

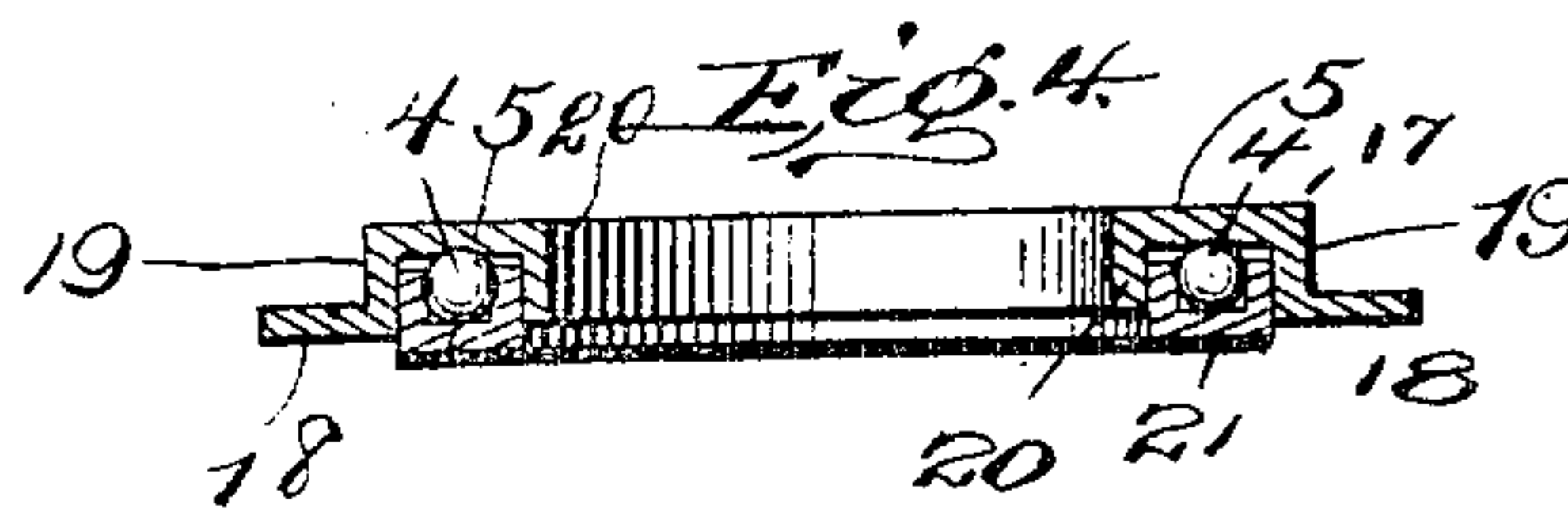
