

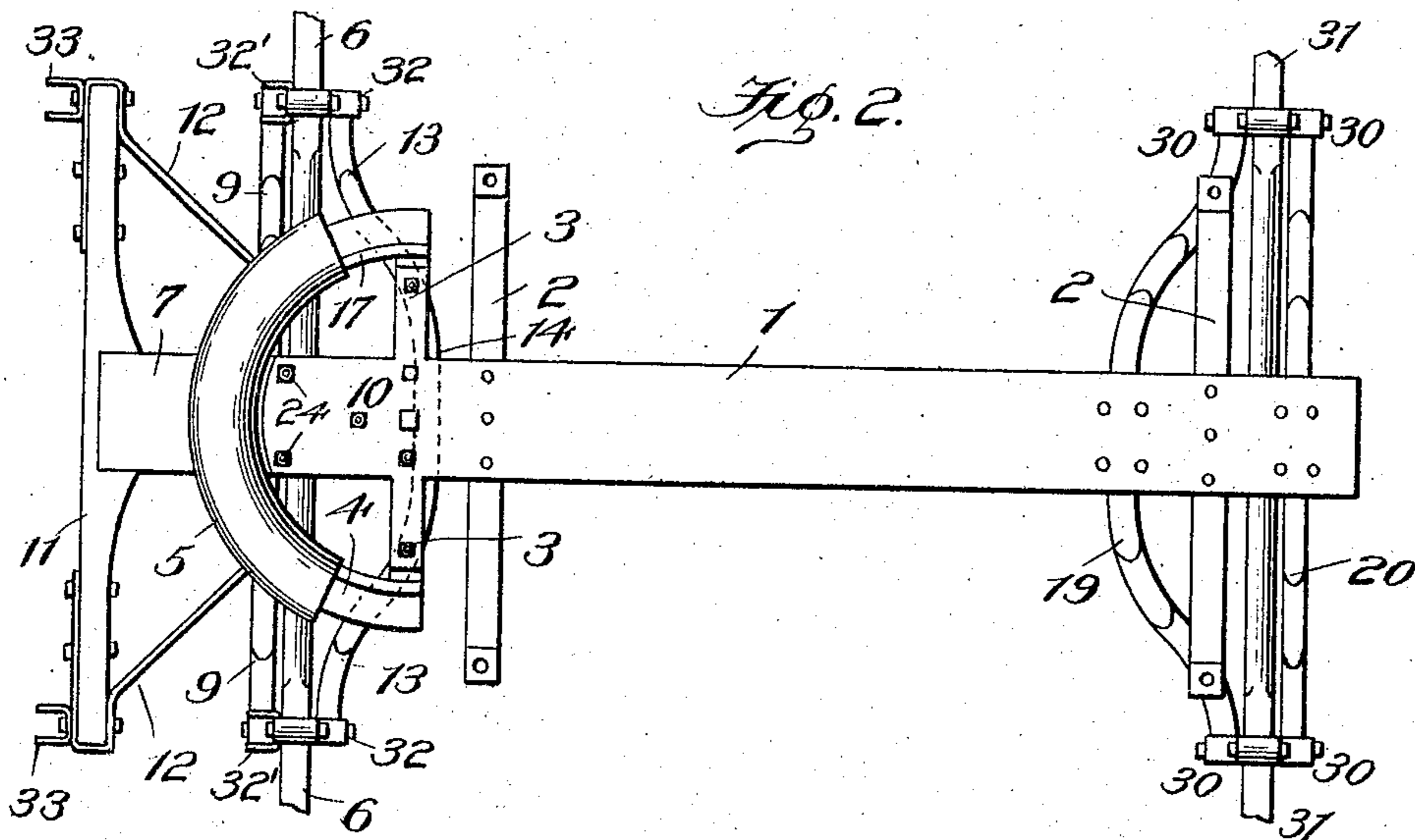
