

UNITED STATES PATENT OFFICE.

FERDINAND GABLER, OF TOPEKA, KANSAS.

CENTER-WHEEL CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 609,093, dated August 16, 1898.

Application filed December 13, 1897. Serial No. 661,669. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND GABLER, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Center-Wheel Car-Brakes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The object of the present invention is to provide a car-brake of simple construction and effective in operation and in which the brake-shoe is adapted to operate upon the periphery of a brake wheel or disk which is located upon the usual axle between the car-wheels; and it consists in the details of construction, substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a central sectional elevation of a car-truck, showing my improved brake mechanism connected thereto; Fig. 2, an under plan view thereof. Figs. 3 and 4 are detail views of the two sections of brake wheel or disk, respectively.

In the accompanying drawings, A B represent the two axles of a car-truck, provided with the usual wheels C, the side bars D and cross-bars D' constituting a part of the usual truck-frame and may be of any well-known construction.

The brake wheel or disk comprises two segmental sections E F, which have portions *a a'* overlapping each other upon opposite sides, the overlapping sections abutting against shoulders *b*, as shown in Fig. 2 of the drawings, thus forming when together a wheel or disk of uniform thickness around its periphery.

Each section of the wheel or disk upon its opposite sides has a section of hub, as shown at *c*, which is preferably of square shape, and when the two sections are fitted together upon the axle of the truck they are secured together by suitable bolts *d*, which pass through the hub-sections, or any other preferred and well-known means may be used in place of the bolts.

To prevent the brake wheel or disk from turning upon the axle when the brake is in

operation, the hub of said wheel or disk may be provided with a slot whereby said hub may be keyed to the axle, or any other suitable means may be provided for the above purpose.

The brake-shoe G is fitted in a head H, which may be of any desirable construction, and is held in position by a hanger I, suspended from a bracket *e* upon the truck-frame.

The brake-head H has suitably connected thereto a brake-lever J, held in position by means of a pin *f*, or any other preferred means may be employed for forming a connection between the lever and head. These levers I, which are used in the two brake mechanisms, are connected together at their lower ends by a rod *g*, suitably pivoted to the ends of the levers.

The levers J are of such proportions as to secure an equal pressure upon both of the brake wheels or disks when the power is applied. The upper end of the short lever J is held in position by means of a bracket or arm *h* and may be adjustably connected thereto. The upper end of the long lever J is connected to the usual cylinder-lever by means of a rod K.

Rods *i*, projecting from the brake-head H, prevent the brake-shoe from moving laterally off the wheel or disk when the power is applied to the brake.

In constructing the brake wheels or disks in section it may be conveniently connected to any axle without the necessity of removing the car-wheels, and by using these wheels or disks it takes all wear from the car-wheels and prevents wear thereon, as would be the case were the brake-shoes applied direct upon the same. It will be seen that each section of the brake wheel or disk with its section of hub is formed of one and the same piece of material, and if of metal it is cast all in one piece, there being only two pieces to form the complete brake wheel or disk with its hub.

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

1. A brake wheel or disk comprising the two segmental sections E F, each section having the reduced portions *a a'* upon the opposite sides thereof and diametrically opposite

each other, each of the reduced portions of one section adapted to overlap those of the other section and abutting against the shoulders *b*, each section having integrally formed therewith and upon opposite sides a section of hub so that when the sections are together a complete hub will be formed upon opposite sides of the brake wheel or disk to encircle the axle, and suitable fastening-bolts extending through both the hub-sections upon opposite sides of the wheel or disk to fasten the sections together, substantially as and for the purpose set forth.

2. A car-brake consisting of brake wheels or disks upon the opposite axles of a truck between the car-wheels, brake-shoes for en-

gaging with the brake wheels or disks, brake-heads connecting with the shoes and provided with rods upon its sides to retain the shoes on line with the periphery of the brake wheels or disks, hangers and operating-levers connecting with the brake-heads, said levers being connected by a rod at their lower ends and adapted to operate substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FERDINAND GABLER.

Witnesses:

ALBERT COPLEY,

JAMES W. MORGAN.