No. 814,845. PATENTED MAR. 13, 1906.

L. E. HICKOK.

VEHICLE GEAR.

APPLICATION FILED JUNE 7, 1905.

FIG. 1.

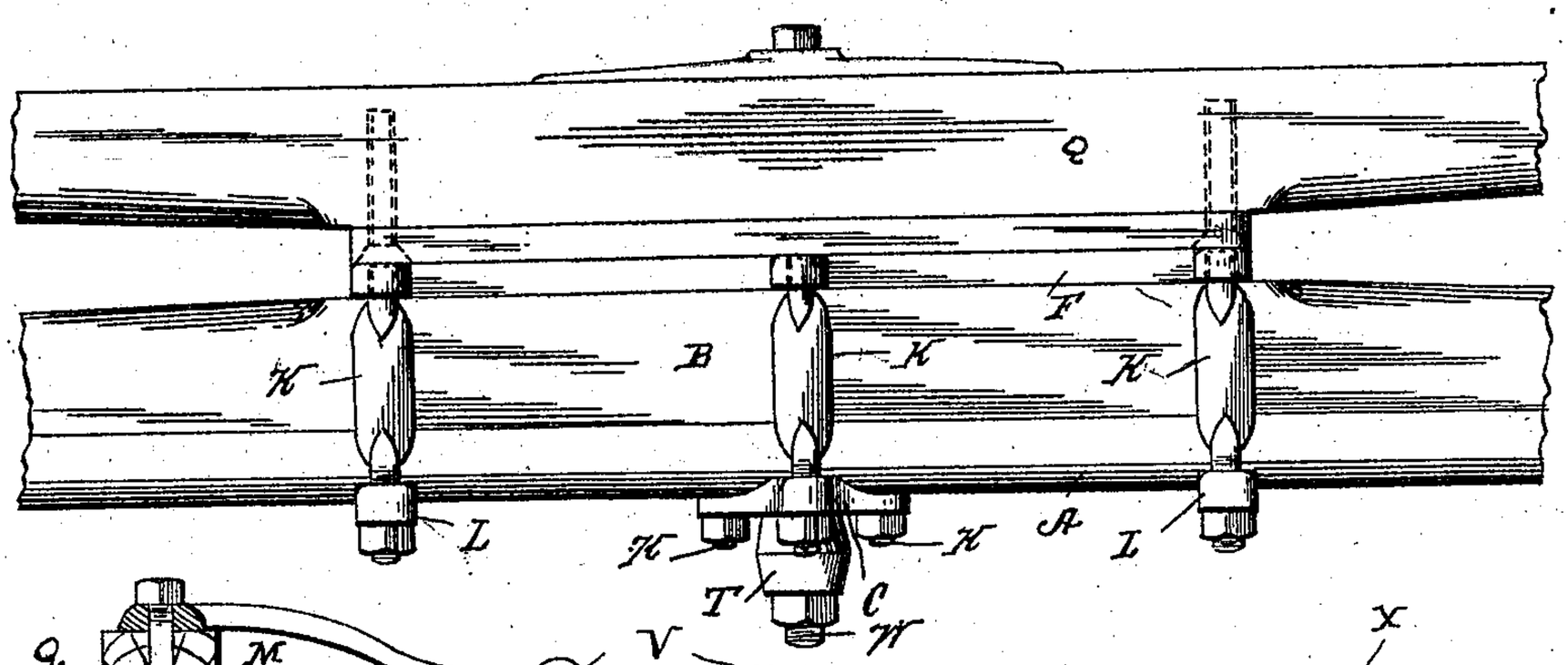


FIG. 2.

