No. 875,527. PATENTED DEC. 31, 1907.

E. G. HINES.

WAGON BOLSTER.

APPLICATION FILED FEB. 27, 1907.

Fig. 1.

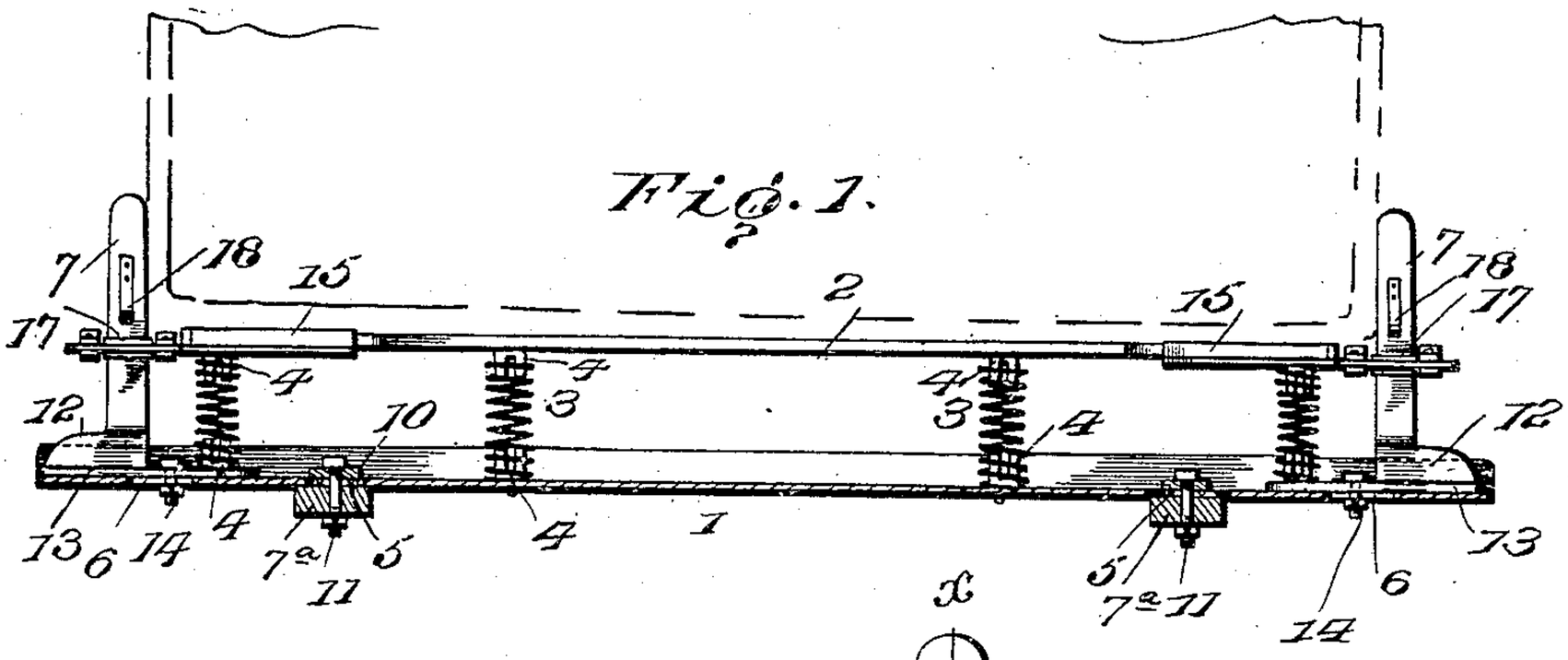


Fig. 2.

