No. 682,716. Patented Sept. 17, 1901.

P. M. KLING.

CAR TRUCK.

(Application filed Feb. 13, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. I.

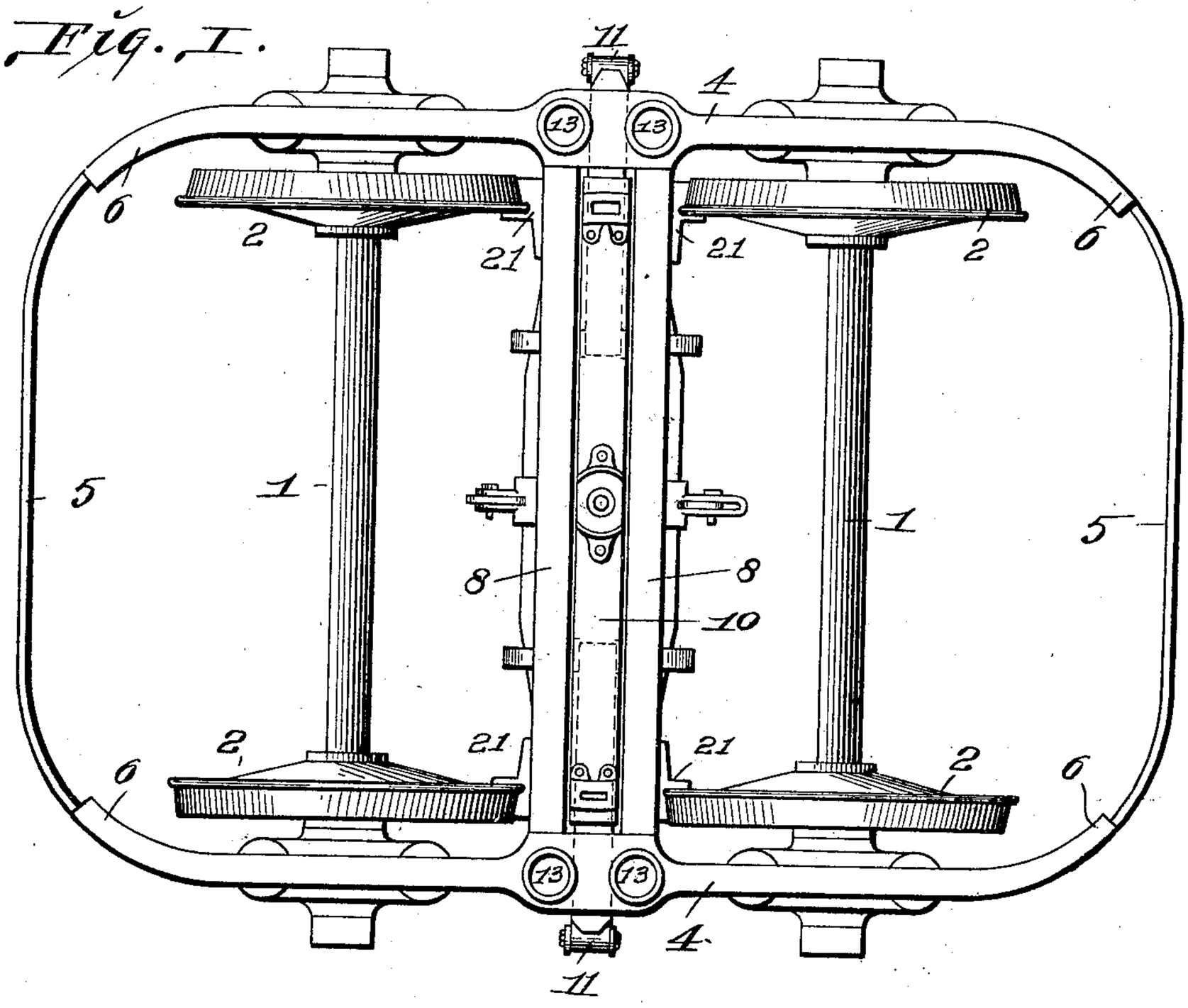

Fig. II.