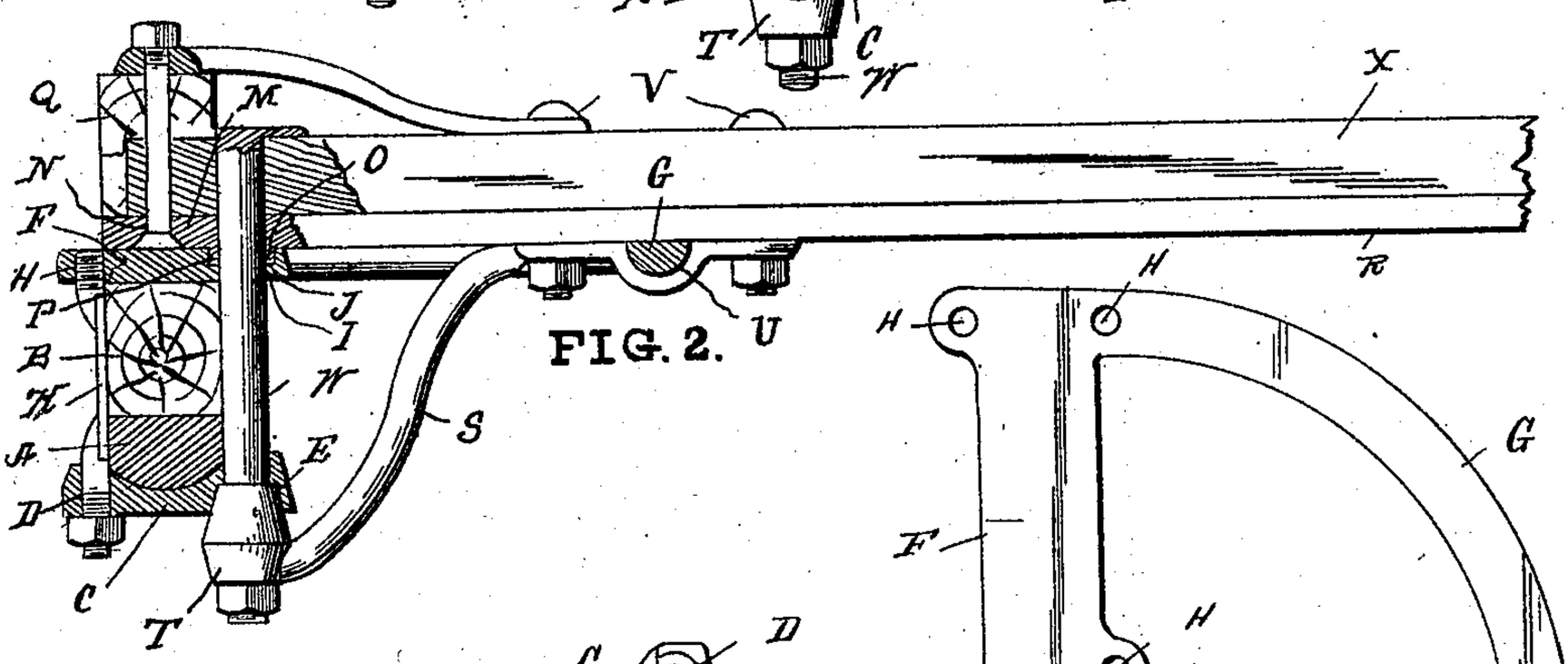


FIG. 4.

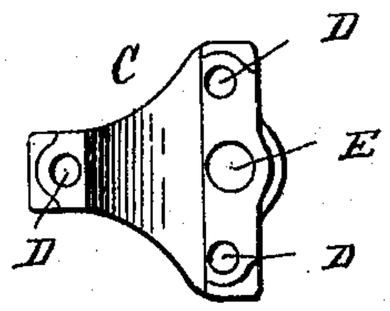


FIG. 5.

