

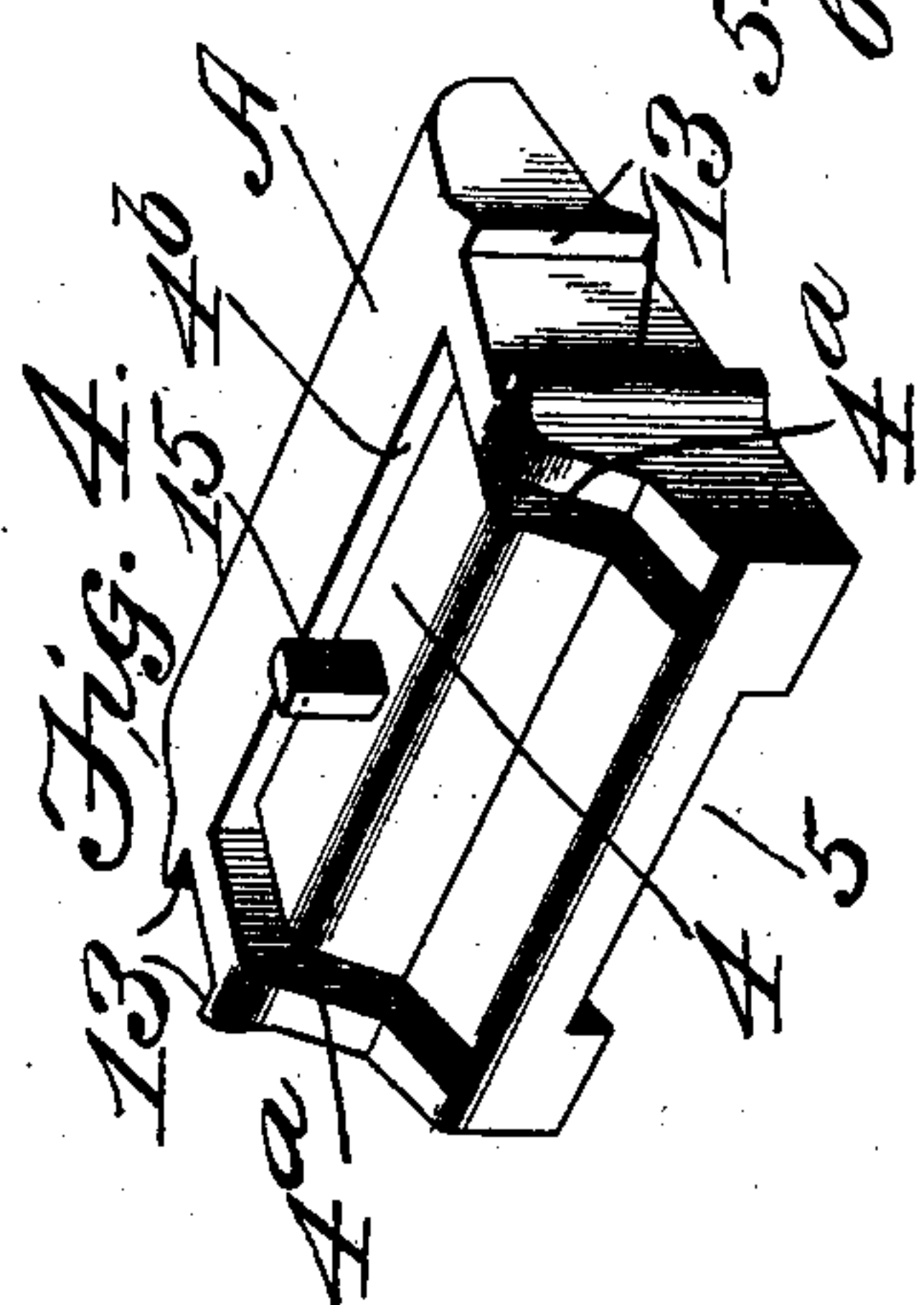
