

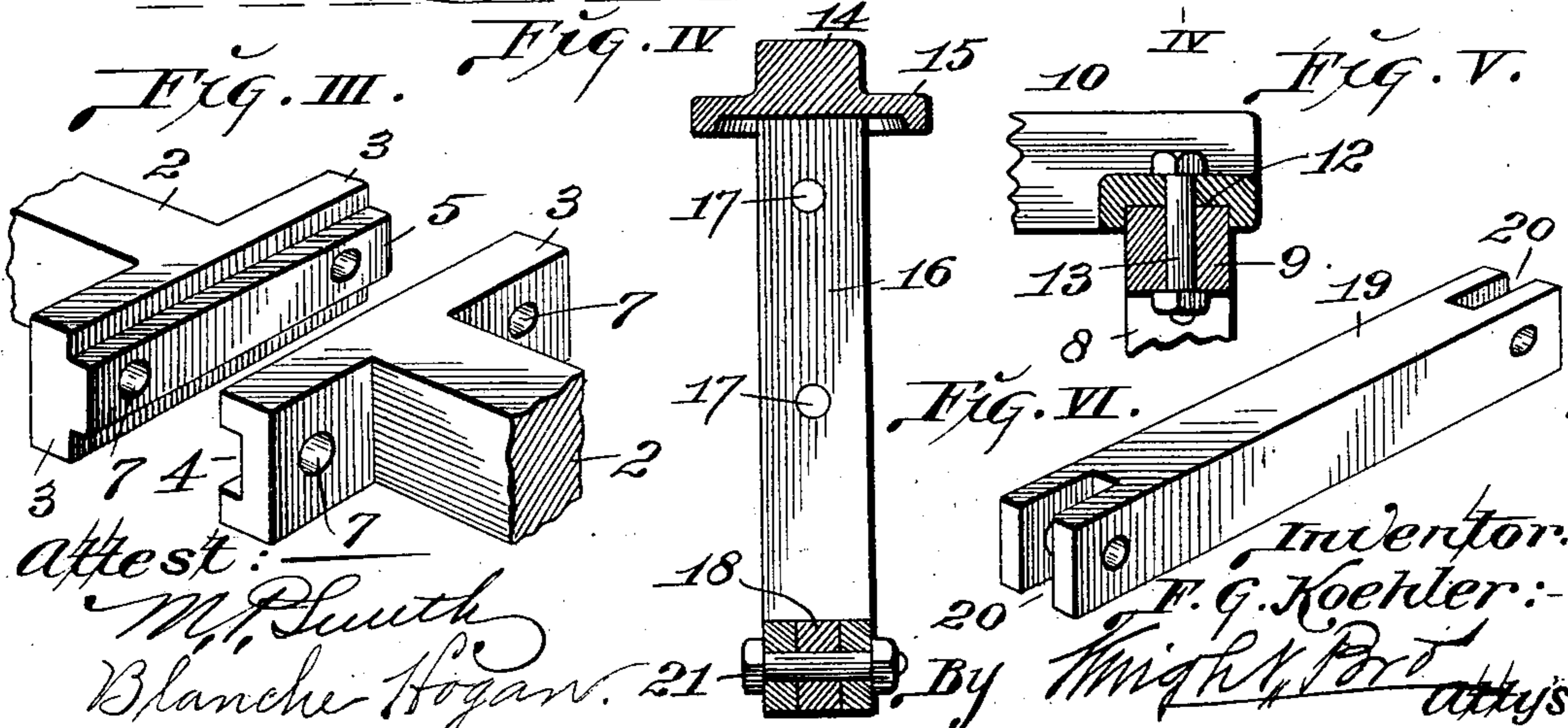
