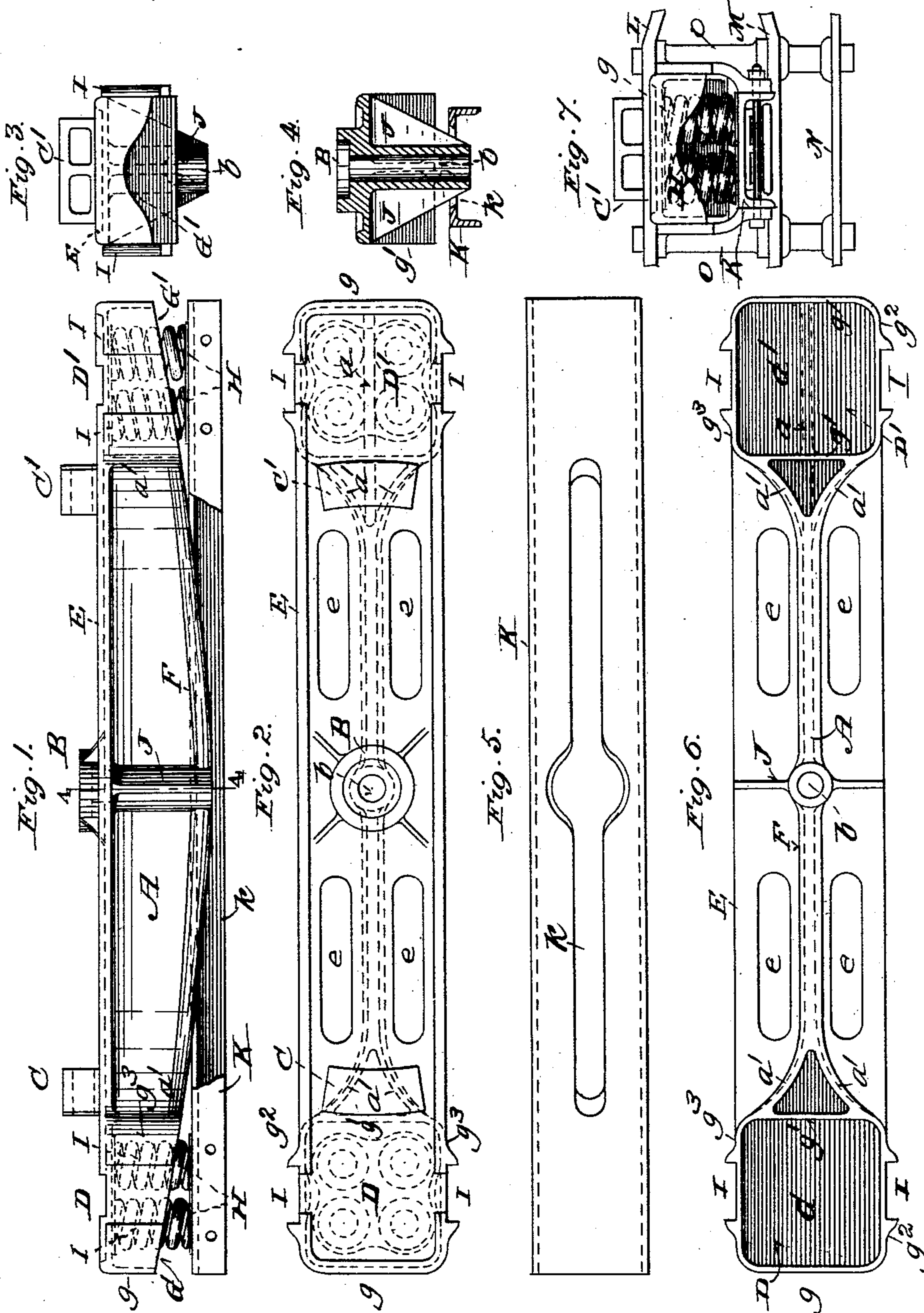


(No Model.)

E. F. GOLTRA.
CAR TRUCK BOLSTER.

No. 541,326.

Patented June 18, 1895.



WITNESSES
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EDWARD F. GOLTRA, OF ST. LOUIS, MISSOURI.

CAR-TRUCK BOLSTER.

SPECIFICATION forming part of Letters Patent No. 541,326, dated June 18, 1895.

Application filed August 23, 1893. Serial No. 483,821. (No model.)

To all whom it may concern:

Be it known that I, EDWARD F. GOLTRA, of St. Louis, Missouri, have made a new and useful Improvement in Car-Truck Bolsters, of which the following is a full, clear, and exact description.