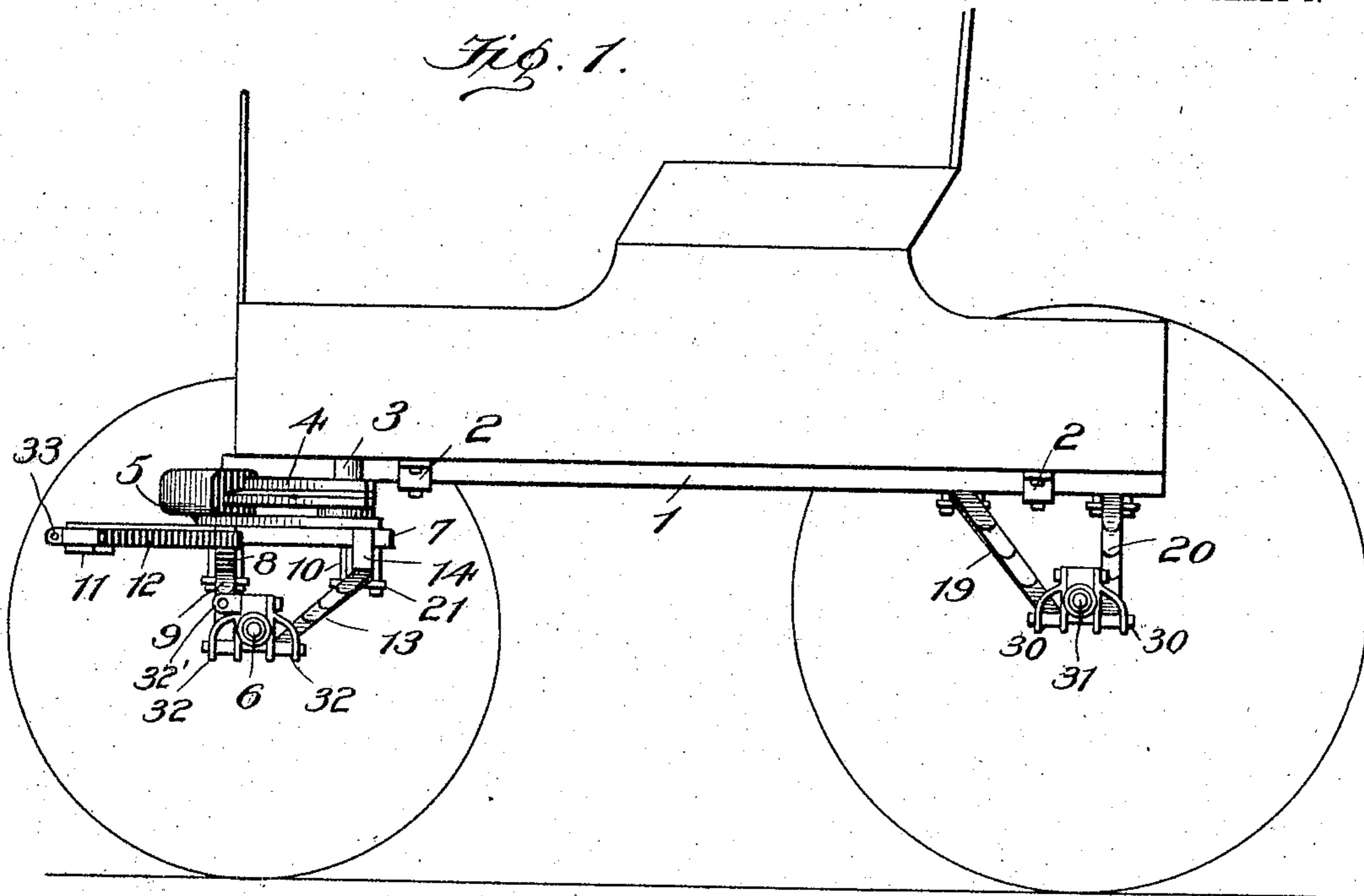
No. 781,482.