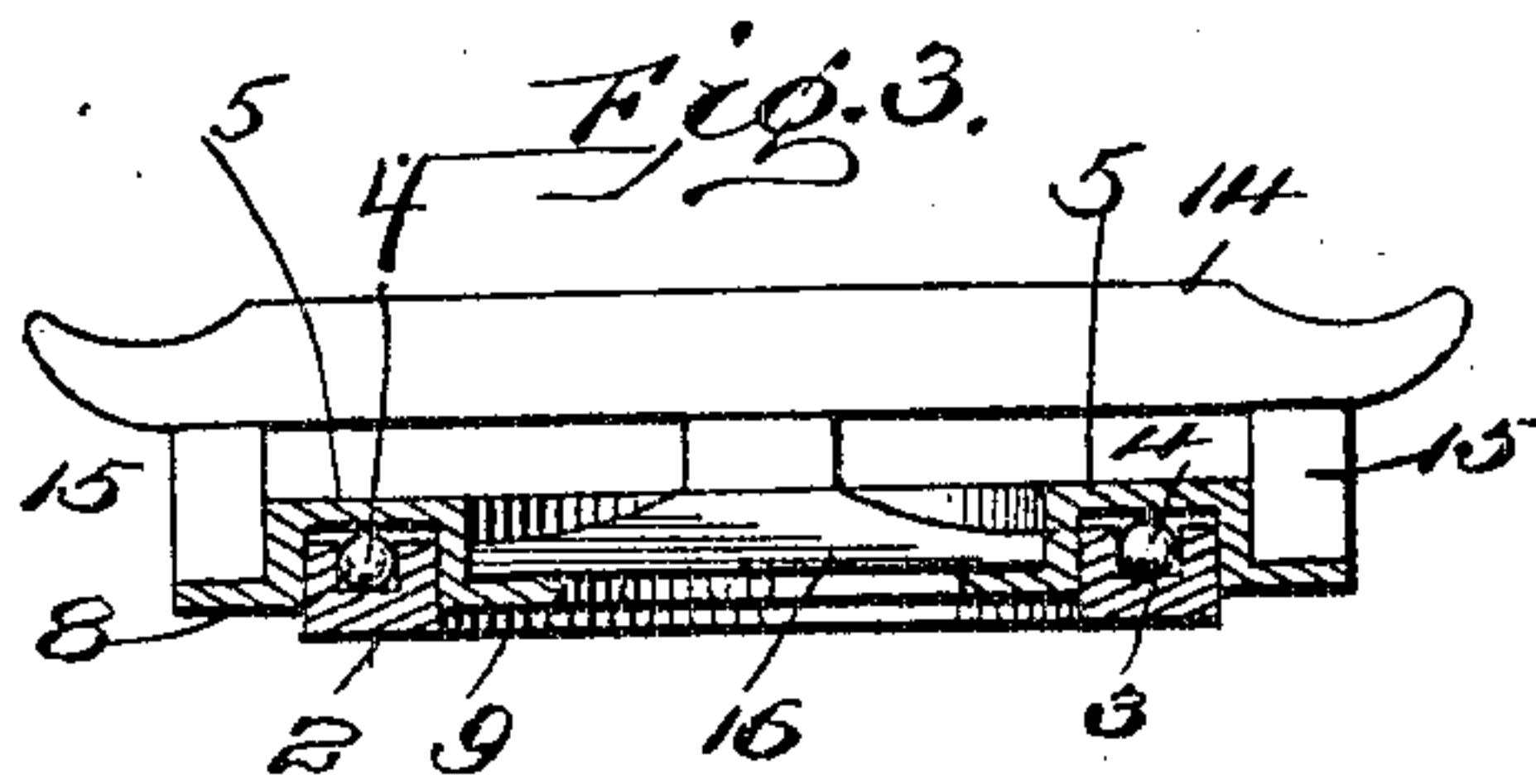
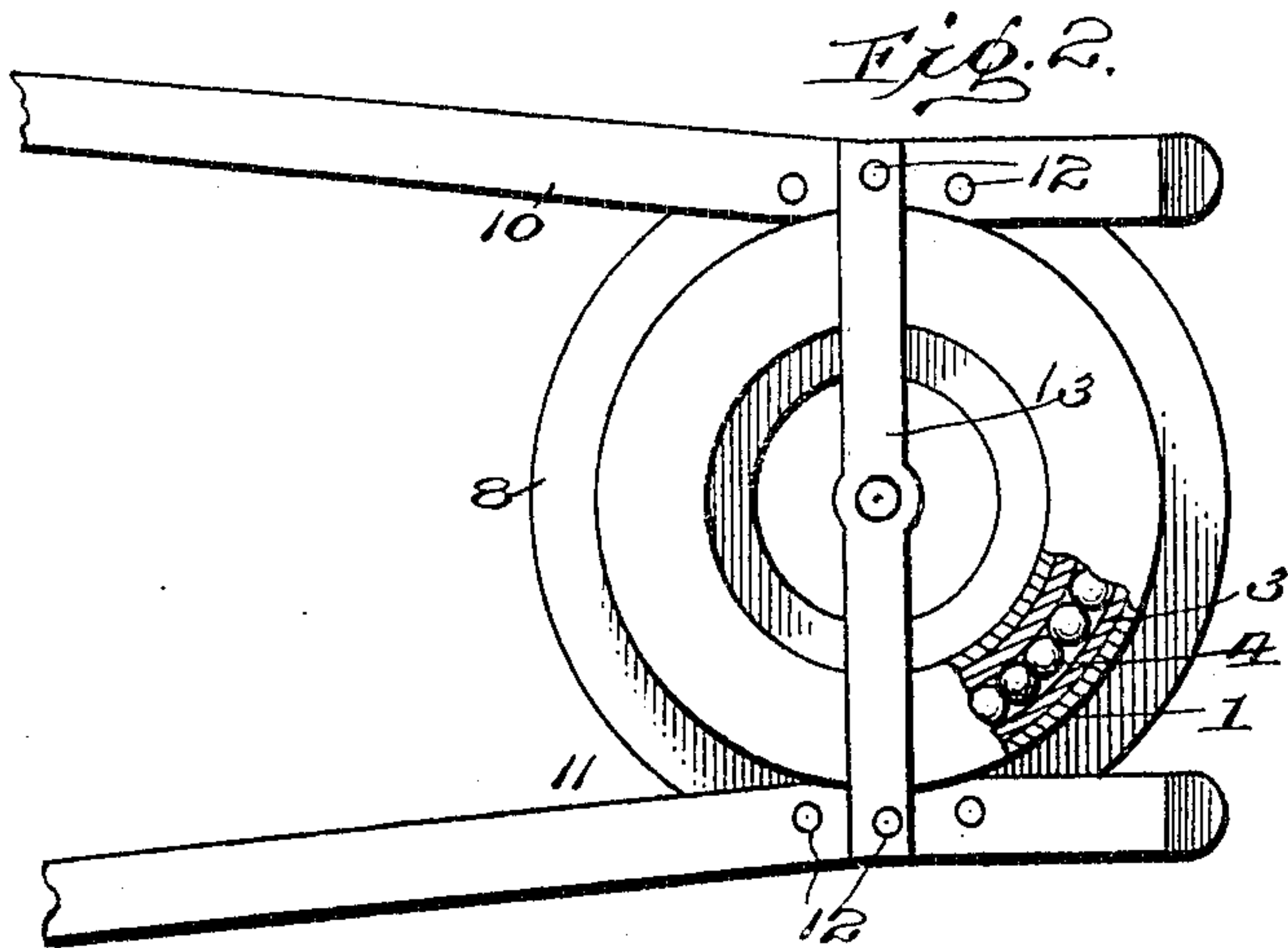