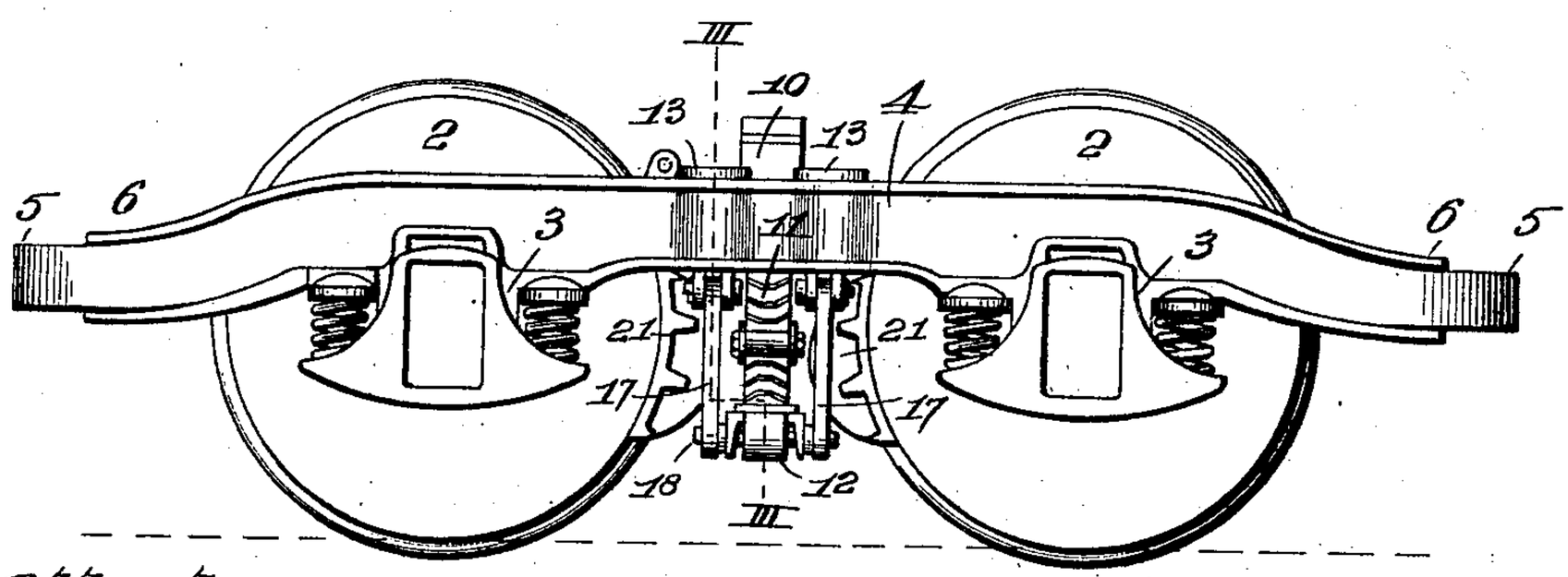

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Fig. III.