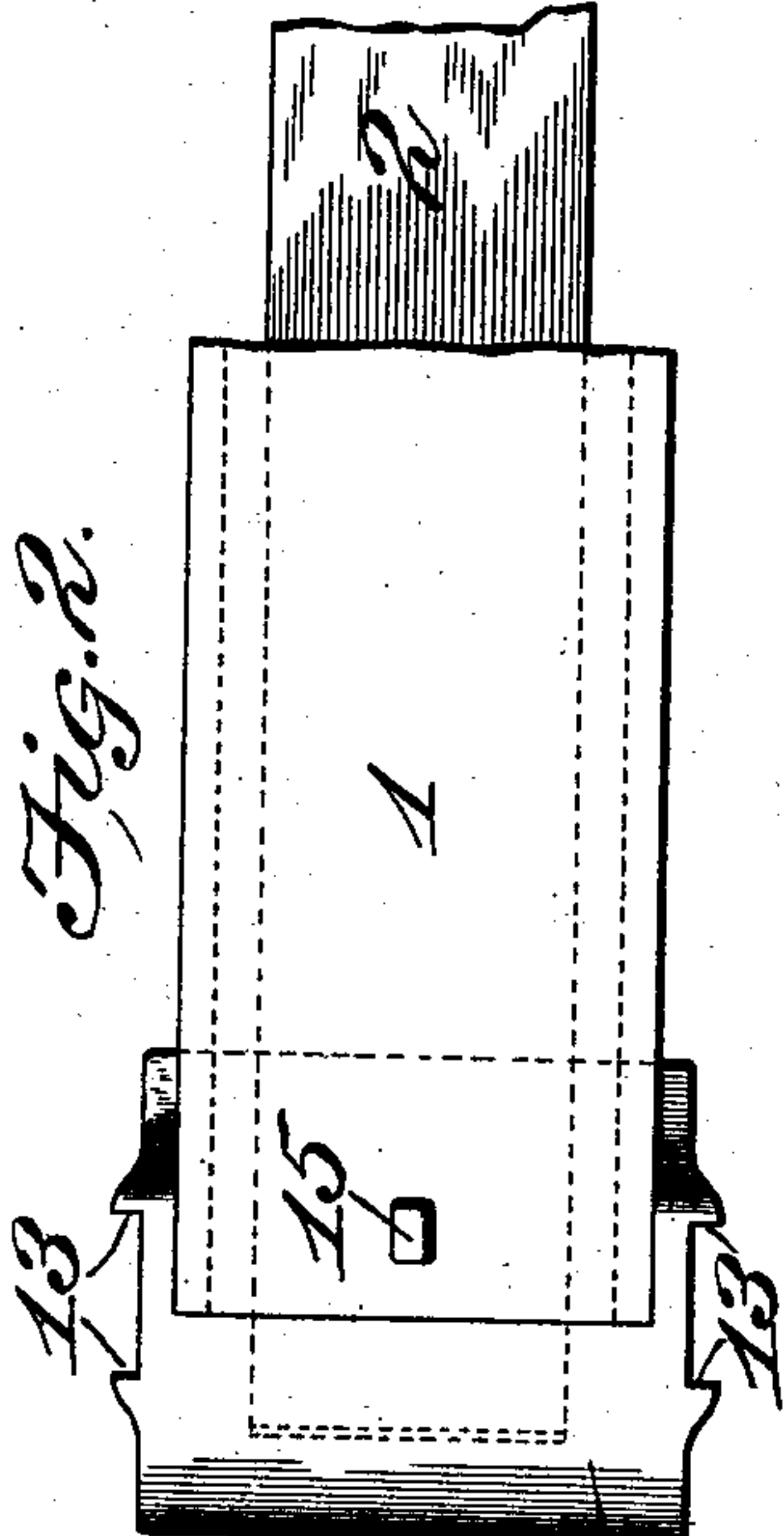
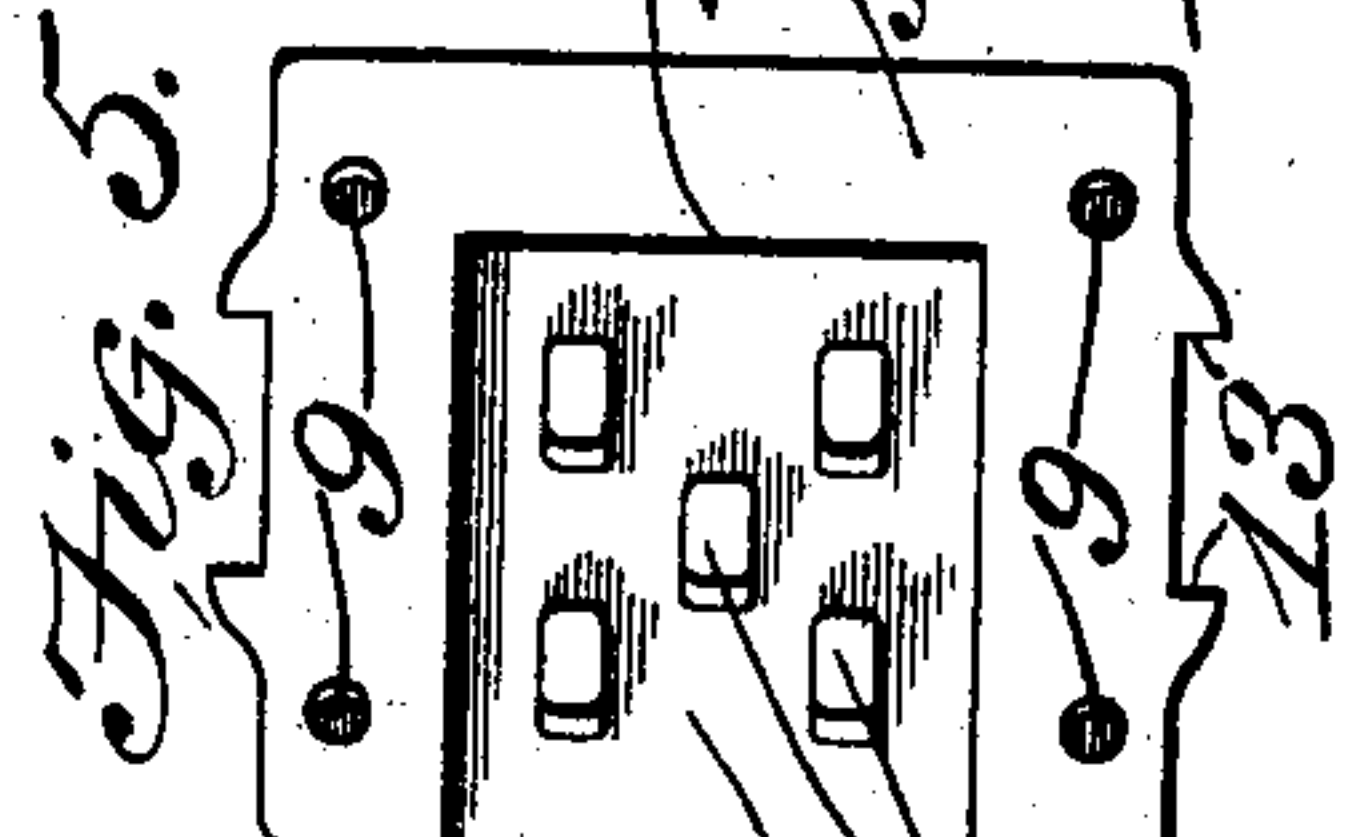