PATENTED JAN. 31, 1905.

F. G. WINNEK.
RUNNING GEAR FOR VEHICLES.

APPLICATION FILED OCT. 28, 1904.

2 SHEETS—SHEET 1.



Witnesses

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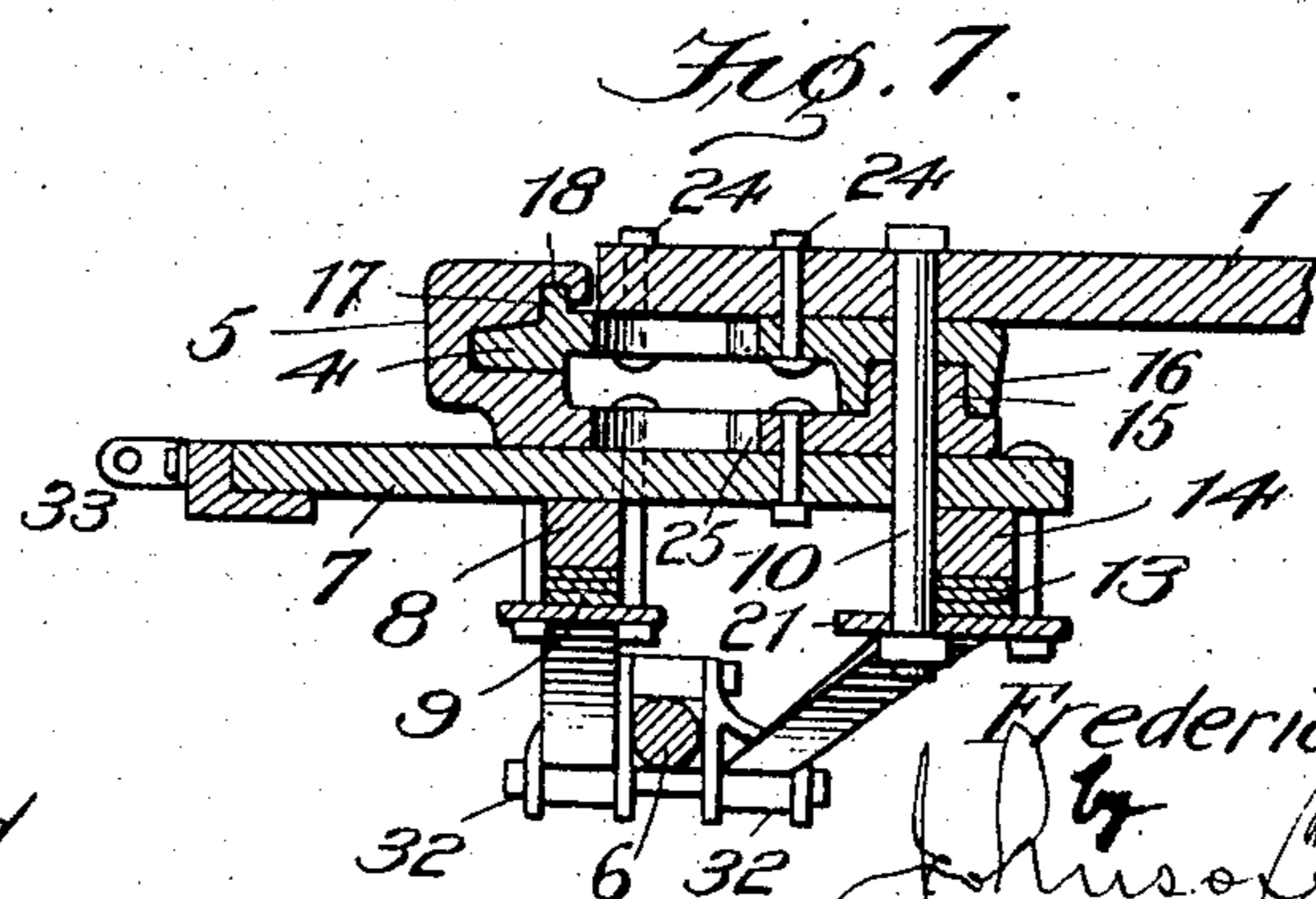