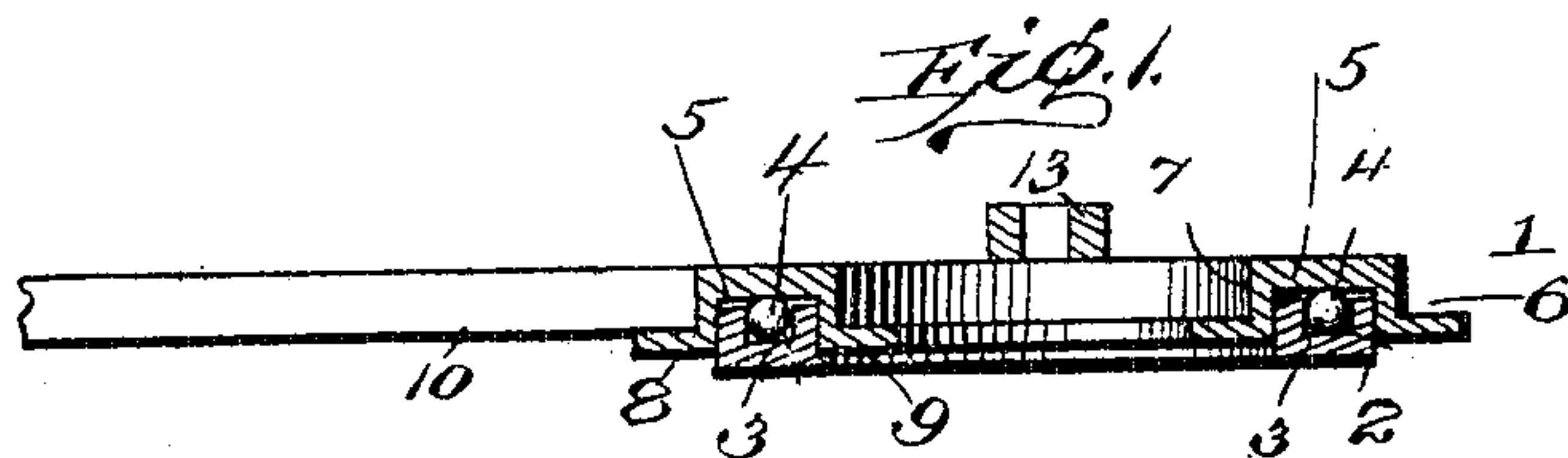
No. 812,095.