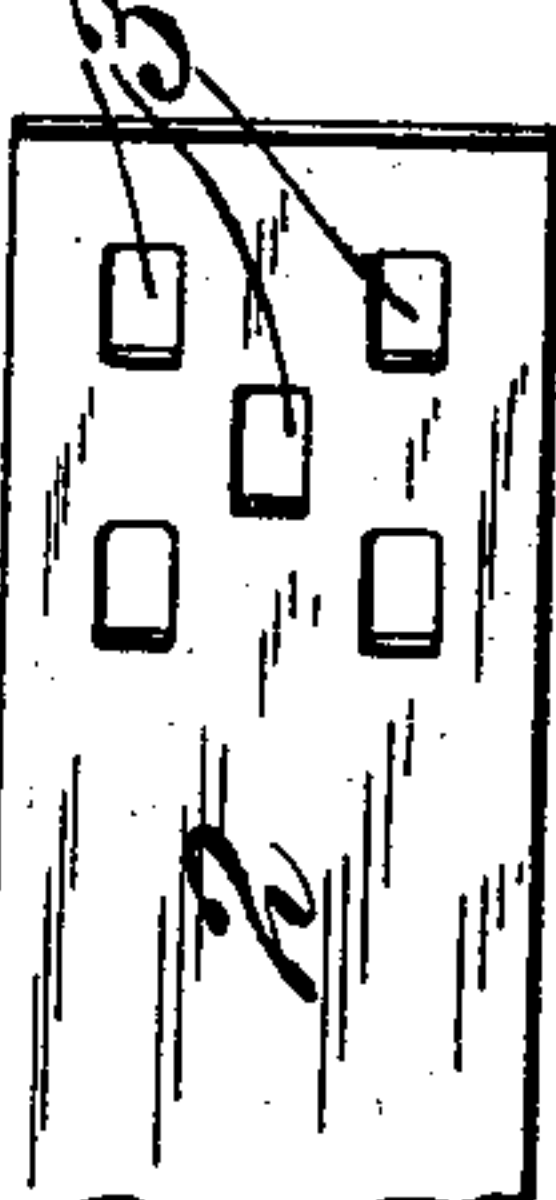