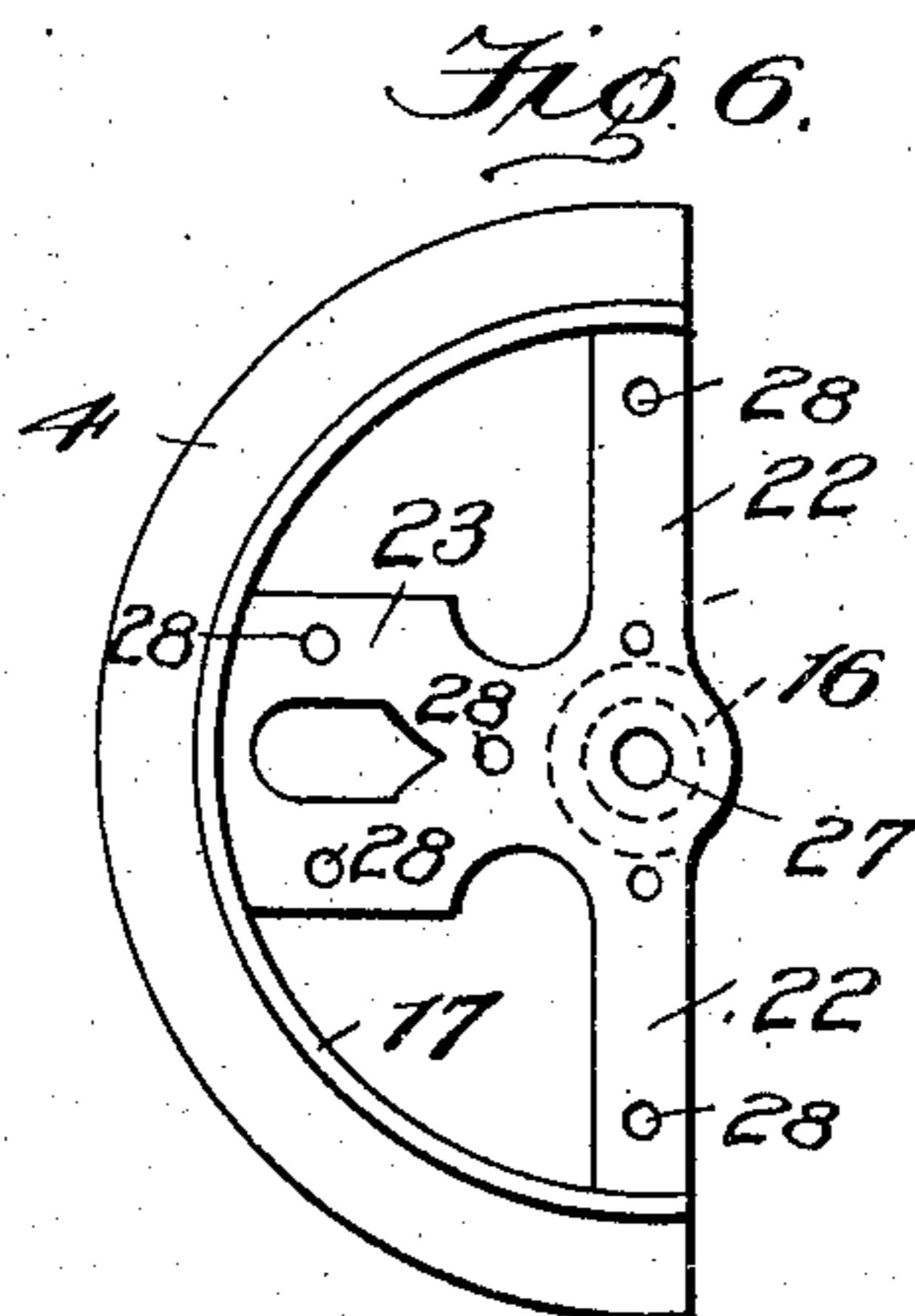
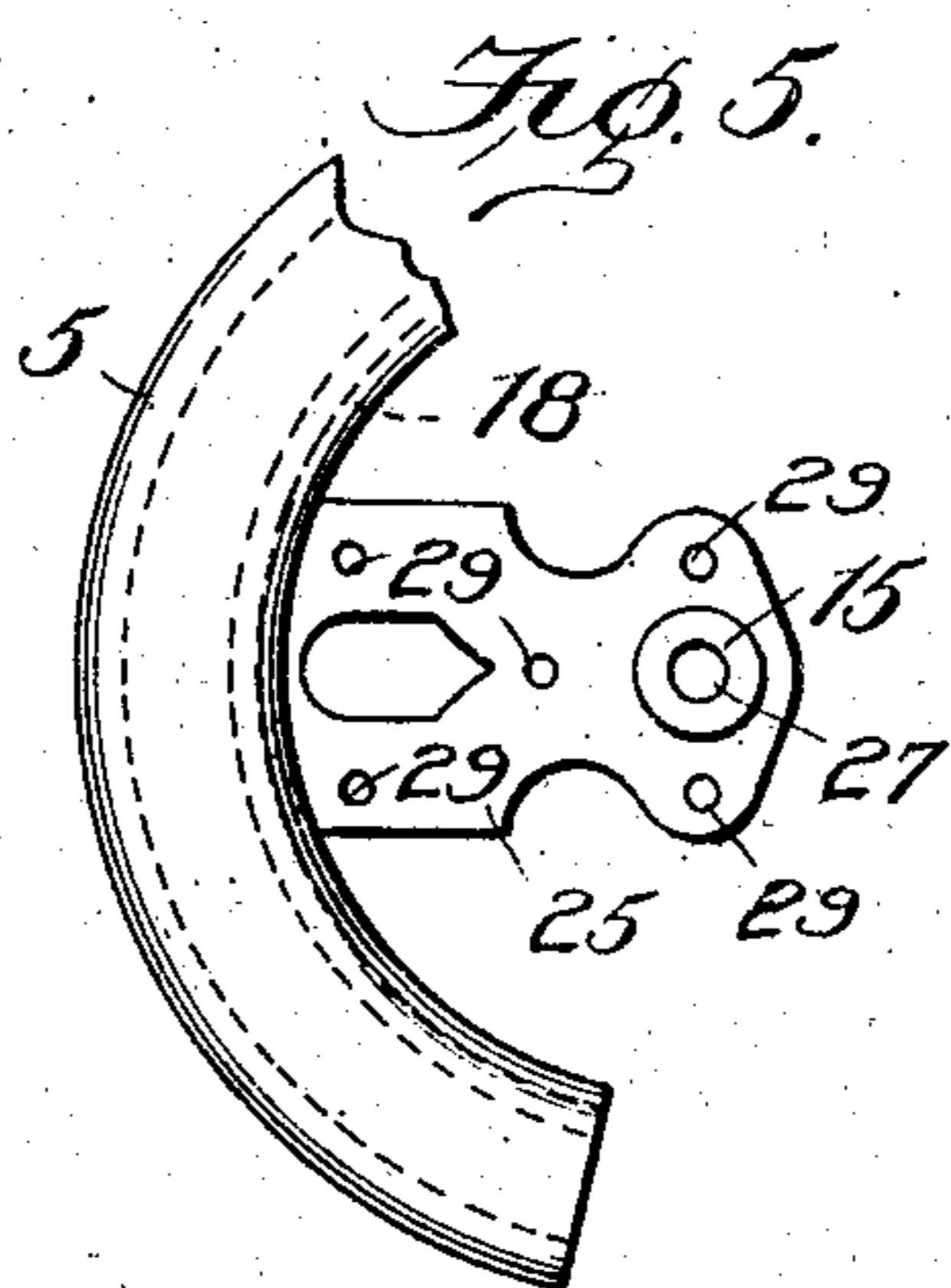
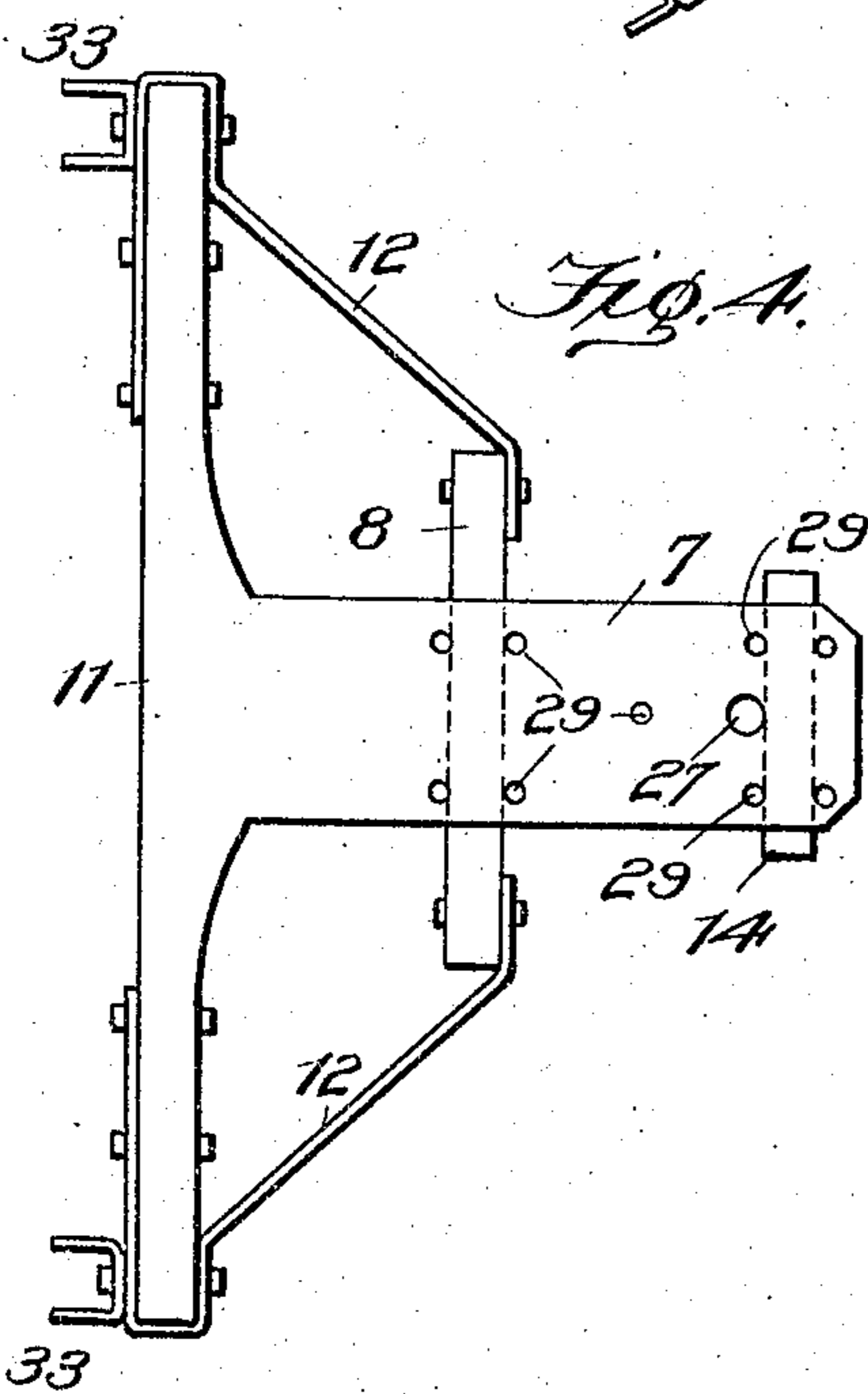