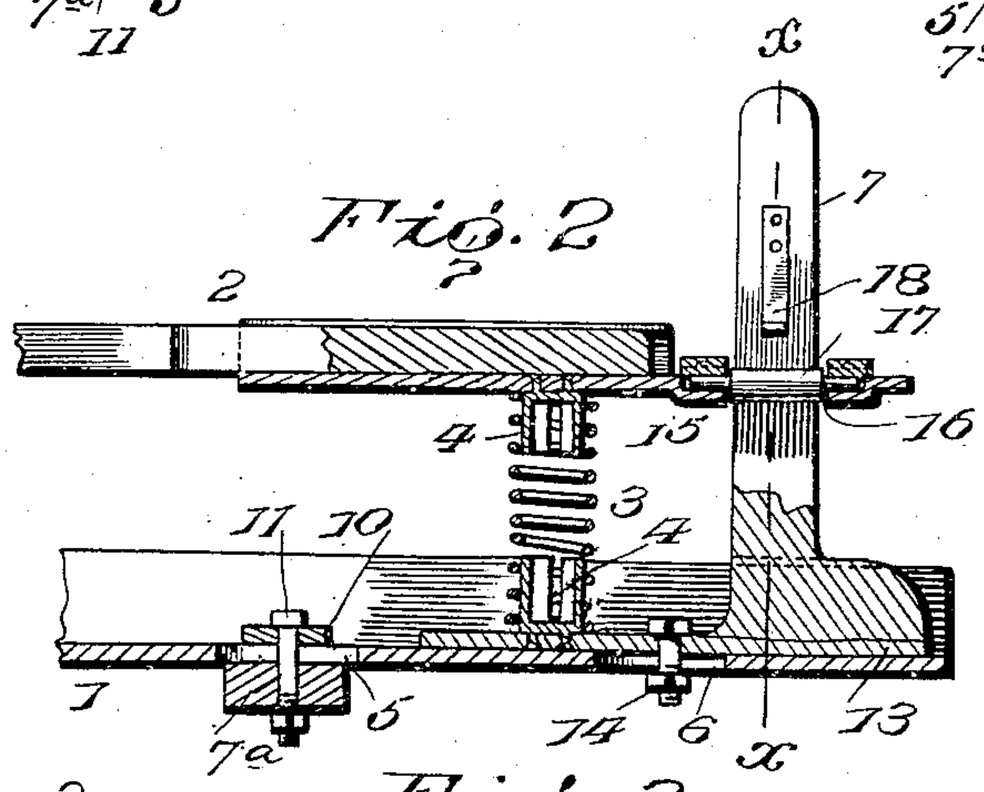


Fig. 6.

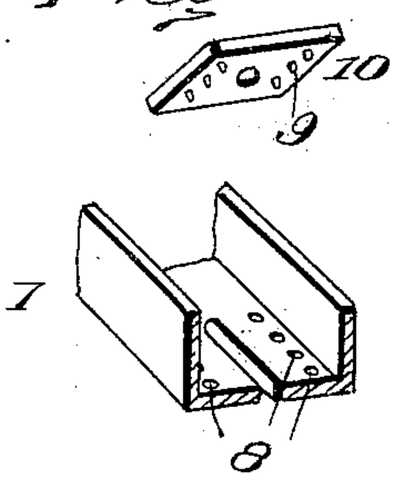


Fig. 3.

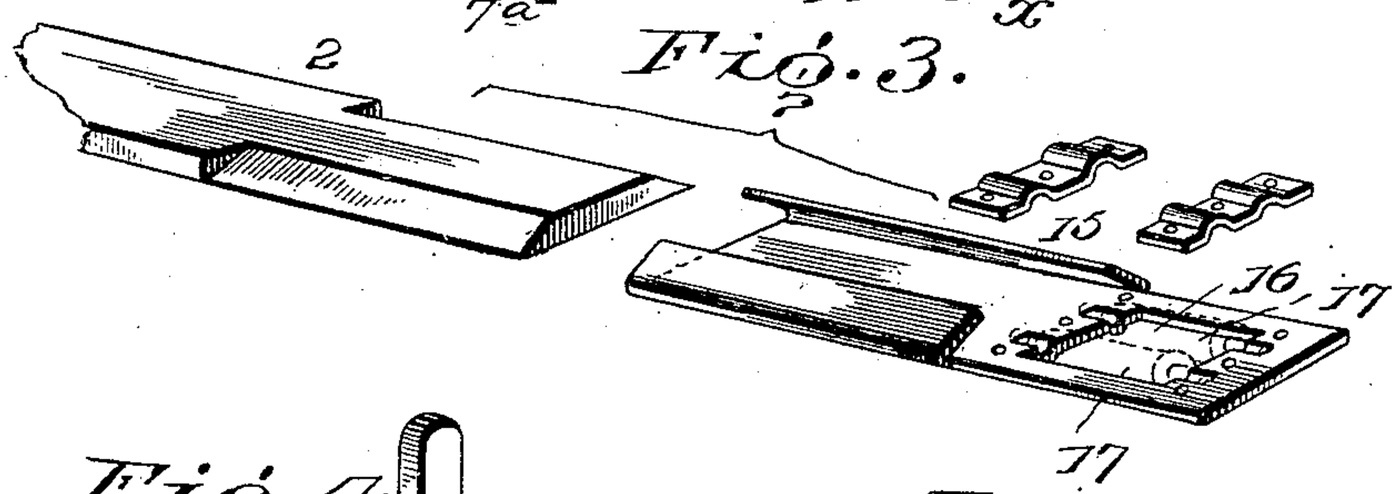


Fig. 4.