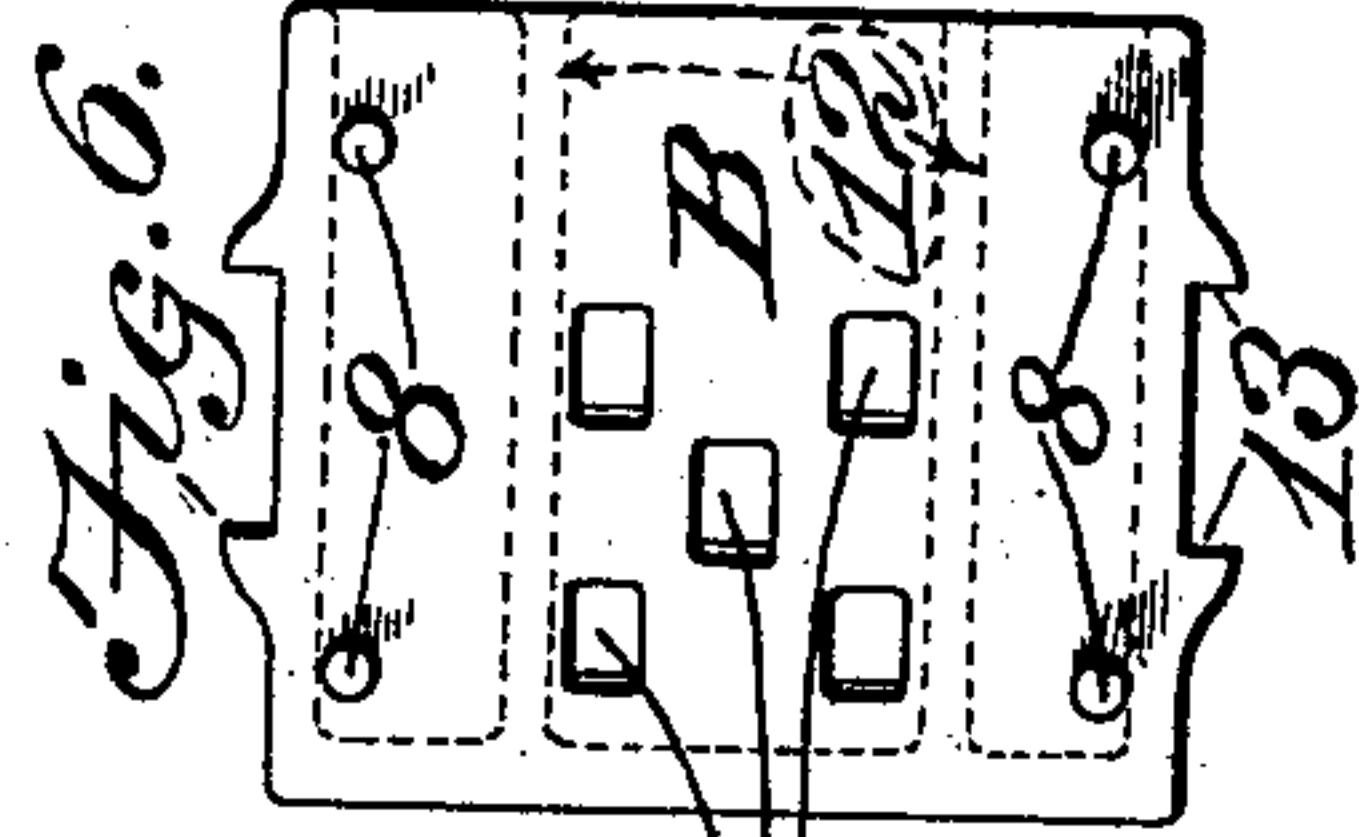
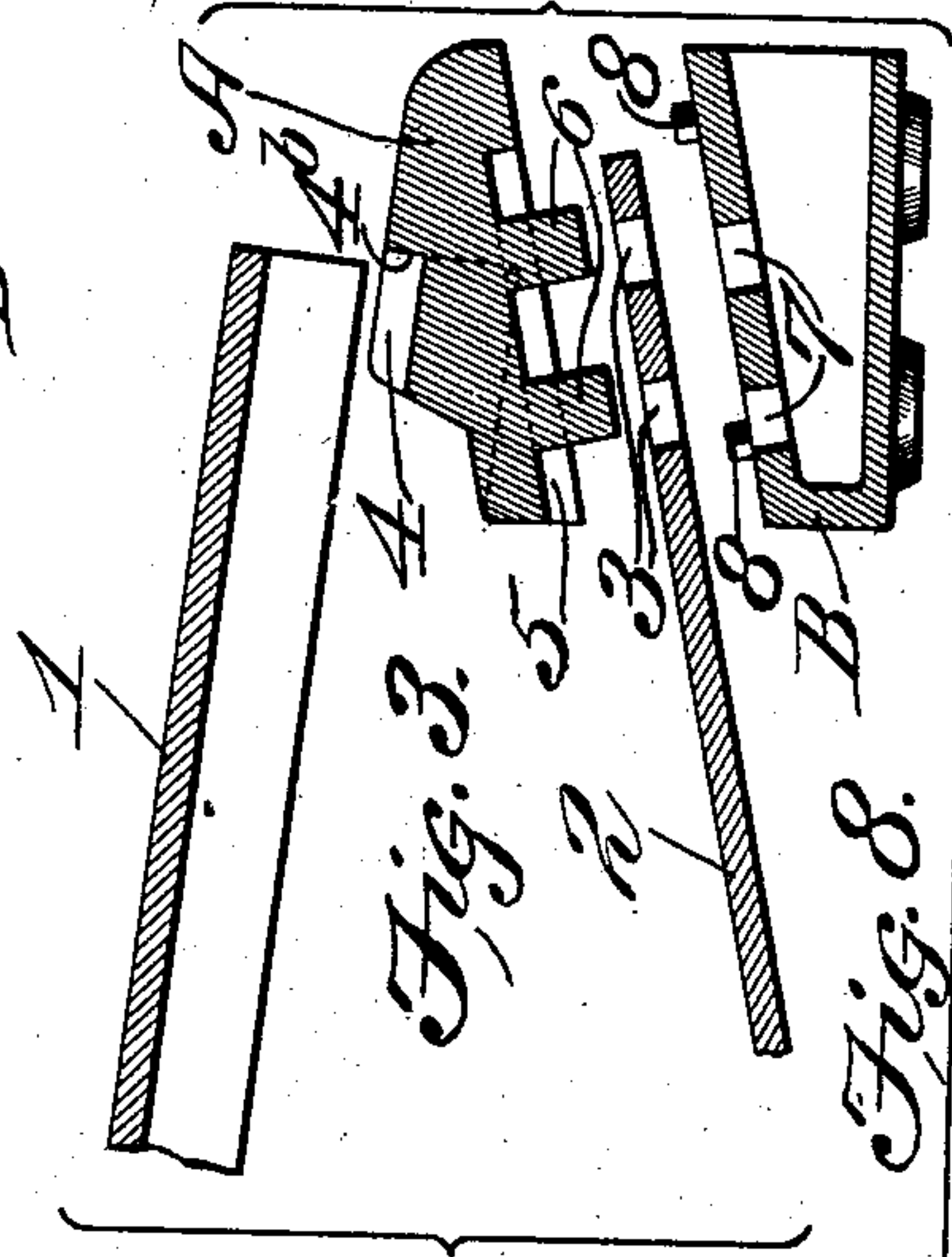