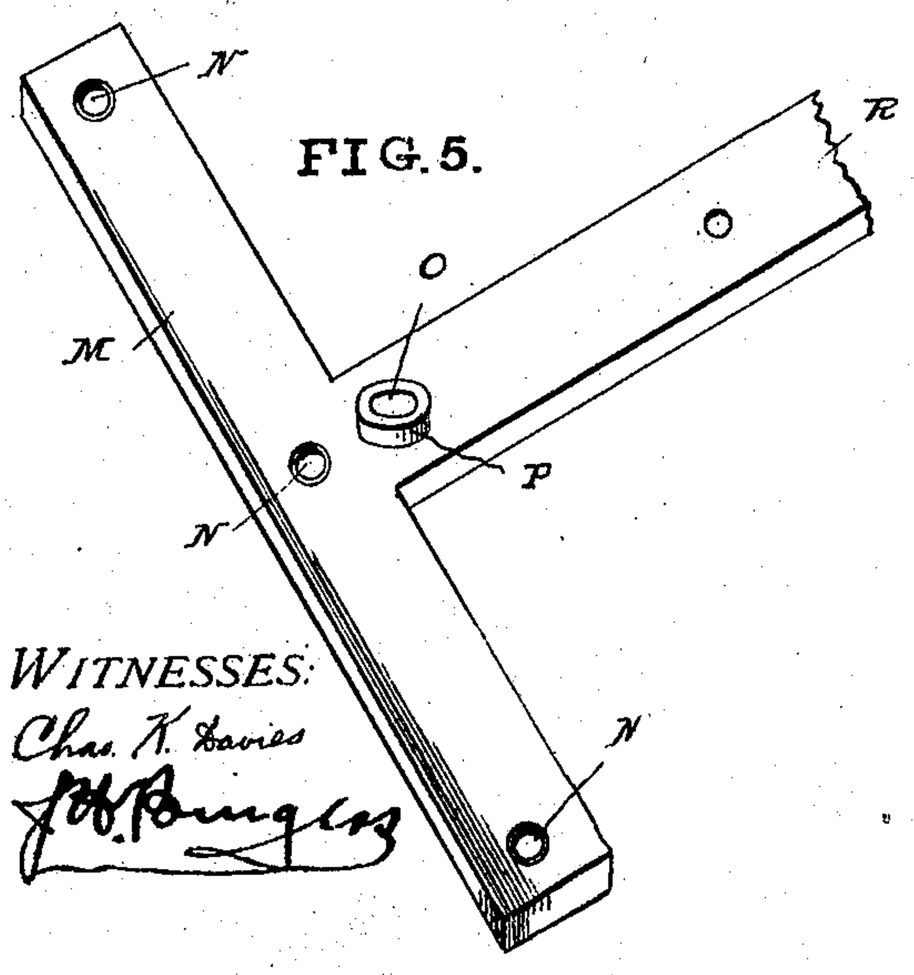
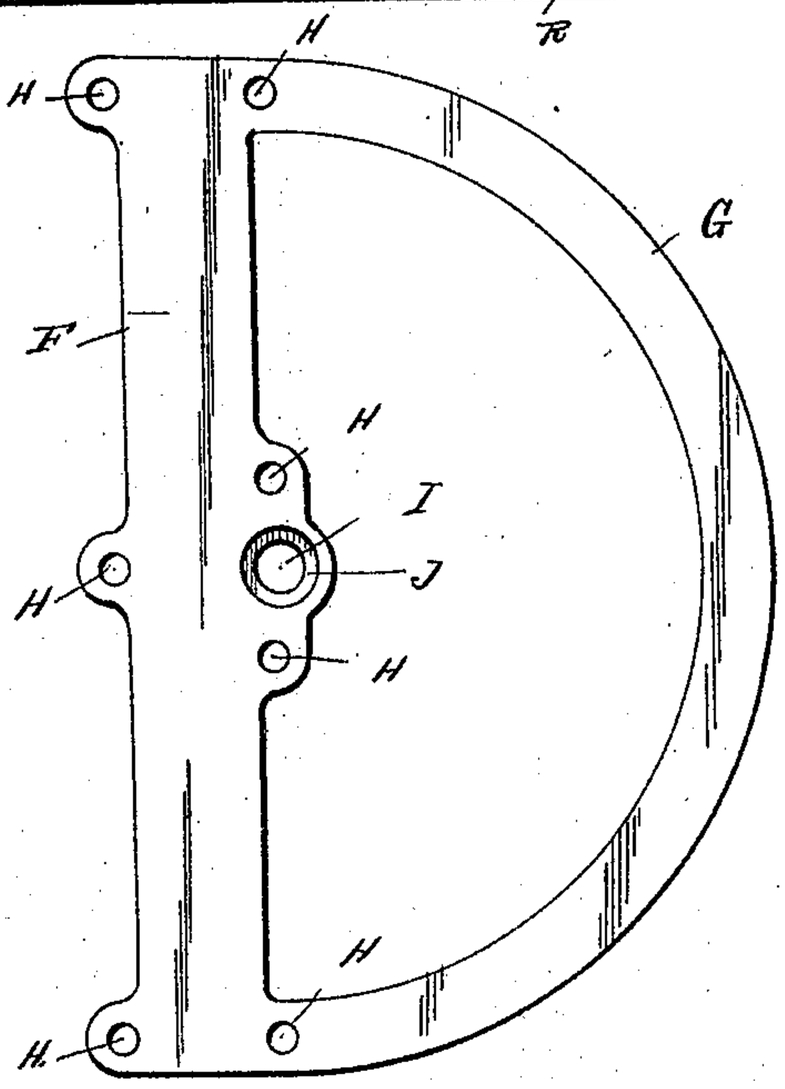


FIG. 3.