PATENTED FEB. 6, 1906.

M. M. SHERWOOD.

FIFTH WHEEL.

APPLICATION FILED MAR. 9, 1905.



Inventor

Matthew M. Sherwood.

Witnesses

J. M. Fowler Jr.

Arthur J. Mitchell.

By

Mason, Furuch, Lawrence

Attorneys.

UNITED STATES PATENT OFFICE.

MATTHEW M. SHERWOOD, OF SCRANTON, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO BURNHAM K. NYCE, OF SCRANTON, PENNSYLVANIA.

FIFTH-WHEEL.

No. 812,095.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed March 9, 1905. Serial No. 249,235.

To all whom it may concern:

Be it known that I, MATTHEW M. SHERWOOD, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Fifth-Wheels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in fifth-wheels for vehicles; and the object of the invention is to provide a fifth-wheel which may be adaptable to various vehicles, though not especially made therefor, the upper member of the wheel being so constructed that it can be secured to the reaches, hounds, or other portions of the running-gear no matter how such portions of running-gear approach the fifth-wheel.

The invention comprises certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a vertical central section through a fifth-wheel constructed in accordance with the present invention. Fig. 2 is a top plan view of such a fifth-wheel. Fig. 3 is a central vertical sectional view through a fifth-wheel applied to a different kind of running-gear from that shown in Figs. 1 and 2. Fig. 4 is a similar sectional view, but showing the upper member of the fifth-wheel as having only one attaching-flange.

The fifth-wheel forming the subject-matter of the present invention is so constructed that it may be attached to various styles of running-gear. For the purpose of illustration and description I have shown one style of running-gear in Figs. 1 and 2 and another style of running-gear in Fig. 3. In the drawings, the fifth-wheel is shown as formed of two members—an upper member 1 and a lower member 2. The lower member 2 is adapted to be secured to the turning portion of a running-gear—that is to say, as is usually the case, to the front axle of the vehicle to which it is attached. The lower member 2 is provided with a groove in this upper surface, which forms a runway 3 for receiving anti-friction-bearings, preferably balls 4, as shown in the drawings. The members of the fifth-

wheel are preferably circular, and of course the runway 3 will be annular in shape and the balls can move or run entirely around in the groove 3.

The upper member 1 is formed with an annular bearing 5 for engaging the anti-friction-balls 4, and they support the weight of the upper member and the running-gear and vehicle which is attached thereto. The upper member is formed with depending annular walls 6 and 7, which are separated sufficiently to receive between them the lower member 2. By having the side walls 6 and 7 of the upper member inclosing and overhanging the side walls of the lower member any collection of grit or dust is prevented from accumulating in the runway or coming in contact with the anti-friction balls or bearings.

An important feature of the invention is the structure of the upper member, so that it can be adapted to various kinds of running-gear and easily and strongly secured thereto. As shown in Figs. 1, 2, and 3, the upper member is provided with laterally-projecting flanges 8 and 9. These flanges are preferably located at the lower edges of the walls 6 and 7, though of course it will be understood that the flanges could project from points at different heights upon said walls. The flange 8 is preferably made continuous entirely around the upper member 1, so that no matter in what direction the reaches or hounds of a running-gear approach the fifth-wheel they can be made to rest upon or can be secured to the said flange 8. When it is determined how the running-gear shall fit upon the said flange 8, suitable apertures may be drilled through the flange and through the members of the running-gear for securing the latter to the said flange. As shown in Fig. 2, the reaches 10 and 11 extend to either side of the body portion of the fifth-wheel and rest upon the upper surface of the flange 8. Bolts or rivets are passed through the reaches and the flanges 8 at the sides of the fifth-wheel, as indicated at 12. A bolster 13 may be placed across the upper member 1 and rest at its ends upon the reaches 10 and 11, as clearly shown in Fig. 2. The spring or other portion of the vehicle which is used at the front may be secured to the bolster 13 in any desired manner. As shown in Fig. 3, the running-gear may be of different type—namely, that in which a turn-table is used in