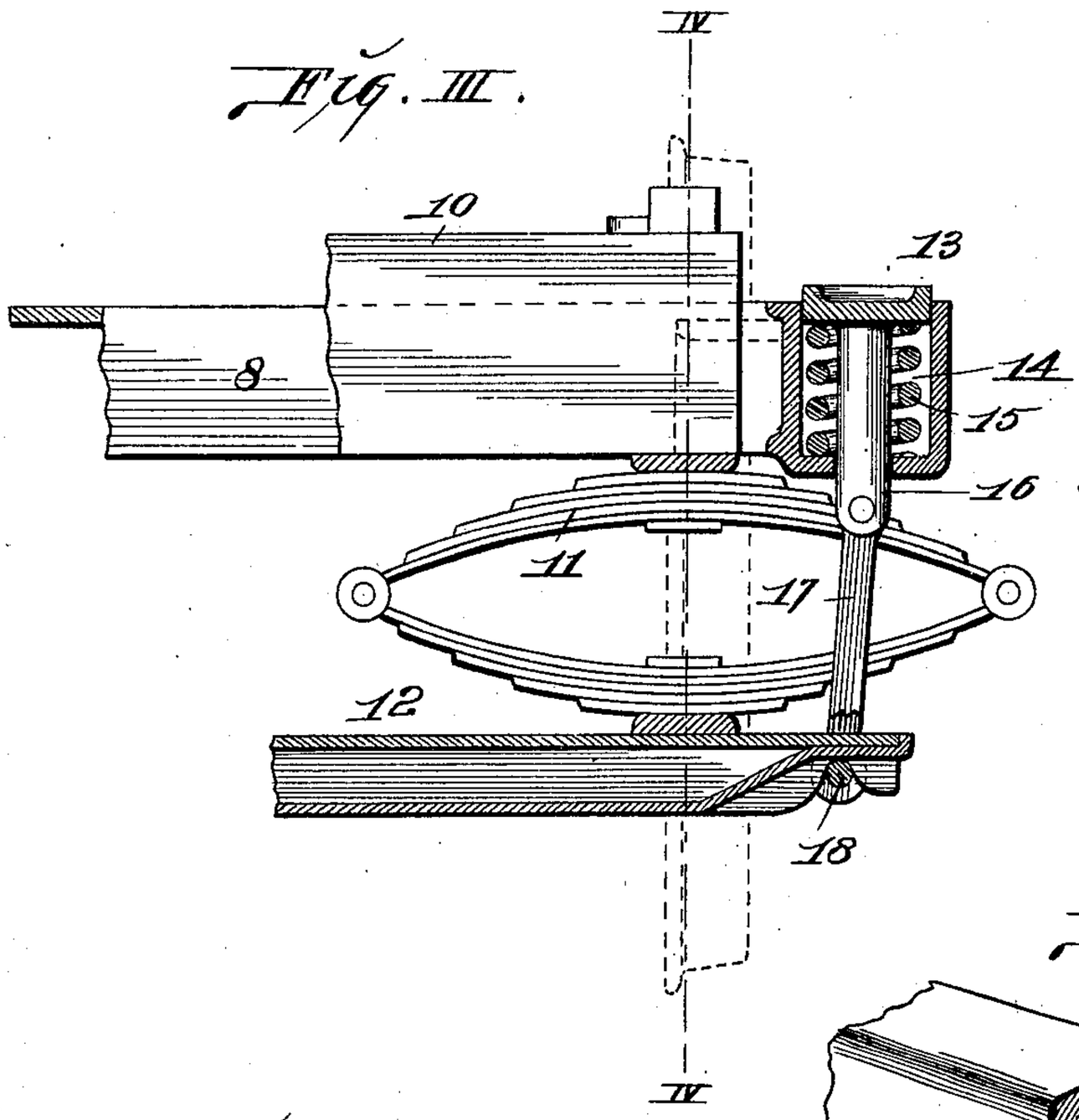


Fig. V.

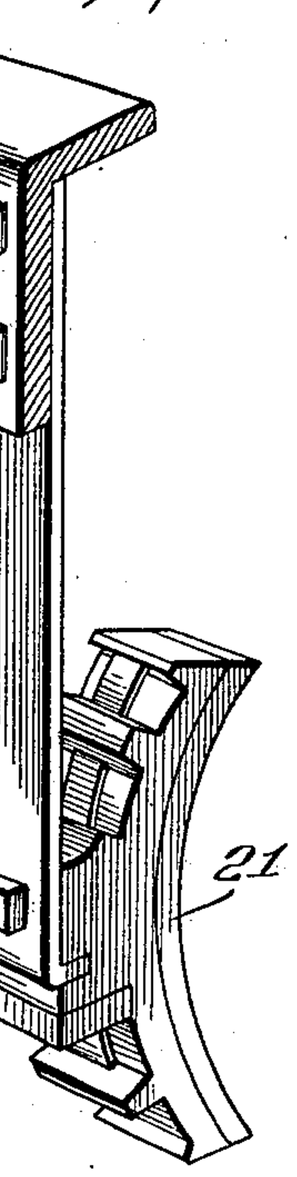
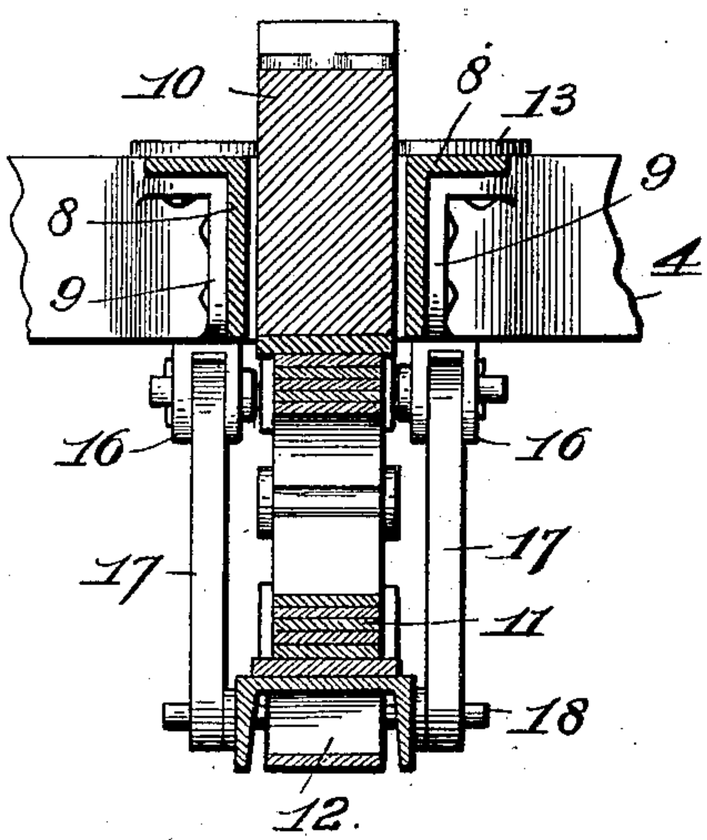


Fig. IV.



