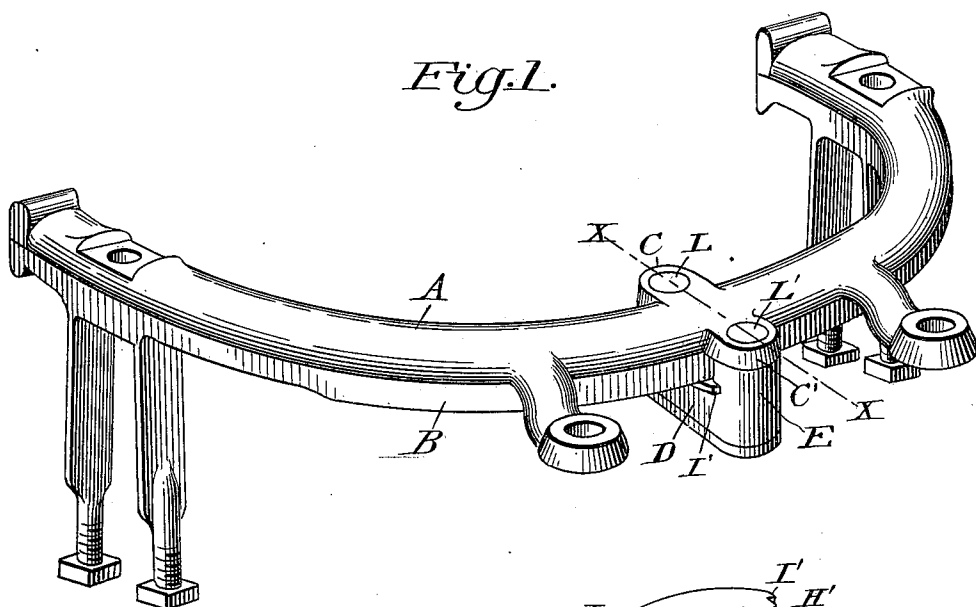
No. 644,651.

Patented Mar. 6, 1900.

F. E. WILCOX.
FIFTH WHEEL.

(Application filed Nov. 23, 1899.)

(No Model.)



Witnesses:
D. W. Edlin.
E. Szemelenyi

Inventor:
Frank E. Wilcox.
By J. E. Stebbins,
Atty.

UNITED STATES PATENT OFFICE.

FRANK E. WILCOX, OF MECHANICSBURG, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO HERBERT C. BROWN, OF SAME PLACE.

FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 644,651, dated March 6, 1900.

Application filed November 23, 1899. Serial No. 738,024. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. WILCOX, a citizen of the United States, residing at Mechanicsburg, in the county of Cumberland and State of Pennsylvania, have invented certain new and useful Improvements in Fifth-Wheels, of which the following is a specification.

My invention relates generally to fifth-wheels for vehicles, and in particular to antirattlers for the same, the objects being, first, the provision of improved means for holding the upper and lower members of a fifth-wheel in frictional contact by a spring, said means to be simple in construction, comprising the fewest number of elements possible, so constructed that parts can easily be detached and replaced and a new spring inserted when desired, and adapted for use with vehicles having a single or double reach, and, second, the provision of means which will retain the members of the fifth-wheel in their relative positions should the king-bolt become broken.

With these ends in view my invention consists, objectively, in an antirattler comprising an upper member of a fifth-wheel provided with integral lugs, a yoke adapted to embrace the lower member and to be secured to the lugs of the upper member by bolts, a spring located in a pocket formed in the lower part of the yoke, and a wear or follower plate.

It further consists in certain novelties of construction and combinations and arrangements of parts hereinafter set forth and claimed.

The accompanying drawings illustrate one complete example of the physical embodiment of my invention and two examples of slight modifications thereof, the said examples being constructed according to the best of the several modes or methods I have so far devised for the application of the principle.

Figure 1 is a perspective view of a fifth-wheel with my improvements applied. Fig. 2 is a sectional view taken on line *x x* of Fig. 1. Fig. 3 illustrates in perspective a yoke, a wear or follower plate, and a removable spring-retaining plate. Fig. 4 is a sectional view, similar to Fig. 2, illustrating a modified shape of the wear or follower plate and

a lower member of a fifth-wheel, which is semicircular in cross-section or in the form of half a round rod. Fig. 5 is a perspective view of the wear or follower plate shown in Fig. 4. Fig. 6 is a sectional view showing a form of my improvement in which the spring-retaining plate is omitted and the pocket for receiving the spring extended only part way through the body of the yoke.

