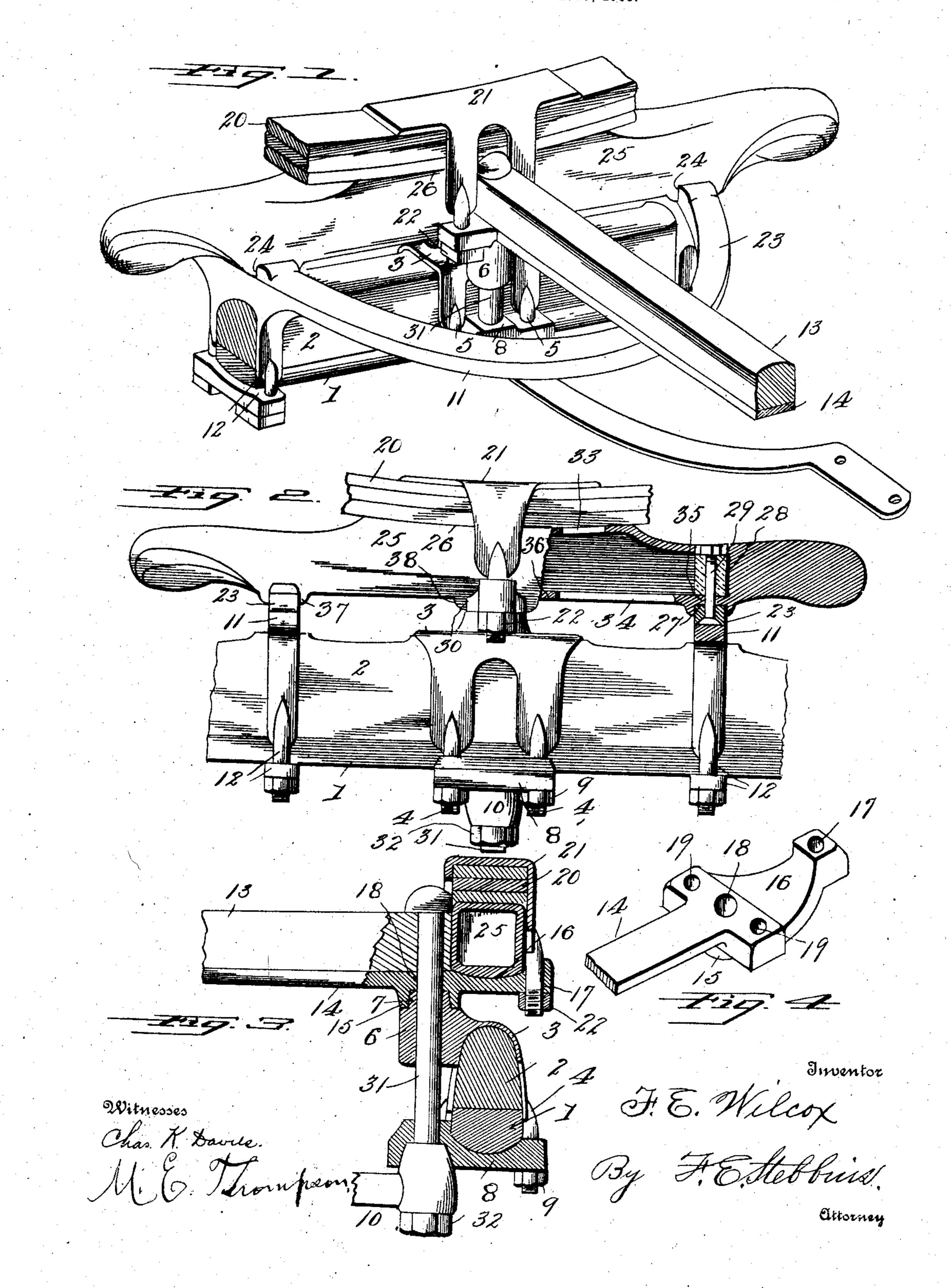
F. E. WILCOX.

VEHICLE GEAR.

APPLICATION FILED FEB. 23, 1906.



## UNITED STATES PATENT OFFICE.

## FRANK E. WILCOX, OF MECHANICSBURG, PENNSYLVANIA.

## VEHICLE-GEAR.

No. 834,957.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed February 23, 1906. Serial No. 302,479.

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 5 and State of Pennsylvania, have invented new and useful Improvements in Vehicle-Gears, of which the following is a specification.

The object of my invention is to simplify 10 the ordinary vehicle-gear, wherein a separate metallic head-block plate and wooden head-block are used, by substituting for the said plate and block a cored-out malleable iron or steel element which shall be adapted 15 to perform the functions of the plate and head-block and which, moreover, shall be of light weight, of ample strength, and not more costly than the two elements usually employed.