the front of the vehicle, the lower member being secured to a spring-framework carried by the axle. In this structure body-bolsters 14 are rested upon blocks 15 at the sides of the fifth-wheel, the said blocks being secured to the flange 8. The bolster or bolsters 14 may also be supported centrally by means of a cross-bar 16, mounted upon and secured to the inner annular flange 9 and built up to engage the under side of said bolster or bolsters. In this manner the weight of the vehicle will be brought to bear upon the flanges of the upper member 1 and will have a frictional engagement through the agencies of the balls 15 in the runway with the lower member 2, which is carried by the front truck or axle of the vehicle.

By reference to Fig. 4 it will be seen that one of the flanges may be dispensed with. In this instance the upper member 17 is provided with only one flange, as 18, though the said upper member 1 has downwardly-extended walls 19 and 20, which inclose and cover the lower member 21, as above described, with respect to the member 2.

The great utility in this invention lies in the fact that the fifth-wheels may be made up into quantities and can be shipped to manufacturers of vehicles who order the parts already made and put them together. By providing the attaching-flanges upon the upper member of the fifth-wheel the device may be suited to any style of vehicle which a party may be manufacturing or making to order, and the attaching-flanges may be perforated to suit the condition of the running-gear in every instance. Where fifth-wheels are made with projecting lugs for attachments, it is necessary that the said lugs shall be exactly placed to fit upon a reach or hound or other portion of a running-gear, and if such a fit is not accomplished the fifth-wheel cannot be used upon that gear. By making a continuous flange for attaching the article to the running-gear of a vehicle the said fifth-wheel can be used upon all styles of carriage or vehicles, and the flanges may be perforated at any point to accommodate the securing bolts or rivets. The same thing of course can be said of the inner flange, since it affords additional means for properly supporting and attaching the running-gears of vehicles to the vehicle-supporting member of the fifth-wheel.

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

1. A fifth-wheel for vehicles, comprising an upper rigid member and a lower turning

member projecting below the said upper member to engage a support having a movable engagement with the upper member and an attaching portion formed upon the upper member and projecting in a plane below the plane of bearing and capable of perforation at any point for securing it to the running-gear of a vehicle.

2. A fifth-wheel for vehicles, comprising a lower supporting member having a bearing formed therein, an upper supporting member resting upon said lower member and overhanging the same and an attaching-flange projecting from the upper member in a plane below that of the plane of bearing of the upper member to which portions of a running-gear may be secured the lower supporting member extending sufficiently below the upper supporting member to engage a support.

3. A fifth-wheel for vehicles, comprising a lower supporting member, an upper member resting thereon and having inner and outer walls overhanging and inclosing the lower member and a lateral projecting horizontal flange extending outwardly from the upper member entirely around the same for attachment to any kind of running-gear the said lower supporting member projecting sufficiently below the upper member for attachment to adjacent parts of the running-gear.

4. A fifth-wheel for vehicles, comprising a lower circular member and an upper circular member, the upper member having downwardly-extending walls overhanging the lower member and laterally-extending flanges projecting from each of the said walls affording attaching means for various kinds of running-gear.

5. A fifth-wheel for vehicles, comprising a lower supporting member having an annular runway formed therein, antifriction bearing means mounted in said runway and an upper member fitting upon said lower member and having a bearing for engaging and resting upon said antifriction means, laterally-extending flanges projecting from the upper member and capable of receiving the reaches or hounds of various kinds of running-gear, the said flange affording means to which the portions of the running-gear may be bolted or secured at any point.

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

MATTHEW M. SHERWOOD.

Witnesses:

W. W. BOYLOR,
MAY JOSEPH.