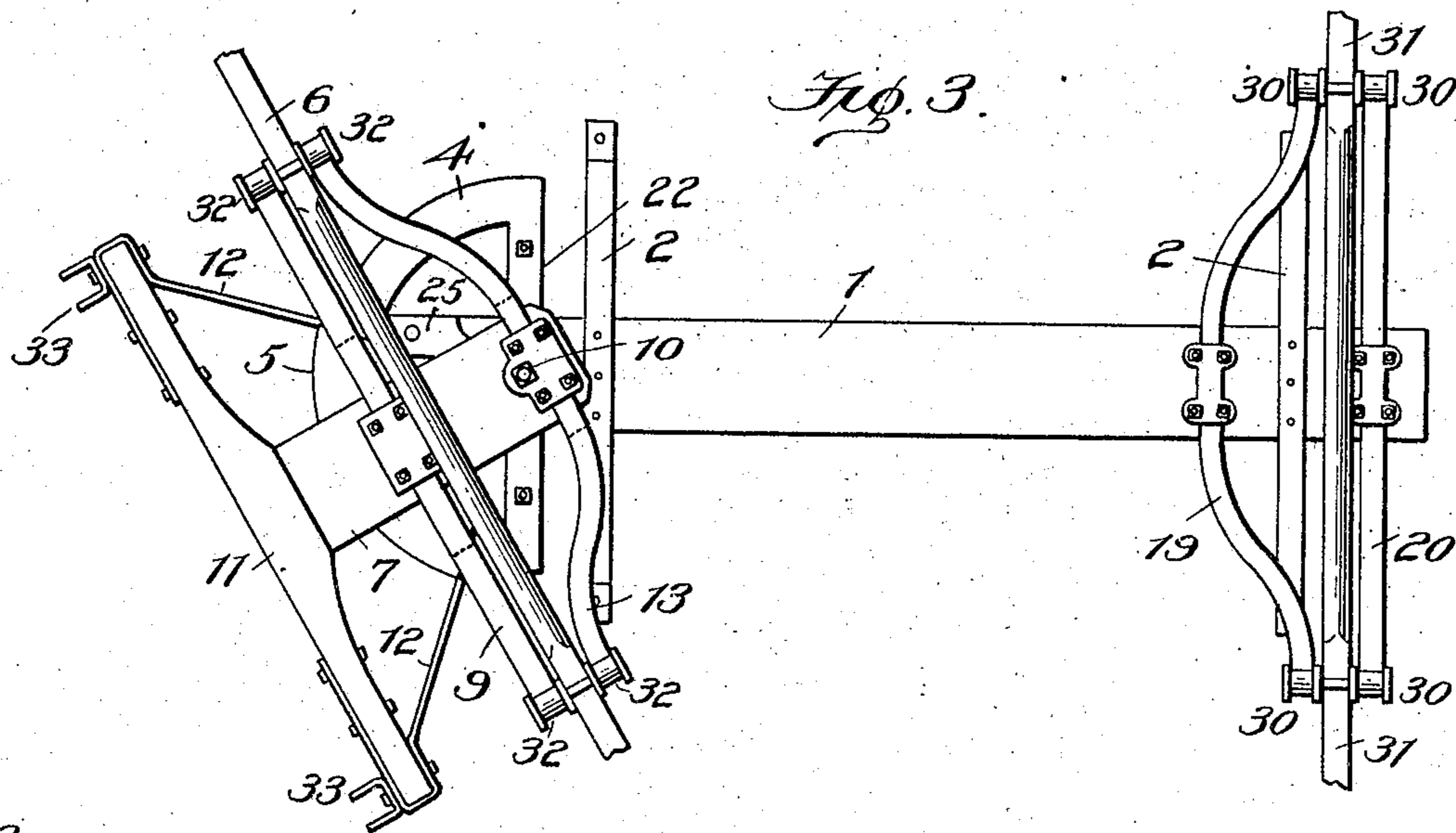
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UNITED STATES PATENT OFFICE.