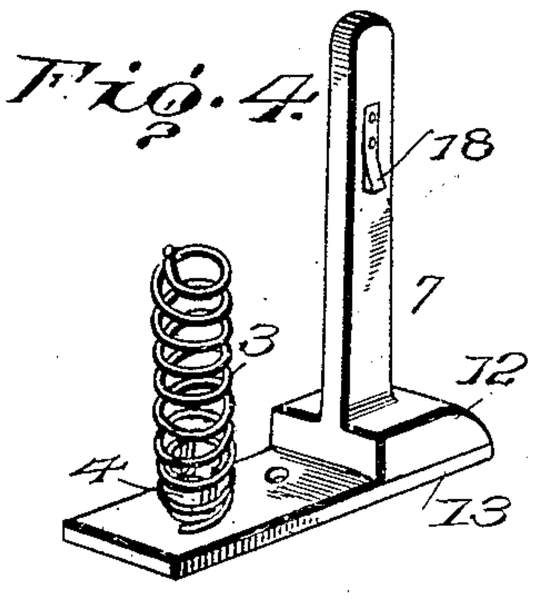
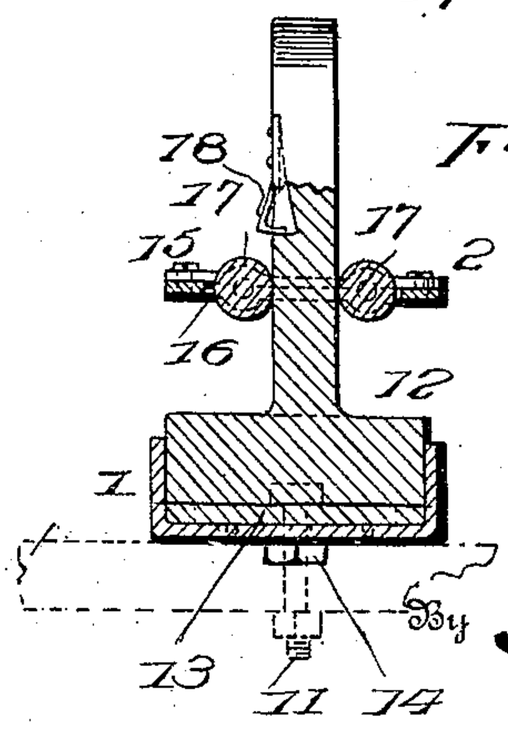


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

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WAGON-BOLSTER.

No. 875,527. Specification of Letters Patent. Patented Dec. 31, 1907.

Application filed February 27, 1907. Serial No. 359,561.

To all whom it may concern:

Be it known that I, EDWIN G. HINES, a citizen of the United States, residing at Drums, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Bolsters, of which the following is a specification.

This invention provides a novel form of bolster which may be readily adapted to vehicle bodies of different widths and which embody a yielding member to relieve the body or bed of the vehicle of shock and jolt incident to passing over rough roads.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment is shown in the accompanying drawings, in which:

Figure 1 is a front view of a bolster embodying the invention, a portion of the flange on the near side of the lower member being broken away. Fig. 2 is a longitudinal section of an end portion of the bolster showing the parts on a larger scale. Fig. 3 is a detail perspective view of an end portion of the upper bolster member having the extension detached. Fig. 4 is a detail perspective view of the stake. Fig. 5 is a transverse section on the line x—x of Fig. 2. Fig. 6 is a detail perspective view of a portion of the lower member and the plate coöperating therewith to prevent slipping of the bolt connecting the bolster with the member of the reach.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The bolster proper comprises a lower member 1 and an upper member 2, springs 3 being interposed between the two members to form a yielding support for the upper member to neutralize shock and prevent the same being transmitted to the vehicle body or bed. The upper member 2 consists of a bar or plate, whereas the lower member 1 is channeled and arranged with the channeled side uppermost. Sockets 4 are attached to the members 1 and 2 and fit within end portions of the springs 3, said sockets being expansible to insure positive connection with the springs. Slots are formed in the sides of the sockets to render them compressible, whereby they adapt themselves to the springs to compensate for variation in the evolutions thereof due to compression and expansion of said springs.