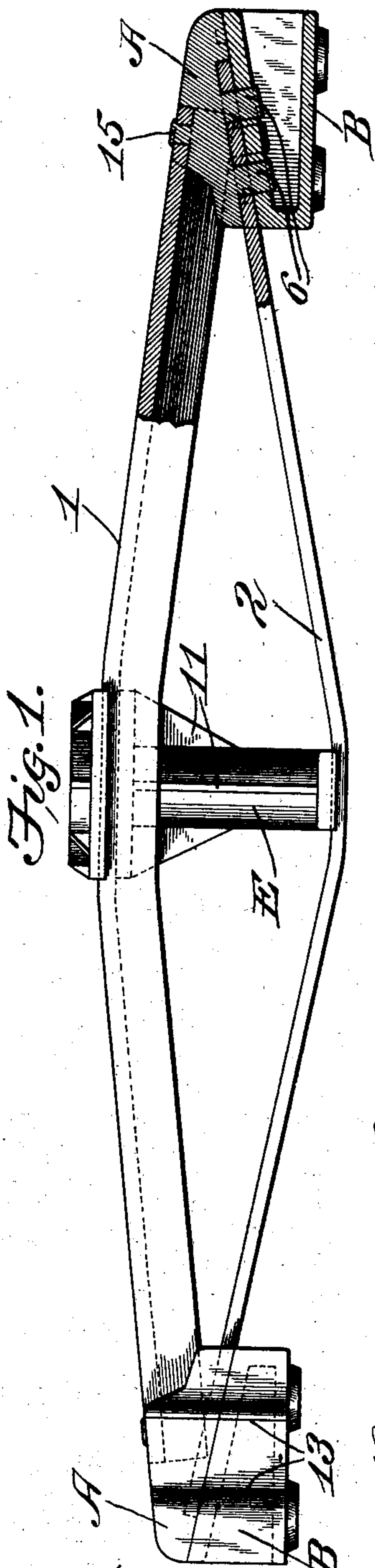
No. 721,131.