FREDERICK GIDEON WINNEK, OF HOLTON, KANSAS.

RUNNING-GEAR FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 781,482, dated January 31, 1905.

Application filed October 28, 1904. Serial No. 230,325.

To all whom it may concern:

Be it known that I, FREDERICK GIDEON WINNEK, a citizen of the United States, residing at Holton, in the county of Jackson and State of Kansas, have invented certain new and useful Improvements in Running-Gear for Vehicles; 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.

The invention herein is directed to the production of a safe and durable short-turn fifth-wheel and its relation to the reach and to the running-gear of vehicles, and the features of novelty which constitute my invention will be specifically set out in the claims appended hereto in connection with the accompanying drawings, in which—

Figure 1 shows in side elevation my improved fifth-wheel as applied to the reach of a vehicle. Fig. 2 shows a top view of the running-gear, including the fifth-wheel. Fig. 3 is a bottom view of the same, showing the front axle partly turned on the fifth-wheel. Fig. 4 shows, enlarged, a top view of the draw-bar on which the fifth-wheel parts are mounted. Fig. 5 is an enlarged top view of the under members of the fifth-wheel. Fig. 6 is an enlarged view of the top member of the fifth-wheel. Fig. 7 is a vertical section of the fifth-wheel parts and their connection with the draw-bar and the reach.

A flat wide metal bar 1 forms the reach and a sill for the body of the vehicle and is fastened to the bottom of said body by transverse braces or stays 2 2 between the fifth-wheel and the rear axle. Near its front end the reach has cross-arms 3 3, Fig. 2, to which the upper semicircular member 4 of the fifth-wheel is bolted or riveted by its cross-bar 22, Fig. 6, while the end of the reach projects forward over the web 23 of the fifth-wheel and forms an overhanging support for it. This fixed top member of the fifth-wheel is therefore firmly secured to the front end of the reach by bolts 24, while the coupling member 5 of the fifth-wheel is mounted to engage by an overlap the top fixed member and turn thereon as the front axle 6 is turned. This under

coupling member is secured by a web-plate 25 to a front draw-bar 7, which crosses the front axle and projects in the front and in the rear thereof and is secured about mediately of its length to bolster-blocks 8 and 14 in front and rear of the axle. Each bolster-block is secured upon a spring 9 and 13, the ends of which are secured by suitable clips to the front and rear side of the axle. The inner end of the front draw-bar 7 is secured to the reach and to the male member 4 of the fifth-wheel by the king-bolt 10, while the front end of said draw-bar has the tongue or pole coupling-bar 11, which is braced by the hounds 12 to said front bolster-block. The spring 13 is secured by the bolster-block 14 to the inner end of said front draw-bar, and the ends of this spring 13 are secured by suitable clips to the rear side of the axle. The front axle therefore carries the front draw-bar, which carries the king-bolt, a pair of springs, one on each side of the axle, the coupling or movable member 5 of the fifth-wheel, and the tongue or pole draft-bar 11, while the reach carries the fixed member 4 of the fifth-wheel.