In the annexed drawings, Figure 1 is a side elevation of the improved bolster, including the spring-plank, a portion of which is broken away; Fig. 2, a plan of the same; Fig. 3, an end elevation of the bolster; Fig. 4, a vertical cross-section on the line 4 4 of Fig. 1; Fig. 5, a plan of the spring-plank; Fig. 6, a bottom view of the bolster; Fig. 7, an end elevation of the bolster in position.

The same letters of reference denote the same parts.

The body of the improved bolster consists substantially of a single girder, A, carrying a center bearing B, side-bearings C, C', and spring seats D, D'. The girder is perforated suitably at *b* to receive the usual king-bolt. The girder, at one or more points in its height, is suitably stiffened against lateral strains by means of a laterally-extended flange or flanges, and the uppermost flange may be, and preferably is, suitably widened, or constructed, to aid in supporting the described bearings, and such flanging preferably takes the form of the top E, which is arranged at the top of the girder and in width is uniform with that of the spring-seats, substantially as shown. At its lower edge the girder may be stiffened by means of the flange F, substantially as shown.

The improvement is more fully carried out when chambers G, G', are formed at the ends respectively of the bolster for receiving the upper portions of the bolster springs H, substantially as shown. The said chambers, in the present instance, are each formed by means of the flanges *g, g'*, in conjunction with the longitudinally extended flanges *g², g³*, all of which project from the top E, substantially as shown. Said last named flanges *g², g³*, serve also to support the column-guides I. The center and side bearings are of any suitable shape consistent with the nature of the improvement. The girder may be further stiffened by means of the brackets or corner pieces J, which connect the perforated portion of the girder with the top, substantially

as shown. The top, E, to lighten it, may have portions, *e*, removed therefrom. The girder may extend only to the spring chambers, as indicated in the left-hand portion of Fig. 2, and shown in the left-hand portion of Figs. 1 and 6, or it may be extended through the spring chambers as indicated by the broken lines, *a*, in the right-hand portion of Figs. 2 and 6.

The girder, while it may otherwise be extended to connect with the spring chambers, is preferably forked or branched at each end thereof, substantially as shown at *a', a'*.

All of the enumerated parts of the bolster are preferably united in the form of an integral casting.

The present form of bolster is desirable in that it can be made of any desired strength but with less weight than has hitherto been required in bolsters of the class under consideration. The bolster is also well adapted for inspection and repair, and its cost is less than that of similar bolsters. The bearings are also favorably sustained by being directly over the girder. It is well understood in car-building that the level of the draw-bar is fixed, and that the level of the spring-plank cannot well be lower. The present improvement enables the space between the limits referred to to be more thoroughly utilized than hitherto has been practicable. I accomplish this as follows: Without altering the level of the center bearing necessarily, the girder is extended downward, or is capable of being extended downward, to a level lower than hitherto has been the practice, and to provide for such extension the spring plank, K, is grooved, cut away, or slotted, substantially as shown at *k*, Figs. 1, 4 and 5. Such shaping of the spring plank is adapted to the shape and position of the lower portion of the bolster girder, and allowance is made for the vibration of the bolster in use.

In Fig. 7 the bolster is shown mounted in position. L represents the arch-bar, M the inverted arch-bar, and N the pedestal tie bar, and O the bolster columns.

The present bolster, from its cross sectional shape, may be styled a T-bolster, or perhaps an I-bolster, according as the flanges on the girder are arranged and widened.

I claim—

1. A car truck bolster having spring seats and having a single longitudinally extended girder flanged and carrying center and side bearings.
 - 5 2. A car truck bolster having spring seats and having a single longitudinally extended girder perforated centrally to receive the king bolt.
 - 10 3. A car truck bolster having spring seats and having a single longitudinally extended girder, flanged as described, and perforated centrally.
 - 15 4. A car truck bolster having spring seats and having a longitudinally extended girder flanged along its upper and lower edges, and provided with a center bearing and side bearings.
 - 20 5. A car truck bolster having spring seats and having a longitudinally extended girder flanged along its upper and lower edges, and provided with a center bearing and side bearings, and perforated centrally to receive the king bolt.
 6. A car truck bolster, having spring seats and having a longitudinally extended girder 25 provided with a center bearing and with an upper and a lower flange, the cross sectional area of the upper flange being at least equal to that of the lower.
 7. A car truck bolster, having spring seats 30 and having a longitudinally extended flanged girder provided with a center bearing and with stiffening brackets.
- In testimony whereof I affix my signature in presence of two witnesses.
- EDWARD F. GOLTRA.
- Witnesses:
C. D. MOODY,
J. J. S. HUSSE.