Referring to the several figures of the drawings, the letter A designates the upper member of a fifth-wheel, in this instance in the form of a half-circle; B, the lower member, corresponding in general outline with the upper member.

C C' are lugs of the shape shown, made integral with the upper member on opposite sides thereof, and each lug having a hole for a bolt.

D designates the yoke.

E E' are the arms of the yoke, each provided with a longitudinal seat and a hole for a bolt, as shown.

F designates a spring-pocket made in the lower part of the yoke.

G is a wear or follower plate.

H H' are recesses made in the sides of the follower-plate to engage bolts.

I I' are lugs on the plate G, which serve to hold the plate between the arms of the yoke and guide it in its upward and downward movements.

J is a detachable spring-retaining plate having perforations for bolts.

K is a coil-spring.

L L' are bolts, each threaded at one end to receive a nut.

B' is a lower member of a fifth-wheel, semicircular in cross-section, and G' is a wear or follower plate having recesses similar to those shown in Fig. 3 to receive bolts and hold and guide the plate and also provided with a semicircular or concave seat to fit the lower member B' of the fifth-wheel, as illustrated.

In Fig. 6 the spring-retaining plate J is omitted and the pocket for the spring extended only part way through the body of the lower portion of the yoke. The letter M in that view designates the bottom of the spring-pocket.

The method of assembling the several ele-

ments of the two examples illustrated in Figs. 1, 2, 3, 4, and 5 is obvious from an inspection of the drawings. The bolts are first passed through the lugs of the upper member of the fifth-wheel, the spring placed in the pocket, the follower-plate located between the arms of the yoke, and, finally, the yoke itself and spring-retaining plate are adjusted on the bolts and the nuts applied.

From the foregoing description, taken in connection with the drawings, it becomes evident that I have produced a very simple and efficient antirattler which fulfils all the conditions set forth as the end or purpose of my invention. By the construction shown in the complete example and first modification I am able to use a single spring, which will be retained in position by the pocket and for which another can be substituted, when desired, by simply removing the plate J. The modification shown in Figs. 4 and 5 adapts the improvement for use with a fifth-wheel having a lower member circular in cross-section. The modification shown in Fig. 6 is further simplified by the omission of the spring-retaining plate. In this modification it is of course necessary to lower the yoke for the purpose of substituting a spring.

While I have illustrated and described only one complete example and two modifications of the physical embodiment of my invention, I do not thereby intend to exclude from the scope of my claims other examples which involve in their construction merely colorable changes and alterations. Moreover, my improvements may be used in connection with any other form or type of fifth-wheel than that shown and with a vehicle having a single or double reach, inasmuch as the essence of the invention resides in the means for holding the upper and lower members of the fifth-wheel substantially in frictional contact or so the lower member cannot vibrate and not in the relation of said means to other and remote parts of the vehicle with which there is no direct coöperation.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with an upper member of a fifth-wheel having the integral perforated lugs, C C', of a lower member; a yoke having arms to receive bolts and a spring-pocket made in the body of the metal; a spring located in the pocket; a follower-plate resting on the spring and bearing against the lower member; and bolts for rigidly uniting the yoke and lugs, C C'; in substance as set forth.

2. The combination with an upper member of a fifth-wheel having the perforated lugs, C C', of a lower member; a yoke having arms and a spring-pocket, F, made in the body of the metal; a spring located in the pocket; a follower-plate resting on the spring and bearing against the lower member; a removable spring-retaining plate, J; and bolts for rigidly uniting the yoke and lugs, C C'; in substance as set forth.

3. The combination with an upper member of a fifth-wheel having the integral perforated lugs, C C', of a lower member; a yoke having arms to receive bolts and a spring-pocket, F, made in the body of the metal; a spring located in the pocket; a follower-plate resting on the spring and bearing against the lower member; and bolts for rigidly uniting the yoke and lugs, C C'; said follower-plate being provided with means for holding it in position during its upward and downward movements; in substance as set forth.

4. The combination with an upper member of a fifth-wheel having the perforated lugs, C C', of a lower member; a yoke having arms and a spring-pocket, F, made in the body of the metal; a spring located in the pocket; a follower-plate resting on the spring and bearing against the lower member; and bolts for rigidly uniting the yoke and lugs, C C'; said follower-plate having recesses which receive the bolts, L L'; in substance as set forth.

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

FRANK E. WILCOX.

Witnesses:

JESSIE MERCER,
H. H. MERCER.