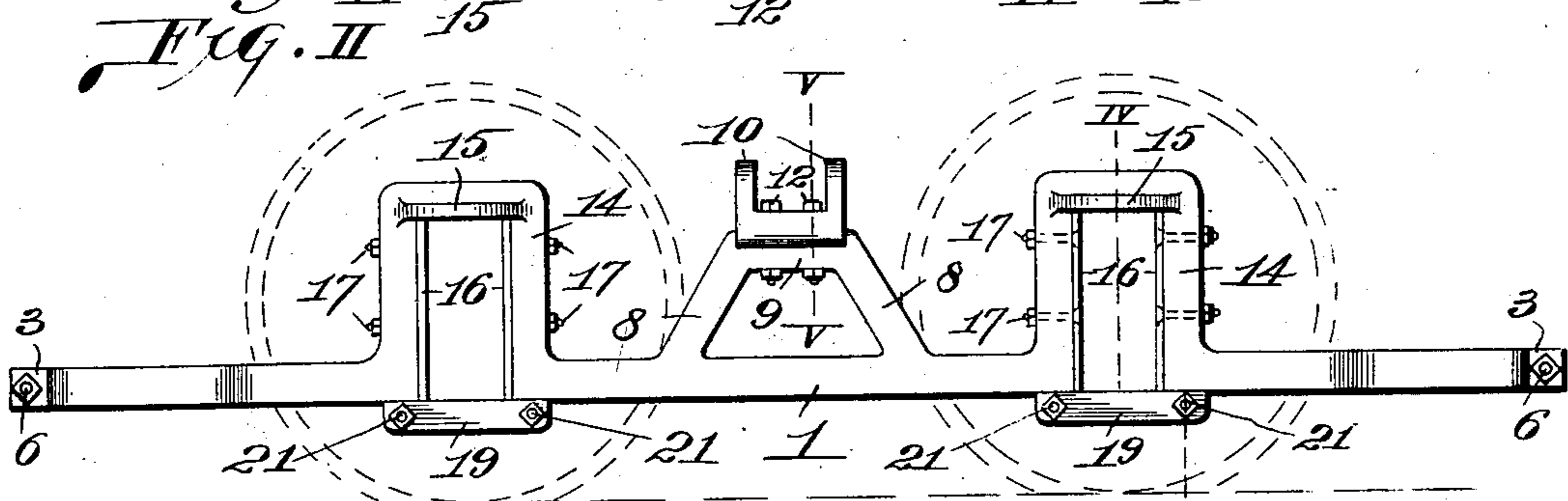
