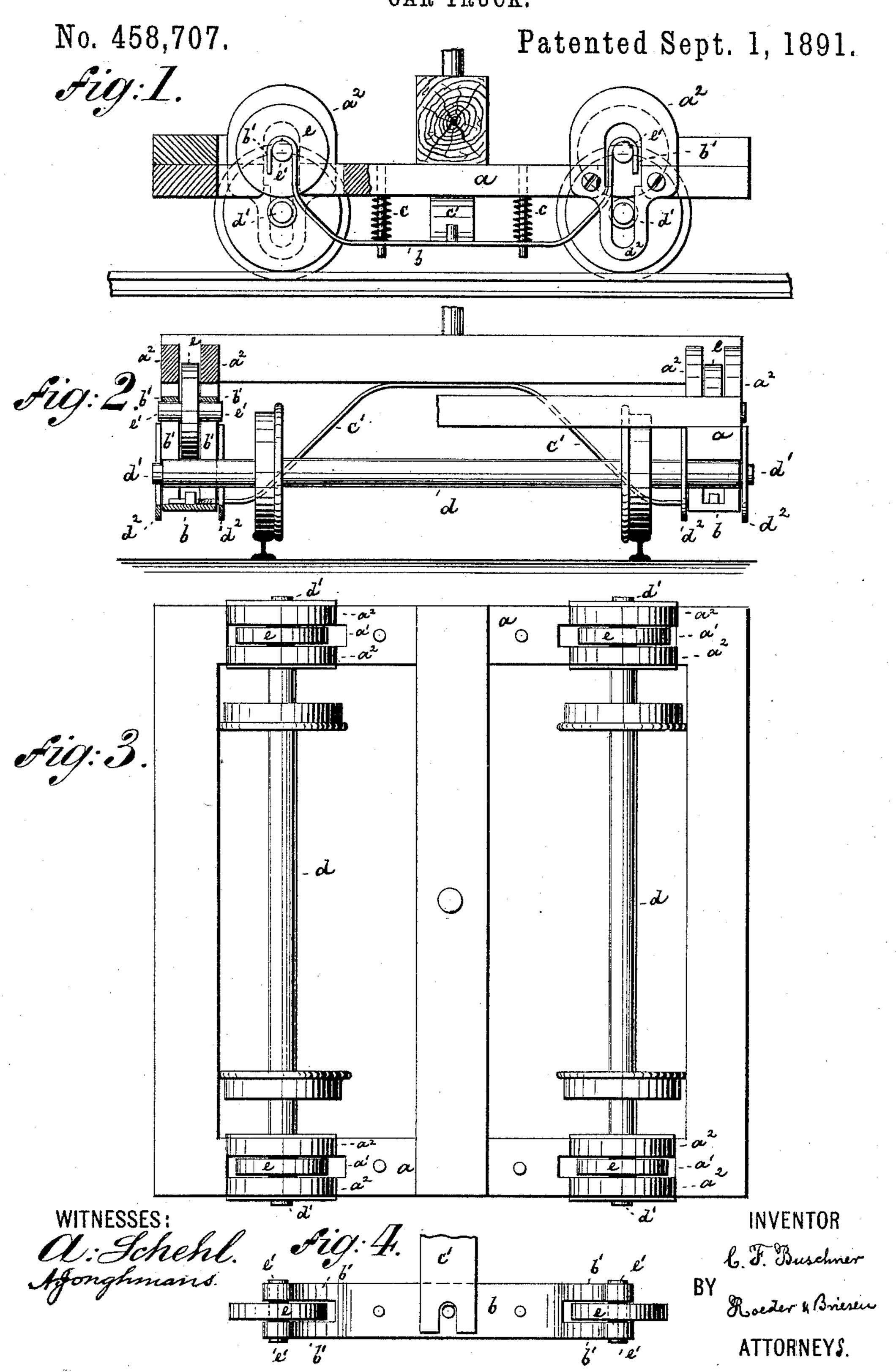
C. F. BUSCHNER. CAR TRUCK.



United States Patent Office.

CARL F. BUSCHNER, OF NEW YORK, N. Y.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 458,707, dated September 1, 1891.

Application filed April 10, 1891. Serial No. 388,359. (No model.)

To all whom it may concern:

Be it known that I, CARL F. BUSCHNER, of New York city, New York, have invented an Improved Car-Truck, of which the following 5 is a specification.

This invention relates to a car-truck provided with an anti-friction bearing of simple construction.

It consists in the various features of improvement, more fully pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view, partly in section, of my improved car-truck. Fig. 2 is a front view, partly in section, of the same; Fig. 3, a top view of the truck, and Fig. 4 a top view of the equalizing-bar b.

The letters a a represent the longitudinal timbers of the truck-frame, and b b are the equalizing-bars.

 $c\ c$ are the interposed spiral or gum springs, and c' an additional semi-elliptic spring.

d represents the axles ending in journals d', that are received by the slotted hangers d^2 . Above the journals d' the timbers a are slotted, as at a', and to the right and left of the slot the timbers are provided with an upwardly-projecting semicircular cheek a^2 .

Within the slot a' and between the cheeks 30 a^2 there is placed an anti-friction disk or wheel e, against which the journal d' bears

directly. The disk e is provided with journals e', which are engaged by the hook-shaped ends b' of the equalizing-bars b. These ends b' are slotted, Fig. 4, and are bent first up- 35 ward and then downward, Fig. 1, so as to straddle or embrace the disks e to form the bearings for the journals e'.

In use the revolution of the axles d will cause the journals d' to slowly revolve the 40 disks e between the cheeks a^2 . The journals e' of these disks revolve in the hook-shaped ends of the equalizing-bars b, and thus a simple and effective bearing is provided.

What I claim is—
1. The combination of slotted timbers a, with equalizing-bars b, having slotted ends b', anti-friction disks e, embraced by and turning in said ends, and axle-journals d', engaging said disks, substantially as specified.

2. The combination of slotted timbers a, having upwardly-projecting cheeks a^2 , with equalizing-bars b, having slotted hook-shaped ends b', anti-friction disks e, having journals e', that turn in such ends, and with axle-journals d', that engage disks e, substantially as specified.

CARL F. BUSCHNER.

- Witnesses:

F. v. Briesen, A. Jonghmans.