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UNITED STATES PATENT OFFICE.

PETER M. KLING, OF ELIZABETH, NEW JERSEY.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 682,716, dated September 17, 1901.

Application filed February 13, 1901. Serial No. 47,107. (No model.)

To all whom it may concern:

Be it known that I, PETER M. KLING, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Car-Trucks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My present invention relates to certain improvements in car-trucks intended more particularly for street-car use.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a top or plan view of my improved truck. Fig. II is a side view. Fig. III is an enlarged detail vertical section taken on line III III, Fig. II. Fig. IV is a vertical transverse section taken on line IV IV, Fig. III. Fig. V is a detail perspective view illustrating the brake-shoe holders.

Referring to the drawings, 1 represents the axles of the truck, 2 the track-wheels, and 3 the axle-box pedestals. The truck frame consists of a single casting composed of sides 4 and ends 5, joined by rounded corners 6. The axle-box pedestals are formed integral with the sides 4 of the truck-frame. By forming the frame in one integral casting and making the junctions between the sides and ends of the frame inwardly curved, as shown, the width of the frame considered as a whole is reduced, thus avoiding liability of its interfering with the steps and other attachments of the car. The sides of the truck-frame are connected together centrally by means of L-shaped metal bars 8, bolted or riveted to ears or lugs 9, cast on the inner faces of the sides 4, as shown in Fig. IV. The bars 8 are spaced sufficiently far apart to receive the truck-bolster 10, as shown in Fig. I, and the bars act to hold the bolster from lateral displacement. The bolster rests upon elliptical springs 11, supported by a beam 12, that is suspended from the sides 4 of the truck-frame by means of plungers 13, fitting in sockets 14 in the sides 4 and resting upon coil-springs 15, that fit in the sockets. The plungers have downwardly-projecting stems 16, that extend beneath the sides of the truck-frame and to which stirrups are pivoted, consisting of links 17, the lower ends of the links being connected by rods 18, that fit in notches formed in the under side of the beam 12, as shown in Fig. III. There is a pair of plungers 13 and stirrups 17 on each side of the truck, and the plungers, with their stirrups and rods 18, thus act to support the bolster through the medium of the springs 11 and beam 12, the construction providing a simple and effective means for carrying the bolster.

20 represents the brake-beam, and 21 the brake-shoes. These are supported from the bars 8 by means of flat metallic spring-plates 22, bolted rigidly to the bars 8 at 23 and to the brake-shoes at 24. The plates normally hold the shoes away from the wheels while permitting the shoes to be forced against the wheels, and by the use of such plates rigidly connected to the bars and to the brake-shoes there is no wear between parts as there is in the ordinary means for supporting brake-shoes and their beam by means of rods or bars pivoted to their support and to the brake-shoes or their beam.

I claim as my invention—

1. In a car-truck, the combination of a truck-frame the sides of which are formed with sockets, spring-supported plungers located in said sockets, stirrups pivoted to the stems of the plungers, a beam supported by said stirrup, springs resting on said beam, and a bolster carried by said springs, substantially as set forth.

2. In a car-truck, the combination of a truck-frame, the sides of which are formed with sockets, spring-supported plungers located in said sockets, stirrups pivoted to the stems of said plungers, a beam supported by said stirrups, springs carried by said beam, a bolster resting on said springs, and bars secured to the sides of said frame and between which said bolster is located, substantially as set forth.

3. In a car-truck, the combination of a frame, plungers carried by the frame, springs interposed between the plungers and the frame, stirrups pivoted to the plungers, a beam supported by said stirrups, springs resting on said beam, a bolster resting on said

springs, and bars secured to said frame and between which said bolster fits, substantially as described.

4. In a car-truck, the combination of a frame the sides of which are provided with sockets, springs located in said sockets, plungers fitting in said sockets and provided with stems which extend beneath said frame, stirrups pivoted to the stems of the plungers, a beam supported by said stirrup, springs carried by said beam, a bolster resting on said springs, and L-shaped bars secured to the sides of said frame and between which said bolster fits, substantially as described.

PETER M. KLING.

In presence of—
JAMES MAGUIRE,
CHAS. S. LIPPINCOTT.