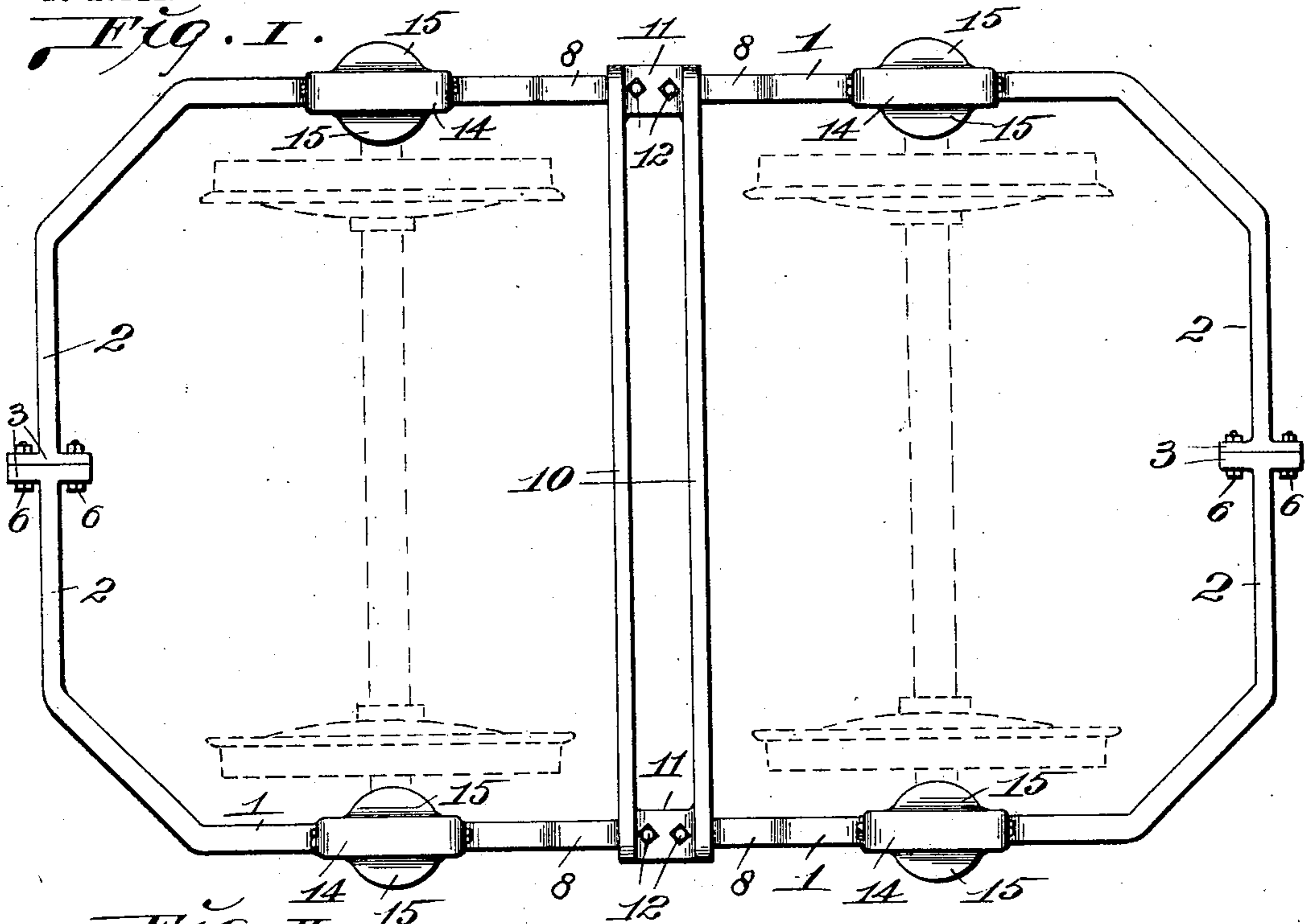
No. 755,887.