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LESTER E. HICKOK, OF MECHANICSBURG, PENNSYLVANIA.

VEHICLE-GEAR.

No. 814,845. Specification of Letters Patent. Patented March 13, 1906.

Application filed June 7, 1905. Serial No. 264,094.

To all whom it may concern:

Be it known that I, LESTER E. HICKOK, a citizen of the United States, residing at Mechanicsburg, in the county of Cumberland and State of Pennsylvania, have invented new and useful Improvements in Vehicle-Gear, of which the following is a specification.

My invention relates to vehicle-gears, and has for its main object the provision of means for detachably uniting the fifth-wheel plate to the axle and axle-bed in such a way that the parts may easily and quickly be assembled and taken apart and at the same time effect a very secure and rigid union of the elements.

A further object is the reduction of the first cost of the gear and the expense attending repairs.

With these main ends in view the invention consists in certain novelties of construction and combinations of parts hereinafter described, and specifically pointed out in the claim.

The accompanying drawings illustrate the best mode of the physical embodiments of my invention which I have so far devised.

Figure 1 is a front view in elevation of an axle, axle-bed, fifth-wheel plate, head-block plate, head-block, and the clip-bolts which unite the fifth-wheel plate to the axle and axle-bed. Fig. 2 is a cross-section of Fig. 1, taken on the line of the king-bolt. Fig. 3 is a top plan view of the fifth-wheel plate and circle. Fig. 4 shows the axle-yoke. Fig. 5 is a bottom view of the head-block plate and a portion of the continuous reach-iron.

Referring to the several figures, the letter A designates the axle; B, the axle-bed; C, the axle-yoke; D, holes in the yoke to receive the lower threaded ends of the clip-bolts; E, the hole for the king-bolt; F, the fifth-wheel plate; G, the fifth-wheel circle; H, the threaded holes in the plate; I, the hole for the king-bolt; J, the recess to receive the boss on the head-block plate; K, the clip-bolts each having a flat central portion and threaded ends; L, yokes with holes; M, the head-block plate; N, holes for screws or bolts; O, the hole for the king-bolt; P, a boss which is seated within the recess J of the fifth-wheel plate; Q, the head-block; R, the reach iron or strap integral with the head-block plate; S, the brace; T, the brace-head; U, a recess at the end of the brace to receive the fifth-wheel circle; V, bolts passed through the end of the brace, reach iron or strap, and the reach; W, the king-bolt, and X the reach.

At the front edge of the fifth-wheel plate are projecting lugs with threaded holes therethrough for the reception of the upper threaded ends of the clip-bolts. The clip-bolts employed at the rear of the axle and axle-bed and which engage the yokes L L and the rear holes D D in the axle-yoke C are identical in construction with those shown in Fig. 1, as is evident. The lower ends of two of these bolts are shown in Fig. 1, where they are designated by K K.

In assembling the parts the clip-bolts are screwed into the threaded holes H and when fully seated have their plain sides facing each other. Should the upper ends of bolts K project above the top surface of plate F, they must be filed off, so as to prevent any obstruction to the movement of the fifth-wheel plate relative to the head-block plate. The axle-bed and axle are next placed between the two rows of clip-bolts, and finally the yokes L L and C are adjusted over the bolt ends and the nuts applied. By this improved method of securing the fifth-wheel plate, axle-bed, and axle together the first cost is less than by the old method of using clips and far superior to the use of headed bolts, as the latter form a loose connection with the plate, whereas by the use of the threaded upper end of the clip-bolt and the threaded seat a very secure and rigid connection is secured.

It is obvious that repairs will be greatly facilitated, as a broken clip-bolt can easily be removed and a new one substituted.

In the practical application of my improvements slight changes may be introduced without constituting substantial departures.

What I claim is—

The combination in a vehicle-gear, of an integral fifth-wheel plate and circle, said plate and circle being provided with two par-

allel rows of threaded holes extending entirely therethrough; perforated axle-yokes; an axle and axle-bed; and clip-bolts threaded at each end, the upper ends screwed into the threaded holes in the plate and circle, and the lower ends passed through the perforations in the yokes and secured by nuts.

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

LESTER E. HICKOK.

Witnesses:
JOHN L. ROBINSON,
ALPHEUS N. LANTZ.