(No Model.)

P. COOL.

CAR WHEEL AND AXLE.

No. 344,768. Patented June 29, 1886.

Fig. 1.

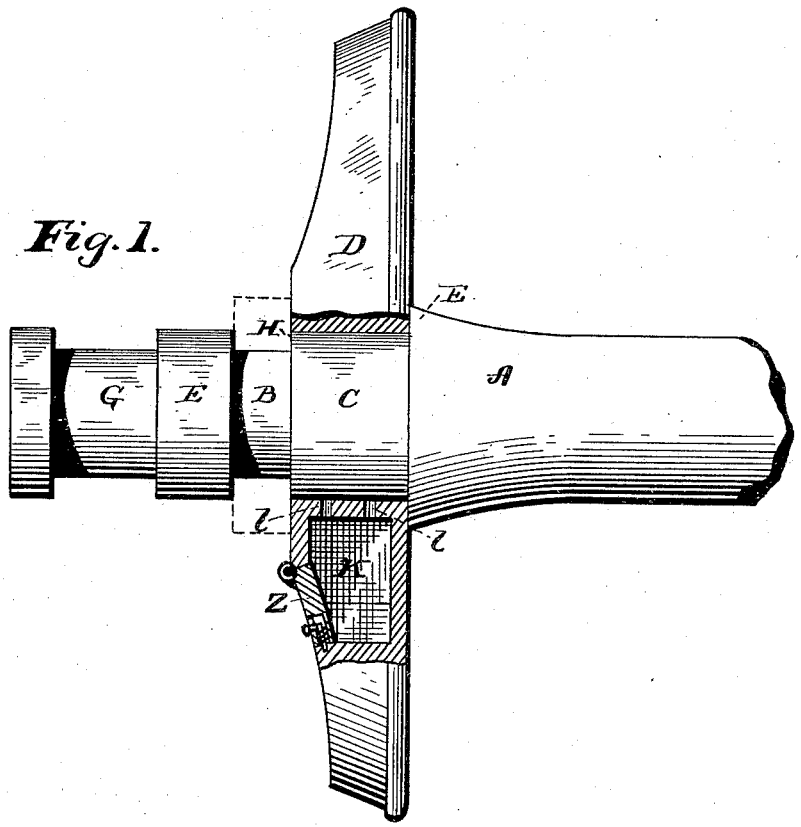
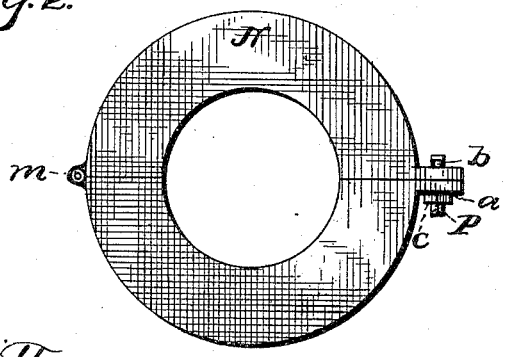


Fig. 2.



WITNESSES

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CAR WHEEL AND AXLE.

SPECIFICATION forming part of Letters Patent No. 344,768, dated June 29, 1886.

Application filed October 24, 1885. Serial No. 180,857. (No model.)

To all whom it may concern:

Be it known that I, PETER COOL, a citizen of the United States, residing at Manhattan, in the county of Riley and State of Kansas, have invented certain new and useful Improvements in Car Wheels and Axles; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a front view, partly in section. Fig. 2 is a detail view of the hinged collar.

This invention has relation to car wheels and axles, and has for its object to facilitate the movements of the wheels in turning curves.

The invention consists in the construction and novel arrangement of parts, all as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, A designates a car-axle, which may have one of its wheels rigidly secured upon it in the ordinary manner.

The end portion of the axle is formed with a channel-bearing, B, which is next to the journal C. A collar, E, is formed between the channel-bearing B and the outer bearing, G, which is designed to receive the box.

The wheel D is provided with a central open bearing at H, which is seated on the journal portion C of the axle, on which it is designed to turn freely. In the body of the wheel, near the bearing H, are formed one or more chambers, K, which are designed to hold oil or grease for lubricating the journal and bearing. This chamber is formed with one or more perforations, *l*, which extend through the wall of the bearing H, to allow the oil to pass to the journal.

Z is the door of the oil-chamber.

N represents a hinged collar, of metal, which is made of proper width to fit in the channel-bearing B. Its branches are hinged together at *m*, and at the ends of these branches are provided with flanges which approximate when the collar is placed around the axle in the channel-bearing, and are secured together by a bolt, P, which passes through perforations *a* in said flanges. A safety-key, *b*, is usually employed to secure one end of the bolt, the other end being held by a nut, *e*. The thickness of the hinged collar is greater than the depth of the channel-bearing, so that when the wheel is put in position and the collar is applied to the channel-bearing it will keep the wheel in place on the journal.

Instead of forming the shoulder E on the axle, the channel-bearing may be made next to the journal on the inside, and a collar-bearing similar to that hereinbefore described may be placed in position in said channel.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with a car-wheel having a central bearing, of the car-axle having a journal portion, C, collar E, and intermediate channel-bearing, B, and hinged fastening-collar adapted to be applied in the channel-bearing next to said wheel, substantially as specified.

2. The combination, with a car-wheel having a central bearing, of a car-axle having a journal for the wheel, a channel-bearing next to said journal, a collar next to said channel, a channel next to said collar-bearing, and an outer collar-bearing for the boxing, substantially as specified.

3. The combination, with a car-wheel and with a car-axle having a channel-bearing next the journal, of a hinged collar having sufficient thickness to project out of the channel-bearing to hold the wheel in place, substantially as specified.

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

PETER COOL.

Witnesses:
D. HUNGERFORD,
E. J. COOL.