PATENTED MAR. 29, 1904.

F. G. KOEHLER.  
CAR TRUCK.

APPLICATION FILED OCT. 5, 1903.

NO MODEL.



# UNITED STATES PATENT OFFICE.

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## CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 755,887, dated March 29, 1904.

Application filed October 5, 1903. Serial No. 175,719. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK G. KOEHLER, a citizen of the United States, residing in the city of St. Louis, and State of Missouri, 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 invention relates to certain improvements in car-trucks of that class intended particularly for street-car use.

The object of my invention is to produce a light strong car-truck of a minimum number of parts and so constructed as that the strain upon the bolts connecting the various parts of the truck is reduced to a minimum.

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

Figure I is a plan view of a truck of my improved construction. Fig. II is a side elevation of the truck. Fig. III is a detail perspective showing the meeting ends of the two parts of the truck-frame. Fig. IV is an enlarged vertical section taken approximately on line IV IV, Fig. II. Fig. V is an enlarged detail section taken approximately on line V V, Fig. II. Fig. VI is a perspective view of a strut made use of below the pedestals.

In the construction of my improved truck I make use of a pair of side frames which are metallic bars rectangular in cross-section and alike in form and size, said bars being provided with integral end pieces 2, which extend toward one another to be united on a line extending longitudinally through the center of the truck. The ends of these end pieces are provided with integral plates or ears 3, in one of each pair of which is formed a groove 4 to receive a rib 5 upon the opposite plate or ear 3. When the truck is assembled, the pairs of plates or ears 3 are fitted together, and bolts or rivets 6 are passed through transverse apertures 7, formed in said plates or ears, and thus rigidly lock the two parts of the frame together. Formed integral with the top of the center of each side frame is a pair of upwardly-extending arms 8, the upper ends of which are joined by an integral cross-bar 9, these

bars 8 and 9 forming a support for the transom of the frame. This transom comprises a pair of transversely-extending parallel bars 10, the under sides of the ends of which are joined by the integral plates 11, which are recessed, as indicated by 12, in their lower faces to fit over the tops of the bars 9. Bolts 13 pass through coinciding bolt-holes formed in the plates 11 and the bars 9, thus rigidly uniting the transom with the side frames of the truck. Formed integral with each side frame 1 at points approximately half-way between the transom-supporting bars 8 and the end pieces 2 of the frame are the pedestals 14, which are of inverted-U shape and provided at the top of the pedestal-jaws with the integral spring-seats 15. The inner face of each pedestal-horn is lined with a wear-plate 16, which is held in place by bolts 17, having countersunk heads. Formed integral with each side frame 1 immediately below each pedestal-horn is a lug 18, and immediately below each pedestal is arranged a strut 19, having its ends bifurcated, as indicated by 20, to engage the lugs just mentioned. Bolts 21 pass through coinciding apertures formed in the lugs and ends of the struts in order to rigidly secure said struts in position. By recessing the under sides of the plates 11 and dovetailing the plates 3 together it will be noted that the strain upon the bolts passing through these various parts is reduced to a minimum.

A truck of my improved construction is virtually a three-pieced truck, is easily assembled or taken apart, and requires very little machine-work. The truck is very light, strong, and durable and is especially applicable for street-car service.

I claim as my invention—

1. In a car-truck, a pair of side frames, and end pieces integral with said side frames; which end pieces are joined on a line through the longitudinal center of the truck, substantially as specified.

2. In a car-truck, a pair of side frames, end pieces integral with said side frames, plates integral with the meeting ends of said end pieces, and means whereby said plates are united, substantially as specified.

3. In a car-truck a pair of side frames, end

pieces integral with said side frames, means whereby the meeting ends of said end pieces are united, and a transom rigidly secured at its ends to said side frames, substantially as specified. 5

4. In a car-truck, a pair of side frames, end pieces integral with said side frames, means whereby the meeting ends of said end pieces are united, and pedestals integral with said side frames, substantially as specified. 10

5. In a car-truck, a pair of side frames, end pieces integral with said side frames, means whereby the meeting ends of said end pieces are united, pedestals integral with said side frames, and a transom secured at its ends to the centers of the side frames, substantially as specified. 15

6. In a car-truck, a pair of side frames, end pieces integral with said side frames, means whereby the meeting ends of said end pieces are united, pedestals integral with said side frames, and struts rigidly secured beneath the pedestals, substantially as specified. 20

7. In a car-truck, a pair of side frames, end pieces integral with said side frames, means whereby the ends of said end pieces are united, 25

pedestals integral with said side frames, struts rigidly secured beneath the pedestals, and a transom secured at its ends to the side frames, substantially as specified. 30

8. In a car-truck, a pair of side frames, end pieces integral with said side frames, means whereby the meeting ends of said end pieces are united, transom-supports extending upwardly from the centers of said side frames, and a transom having its ends rigidly secured to said transom-supports, substantially as specified. 35

9. In a car-truck, a pair of mating side frames, end pieces integral with said side frames, means whereby the meeting ends of said end pieces are united, pedestals integral with said side frames, struts rigidly secured beneath said pedestals, transom-supports integral extending upwardly from the centers of the side frames, and a transom having its ends rigidly secured to said transom-supports, substantially as specified. 40 45

FRANK G. KOEHLER.

In presence of—

E. S. KNIGHT,

BLANCHE HOGAN.