With this end in view my invention consists in a metallic head-block, cored out to secure lightness of weight, provided at the top surface with a concave seat for a spring, seats at the lower surface and adjacent the 25 ends for the reception of the ends of the upper fifth-wheel member, and a seat at the lower surface and at the center for receiving the

end of a single reach-iron.

It further consists in certain novelties of 30 construction and combinations of parts hereinafter set forth and claimed.

Figure 1 is a perspective view of the gear with the parts assembled. Fig. 2 is a front view of the gear in elevation, part of the 35 metallic head-block being in vertical section. Fig. 3 is a vertical section on a line with the king-bolt. Fig. 4 shows the end of the reach-iron.

Referring to the several figures, the nu-40 meral 1 designates the axle; 2, the axle-bed; 3, a four-pronged king-bolt axle-clip; 4, the threaded front prongs of the clip; 5, the threaded rear prongs; 6, a perforated lug integral with and at the rear of the clip; 7, a 45 tapering projection at the top of the lug to engage a seat in the lower surface of the reach-iron; 8, the clip-yoke having five holes therethrough, four for the prongs of the clip and one for the king-bolt; 9, nuts upon the 50 prongs; 10, a brace and brace-head; 11, the lower circle of the fifth-wheel; 12, the clips and yokes by which the lower circle is secured to the axle and bed; 13, the reach; 14, the reach-iron; 15, a seat in the iron to re-55 ceive the projecting part 7 of the axle-clip with which it interlocks; 16, a concave seat

for the head-block; 17, a hole at the extreme end to receive the prong of a clip; 18, a hole for the passage of the king-bolt; 19, two holes to receive the prongs of a clip; 20, 60 the springs; 21, a three-pronged clip embracing the springs and metallic head-block and with its prongs passed through the holes in the end of the reach-iron; 22, nuts upon the threaded ends of the prongs; 23, the upper 65 fifth-wheel circle or member; 24, seats adjacent the ends of the circle; 25, the cored metallic head-block; 26, a concave seat for a spring at the upper surface of the head-block; 27, seats at the lower surface and adjacent 7° the ends to receive the ends of the upper fifth-wheel circle with which ends the headblock interlocks; 28, a block of yielding material, as wood, seated in the metallic head-block and perforated to receive a bolt; 75 29, a bolt uniting the head-block and the upper fifth-wheel member, which latter has a hole therethrough for the passage of the bolt, the head being countersunk, as shown; 30, a seat at the lower surface of the metallic 80 head-block for the reception of the end of the reach-iron, with which it interlocks; 31, the headed king-bolt passed through the reach, reach-iron, lug of the four-pronged clip, the axle-yoke, and the brace-head, and 32 is the 85 nut on the end of the king-bolt.

It will be observed that with the construction shown no head-block plate is necessary, as the lower part of the metallic head-block performs the function of such a plate. The 90 head-block may be fashioned to any desirable shape in outline and be provided with strengthening-ribs, though such ribs are not shown by the example illustrated. The top wall at the spring-seat and the bottom wall 95 have openings 33 and 34, and the number of these openings and their disposition may be arranged and varied at the will of the manufacturer. However, the webs 35 and 36 should be present where the ends of the upper 100 fifth-wheel member and the reach-iron interlock with the head-block. Projections 37 and 38 each side of the seats should also be provided to take the strains of the interlocking parts which otherwise would be imparted 105

to the bolts.

What I claim is— 1. A hollow metallic head-block for a vehicle-gear provided with a seat at its lower surface and midway of its ends for the recep- 110 tion of the end of a reach-iron.

2. A hollow metallic head-block for a vehi-

cle-gear provided with three seats at its lower surface for the end of the reach-iron and the ends of the upper fifth-wheel member.

3. A hollow metallic head-block for a vehi-5 cle-gear provided with a concave seat for a spring at its upper surface and with a seat at its lower surface midway of the ends for the end of a reach-iron.

4. The combination with a hollow metallic head-block having a seat at its lower surface midway of the end, of a perforated reach-iron interlocking with said seat, a spring, and a clip.

5. The combination with a hollow metallic head-block having a seat at its lower surface, of a perforated reach-iron interlocking with

said seat, a spring, a clip, an axle-clip with a

perforated lug, and a king-bolt.

6. The combination with a hollow metallic head-block having three seats at its lower 20 surface, of a reach-iron, the upper member of a fifth-wheel, a spring, a clip, and means for securing the ends of the fifth-wheel member to the head-block; said reach-iron and the ends of the fifth-wheel interlocking with 25 the head-block.

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

FRANK E. WILCOX.

Witnesses:

F. R. PECKMAN,

J. F. Bricker.