PATENTED FEB. 17, 1903.

J. C. WANDS.
BOLSTER.

APPLICATION FILED DEC. 18, 1902.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN C. WANDS, OF ST. LOUIS, MISSOURI.

BOLSTER.

SPECIFICATION forming part of Letters Patent No. 721,131, dated February 17, 1903.

Application filed December 18, 1902. Serial No. 135,802. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. WANDS, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Bolsters, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevational view, partly broken away at one end. Fig. 2 is a top plan view of one end of my improved bolster. Fig. 3 is a vertical sectional view of the several parts comprising one end of my improved bolster separated for the purpose of better showing the details of construction thereof. Fig. 4 is an isometric view of the upper section of the head-block. Fig. 5 is an inverted plan view of the same. Fig. 6 is a plan view of the lower section of the head-block. Fig. 7 is an end view of the same, and Fig. 8 is a plan view of one end of the tension member of my improved bolster.

This invention relates to a new and useful improvement in bolsters designed for use either as truck-bolsters or body-bolsters.

The object of the invention is to construct a bolster with commercially-rolled compression and tension members united at their ends by means of head-blocks composed of a plurality of sections adapted to interlock with each other and with the tension member of said bolster; and the invention consists in certain features of novelty in the construction of the same, all as will be hereinafter more fully described, and specifically pointed out in the claims.

Referring to the drawings, 1 is the compression member of my improved bolster, consisting of a commercially-rolled channel cambered at its central portion.

2 is the tension member of my bolster, comprising a flat plate of commercially-rolled metal which has at its end portions a series of openings 3, preferably angular in shape.

A is the upper section of the head-block, which section is provided on its upper side with the recess 4, having the downwardly-projecting recesses 4^a, the recess 4 being

adapted to receive therein the web of the compression member, while the recesses 4^a are adapted to receive the flanges of said compression member. The member A is provided with a shoulder 4^b for the end of the compression member, which shoulder serves as a stop therefor. The under side of the section A is recessed, as at 5, whereby there is formed a seat for the end of the tension member 2, the lugs or projections 6 extending downwardly from the section A and passing through said angular openings 3 of the tension member and into and through the openings 7, formed in the upper face of the lower head-block section B, while dowels 8 project upwardly from said section B and interlock with recesses 9 in the lower face of the section A, thereby uniting the said sections A and B and, by means of the said lugs 6, securing the tension member of the bolster firmly in position within the head-block, the end of said compression member abutting against the shoulder 4^b of the section A.

E indicates the king-post or strut, which is preferably formed hollow for the passage of the king-bolt, said strut being provided with lateral flanges adapted to afford an extended bearing for the compression member and also provided with webs 11 between said flanges and the vertical portion of said king-post, which webs serve to strengthen the same.