The fifth-wheel members are provided with coupling center bosses, one, 15, projecting upward from the coupling member 5 and the other, 16, forming a socket, projects downward from the fixed member 4, so that these bosses engage each other and form a socket-bearing connecting the fifth-wheel members. By this construction the king-bolt passes through and has its bearing in the reach, the socket-bosses of the fifth-wheel, the front draw-bar, and a plate 21 on the under side of the bolster-block, and all combined to give a long bearing for the king-bolt and to the center of the fifth-wheel members. To add to the security given by the king-bolt to the fifth-wheel, I provide a lock for its members which consist of a rib 17 on the fixed member engaging a groove 18 on the under side of the coupling member, said rib conforming to the circle of the fifth-wheel, and while allowing one member to turn upon the other locks the two members together and reinforces and renders the connection of the fifth-wheel with the reach safely secure.

The rear end of the reach is secured to a

pair of springs 19 and 20, the ends of which are fastened by suitable clips to the opposite sides of the axle. It will be noted that the spring and the bolster-block which support the king-bolt connection with the reach are at the inner side of the king-bolt, so that the latter passes through a plate 21, secured to the under side of this bolster-block 14. It will also be noted that while the reach forms a supporting-sill for the body of the vehicle it also carries the fixed member 4 of the fifth-wheel and connects the front and rear axles by direct connection with the front and rear parts of springs. The distance between the center of the king-bolt and the center of the front axle is about ten inches and this makes a very short turn of the fifth-wheel. It is important also to note that the wide reach forming a sill for the body will relieve the latter of all load strain, as the draw of the vehicle all comes on the wide reach-bar. It is also important to note that the connection of the reach-bar with the pair of springs of the rear axle gives a pulling action upon each spring, and thereby the pulling force is upon the rear and front sides of the rear axle.

In Figs. 4, 5, and 6, 27 indicates the holes for the king-bolt, 28 indicates the holes for the bolts 24 for securing the reach to the web of the fifth-wheel member 4, and 29 indicates the holes for securing the fifth-wheel member 5 to the front draw-bar.

In Fig. 2 the clips for the axle-draft attachment are indicated by 32', while 33 indicates clips for the draft attachment of the central coupling-bar, thus allowing the draft from the axle or from the center bar above the springs, as may be desired.

I claim—

1. In a running-gear for vehicles, a body-supporting reach-bar having a cross-brace at each end for securing it to said body, a semi-circular member of the fifth-wheel fixed to its under side, projecting from its front end and formed with a concentric bead on its inner edge.

2. In a running-gear for vehicles, the reach-bar and the top member of the fifth-wheel fixed to its under side and projecting from its front end, the axle, a central bar having a cross draft-bar in front of said axle, a corresponding bottom fifth-wheel member secured to said bar, a pair of bow-springs secured to said axle, and the king-bolt passing through the reach,

the fifth-wheel members, the central draft-bar and serving to clamp the inner of said springs to said draft-bar.

3. In a running-gear for vehicles, a body-supporting reach-bar having a cross-brace at each end for securing it to said body, the axles, a pair of bow-springs fixed to each axle, a fifth-wheel member fixed to said reach-bar, a central bar having the corresponding member of the fifth-wheel, a king-bolt securing the reach, the fifth-wheel, the central bar and the rear spring of the front pair together, the inner spring of each pair standing inward, the one to brace the body longitudinally, the other to brace the king-bolt against undue draft strain, and the said center bar having a cross draft-bar in front of said axle.

4. In a running-gear for vehicles, and in combination with the reach-bar, and the axles, a pair of bow-springs fixed to each axle, a central draft-bar, the fifth-wheel connecting the central and the reach bars, and the king-bolt connecting the spring at the inner side of the front axle with the said draft-bar.

5. In a running-gear for vehicles, the front axle, a pair of bow-springs fixed thereto one on each side thereof, a central bar fixed to and supported by said springs, a member of the fifth-wheel fixed to said central bar, the reach, and the corresponding member of the fifth-wheel fixed to said reach and the king-bolt, the said central bar and the said axle, each provided with clips for draft attachments, and the said central draft-bar projecting in front of the axle.

6. In a running-gear for vehicles, the reach-bar, the front axle, the central draft-bar, the fifth-wheel members fixed respectively to the reach and to said draft-bars, and interlocked by bead and groove, the king-bolt, and a pair of bow-springs, the spring on the inner side of the axle standing obliquely inward and clamped to said draft-bar by said king-bolt, the said reach-bar, the oblique spring and the interlocking groove and bead of the fifth-wheel, coacting with the king-bolt to resist the force of the draft upon the center bar.

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

FREDERICK GIDEON WINNEK.

Witnesses:

V. V. ADAMSON,
A. P. HOAGLAND.