The lower member 1 is provided near each end with longitudinal slots 5 and 6, the latter providing for adjustable connection of the stakes 7 therewith and the slots 5 enabling the bolster to be adapted to running gear having the members 7^a of the reach spaced apart different distances. A series of holes or depressions 8 are provided in the member 1 along each side of the slots 5 and are adapted to receive tips 9 near the ends of plates 10 which are fitted within the channel or space of the member 1 between the longitudinal or side flanges thereof. The plates 10 are provided with openings through which bolts or fastenings 11 pass for connecting the bolster to the members 7^a of the reach.

The stake 7 is provided with a base 12 which is secured to a plate 13, the latter being of a width to snugly fit between the side flanges of the member 1. The inner end of the plate 13 receives a socket 4 and spring 3, which are adjustable with the stake so as to support the side portion of the vehicle body at a given distance from the stake. A bolt or fastening 14 serves to detachably connect the stake with the member 1 and is passed through the slot 6. All the springs 3 are of like length and tension and since the end springs are supported upon the plates 13, it will be understood that they project above the intermediate spring a distance corresponding to the thickness of the plate 13. When the vehicle body is empty the tension of the end springs of the bolster is such as to enable said springs solely to carry the weight of the body thereby rendering the vehicle more easy riding than if the body or bed were supported upon the series of springs 3.

The upper member 2 is provided at each end with an extension 15 the same being adjustable to adapt themselves to the relative positions of the stakes 7. The exten-

sions 15 are slidably connected with the end portions of the member 2 and are preferably held thereto by an approximately dovetail joint. The edge portions of the extensions 15 are flanged and the flanges are bent so as to embrace and extend over edge portions of the member 2 to prevent vertical movement or displacement of the extensions. An opening 16 is provided near the outer end of each extension 15 to receive a stake 7 and to reduce the frictional contact between the stake and the extension, rollers 17 are provided at opposite sides of the opening 16. The rollers 17 extend lengthwise of the bolster and are journaled in bearings formed in the extension 15 and in cap pieces bolted to the extensions. The vehicle body or bed tends to play in the direction of the length thereof, hence the advantage of placing the rollers 17 lengthwise of the bolster so as to sustain and relieve the friction between the sides of the stakes and the front and rear sides of the extensions bordering upon the openings 16. The catches 18 are applied to each stake 7 and serve to limit the upward movement of the movable member 2 of the bolster and thereby prevent its leaving the stakes under a severe jolt or rebound of the running gear, as when passing over a rough road or dropping into a rut, or a wheel of the vehicle passing over a stone or other obstruction.

Having thus described the invention, what is claimed as new is:

1. A bolster comprising upper and lower members normally held apart by spring pressure, stakes adjustable upon the end portions of the lower member, end extensions adjustably fitted to the end portions of the upper member and in engagement with the stakes and adapted to play thereon in the vertical movements of the said upper member and other springs interposed between the said end extensions and projecting portions of the stakes.

2. In a bolster comprising upper and lower members held separated by spring pressure, the combination of stakes having base extensions adjustably fitted to the end portions of the lower member, means for securing the stakes in an adjusted position, and extensions slidably fitted to the end portions of the upper member and embracing the stakes so as to move therewith when adjusting the stakes upon the lower member and adapted to play upon said stakes as said upper member moves vertically with the wagon body or bed.

3. In combination, a reach, a bolster having longitudinal slots in its bottom, plates fitted upon the bolster and extended over the slots thereof, interlocking means between said plates and bolster to hold the plates in an adjusted position, and vertical fastenings passed through the plates, the longitudinal slots of the bolster and openings in members of the said reach to secure all when properly assembled.

4. In a bolster comprising upper and lower members held apart by spring pressure, stakes adjustably connected to the end portions of the lower member, extensions fitted to the end portions of the upper member and comprising side flanges embracing edge portions of said upper member, said extensions having openings near their outer ends to receive the stakes, and rollers mounted upon the extensions to relieve frictional contact between them and the stakes.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN G. HINES. [L. S.]

Witnesses:
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