The lower section B of the head-block is preferably cast hollow, as best shown at Figs. 3 and 7, and between the horizontal walls thereof are provided vertical partitions 12, which serve to strengthen said section B, said walls extending from the outer ends thereof to the opposite end of said section B.

The sections A and B of the head-block are both provided with shoulders or vertical ribs 13, which serve as column-guides.

In assembling the different parts of my improved bolster the tension member is placed in position upon the lower section B, with the openings 3 registering with the openings 7 of said section, whereupon the upper section A is placed in position with the lugs 6 projecting through both series of openings 3 and 7 and passing into the hollow portion of said section B, after which the strut is placed in position on said tension member and the com-

pression member is placed upon the strut. The compression member is not secured permanently to the head-block nor are the several parts of the head-block permanently connected together, as it will be found that the weight of the car upon the compression member will be sufficient in practice to hold the several parts in their proper coöperative positions; but, if desirable, a temporary securing means may be used to hold the compression member in place upon said head-block, which securing means may be any convenient means which will accomplish the result, such as a pin passing through the flanges of said compression member into the section A of said head-block, or any other convenient means may be used, such as the upset lug 15, integral with the head-block A.

It will be observed that when the parts are assembled for use the sections of the head-block are united by the same means which hold the tension member in position, and it is immaterial whether the lugs 6 be cast integral with the upper section A and the openings 7 be formed in the upper face of the section B or whether said lugs shall project upwardly from the section B and register with corresponding recesses in the section A, as either construction will be within the spirit of my invention.

For the purpose of securing the requisite strength the tension member is made relatively longer than the compression member and, as seen in the drawings, projects therebeyond for a short distance at each end within the head-blocks.

The head-block sections and lugs 6 are preferably made of malleable castings, and to permit the same to be properly annealed are preferably formed three-eighths of an inch in thickness at all points where annealing is desirable.

I am aware that minor changes in the construction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-truck bolster, a commercially-rolled compression member of channel-beam form, a tension member with perforations in its end portions, and a head-block formed of a plurality of sections adapted to interlock with each other and with said tension member; substantially as described.

2. In a car-truck bolster, a commercially-rolled compression member of channel-beam form, a tension member with perforations in its end portions, and a head-block formed of a plurality of sections adapted to interlock with each other and with said tension member and extending beyond the ends of said tension member; substantially as described.

3. In a car-truck bolster, a commercially-rolled compression member of channel-beam form, a tension member with perforations in its end portions, and a head-block formed of a plurality of sections adapted to interlock with each other and with said tension member and extending beyond the ends of said tension member and forming stops for the ends thereof relatively beyond the ends of the compression member; substantially as described.

4. In a car-truck bolster, a commercially-rolled compression member of channel-beam form, a tension member with perforations in its end portions, and a head-block formed of a plurality of sections adapted to interlock with each other and with said tension member and extending beyond the ends of said tension member and forming stops for the ends thereof; substantially as described.

5. In a car-truck bolster, a commercially-rolled compression member of channel form, a tension member with perforations at points near its ends, and a head-block composed of a plurality of parts adapted to surround the ends of said tension member, one of said head-block sections being formed open at its outer end and with openings through its upper wall, and the other of said head-block sections being provided with lugs registering with said openings; substantially as described.

6. In a car-truck bolster, a commercially-rolled compression member of channel form, a tension member with perforations at points near its ends, and a head-block composed of a plurality of parts adapted to surround the ends of said tension member, one of said head-block sections being formed open at its outer end and with openings through its upper wall, and the other of said head-block sections being provided with lugs integral therewith registering with said openings; substantially as described.

7. In a car-truck bolster, a commercially-rolled compression member of channel form, a tension member with perforations at points near its ends, and a head-block composed of a plurality of parts adapted to surround the end of said tension member partly beyond the end of said compression member, one of said head-block sections being formed open at its outer end and with openings through its upper wall, and the other of said head-block sections being provided with lugs registering with said opening; substantially as described.

8. In a car-truck bolster, a commercially-rolled compression member of channel form, a tension member with perforations at points near its ends, and a head-block composed of a plurality of parts adapted to surround the end of said tension member thereby forming a stop for the end thereof, one of said head-block sections being formed open at its outer end and with openings through its upper wall,

and the other of said head-block sections being provided with lugs registering with said openings; substantially as described.

9. In a car-truck bolster, a commercially-rolled compression member and tension member of different lengths in combination with a plurality of head-block sections adapted to interlock with said tension member and with each other, one of said sections having a projecting portion in alinement with the longitudinal axis of said tension member and forming a stop therefor; substantially as described.

10. In a car-truck bolster, a commercially-rolled compression member and tension member of different lengths in combination with a plurality of head-block sections adapted to interlock with said tension member and with each other, one of said sections having a projecting portion in alinement with the longitudinal axis of said tension member and forming a stop therefor beyond the end of said compression member; substantially as described.

11. In a car-truck bolster, a commercially-rolled channel member and flat tension member of different lengths, the tension member being provided with perforations, a plurality of head-block sections, one of which is provided with an oblique upper face having openings therein, the other of said head-block sections having a correspondingly-inclined meeting face, lugs projecting therefrom registering with said openings, and a stop thereon cooperating with said tension member; substantially as described.

12. In a car-truck bolster, a commercially-rolled channel member and flat tension member of different lengths, the tension member being provided with perforations, a plurality of head-block sections, one of which is substantially hollow and provided with an oblique upper face having openings therein, the other of said head-block sections having a correspondingly-inclined meeting face, lugs projecting therefrom registering with said openings, and a stop thereon cooperating with said tension member; substantially as described.

13. In a car-truck bolster, a compression member, a tension member, a plurality of head-block sections, and locking means thereon which are adapted to hold the tension member in position; substantially as described.

14. A trussed bolster comprising a compression member, a tension member, and a head-block composed of a plurality of interlocking sections, and means adapted to retain the tension member therein, which means serve to lock said sections together; substantially as described.

15. A trussed bolster comprising a compression member, a tension member longer than said compression member, a head-block composed of a plurality of sections, and means thereon for locking said sections together, which means serve to lock said tension member therebetween; substantially as described.

16. A trussed bolster comprising a compression member, a tension member longer than said compression member, a head-block composed of a plurality of sections, stops for the ends of said tension member within said head-block, and means thereon for locking said sections together, which means serve to lock said tension member therebetween; substantially as described.

17. A trussed bolster comprising a compression member of channel form, a tension member longer than said compression member, a head-block composed of a plurality of sections, and means thereon for locking said sections together, which means serve to lock said tension member therebetween, substantially as described.

18. A trussed bolster comprising a compression member, a flat tension member longer than said compression member, a head-block composed of a plurality of sections, and means thereon for locking said sections together, which means serve to lock said tension member therebetween; substantially as described.

19. A trussed bolster comprising a compression member of channel form, a flat tension member longer than said compression member, a head-block composed of a plurality of sections, and means thereon for locking said sections together, which means serve to lock said tension member therebetween; substantially as described.

20. In a bolster, a compression member, a tension member, a compound head-block provided with inclined meeting faces forming a seat for the end of the tension member between the members of said head-blocks, and a projection at the end of one of said faces forming a stop in juxtaposition to the end of said seat within said head-block; substantially as described.

21. In a bolster, a compression member, a tension member, a compound head-block composed of a plurality of sections, a stop integral with the upper portion of one section cooperating with the compression member, a stop integral with the lower portion of the same member cooperating with the tension member, and means for locking said sections in operative relation to each other, said means locking the tension member in position between said head-block sections; substantially as described.

22. In a bolster, a head-block composed of a plurality of sections having inclined meeting faces, of locking means projecting from one of said faces cooperating with openings in the other of said faces, said locking means being adapted to secure said sections together upon a tension member; substantially as described.

23. In a bolster, a head-block composed of a plurality of sections having inclined meeting faces, of locking means projecting from one of said faces cooperating with openings in the other of said faces, said locking means

being adapted to secure said sections together upon a tension member, and a tension member cooperating therewith having openings adapted to interlock with said projecting locking means; substantially as described.

5 24. In a bolster, a head-block composed of a plurality of sections having inclined meeting faces, a plurality of locking means projecting from one of said faces cooperating
10 with openings in the other of said faces, said locking means being adapted to secure said sections together upon a tension member, and

a tension member cooperating therewith having a plurality of openings adapted to interlock with said projecting locking means; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 16th day of December, 1902.

JOHN C. WANDS.

Witnesses:

G. A. PENNINGTON,
FREDERICK H. GIBBS.