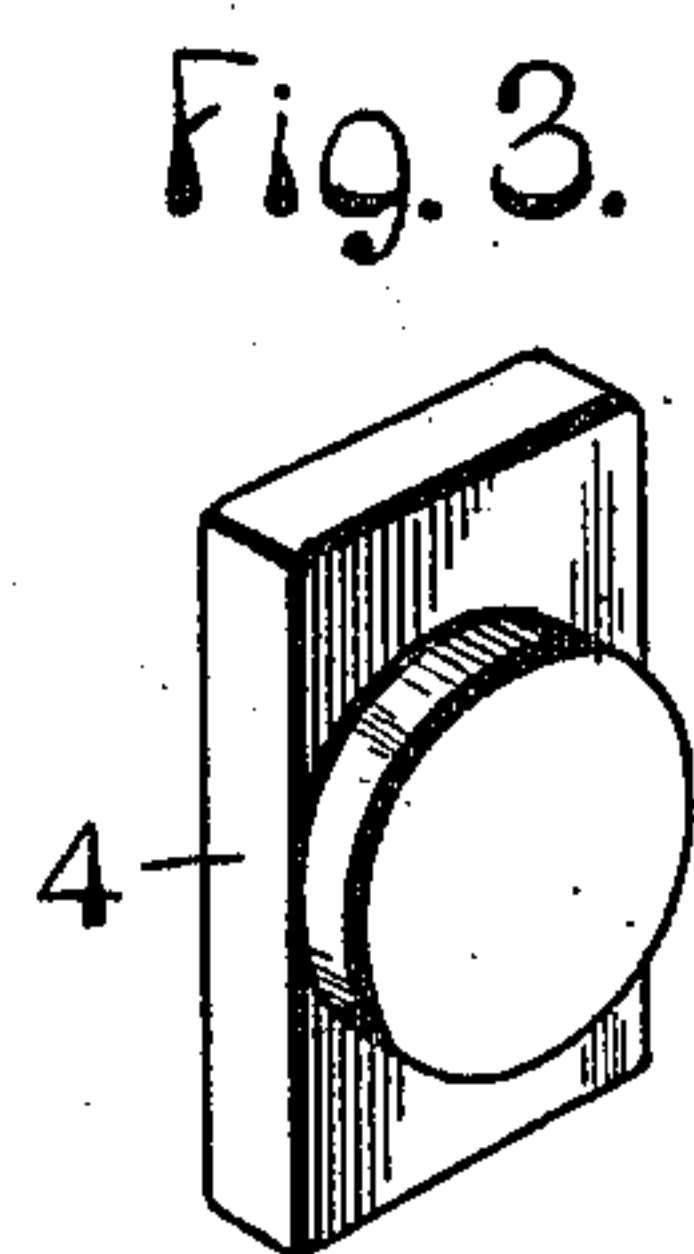
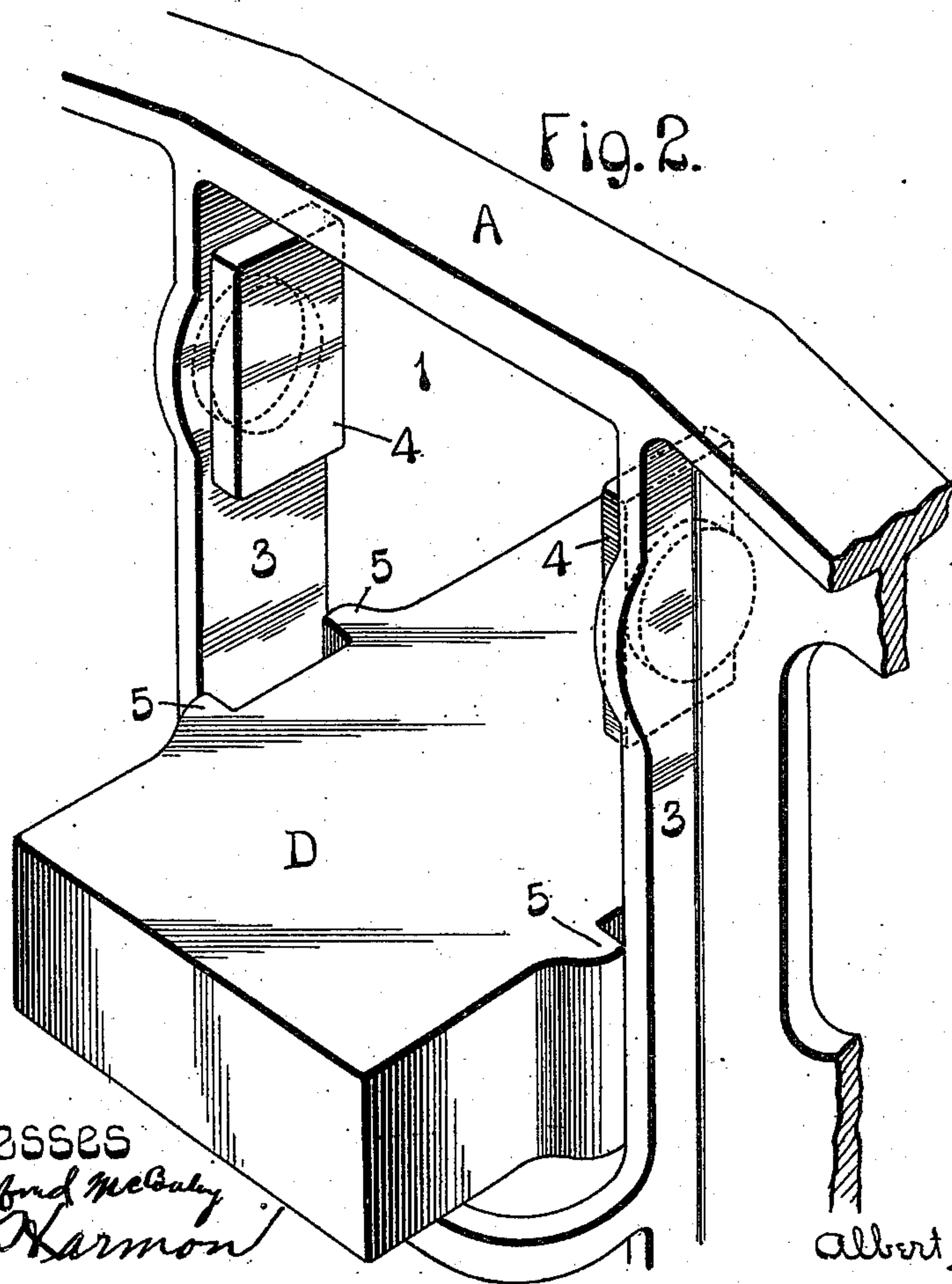
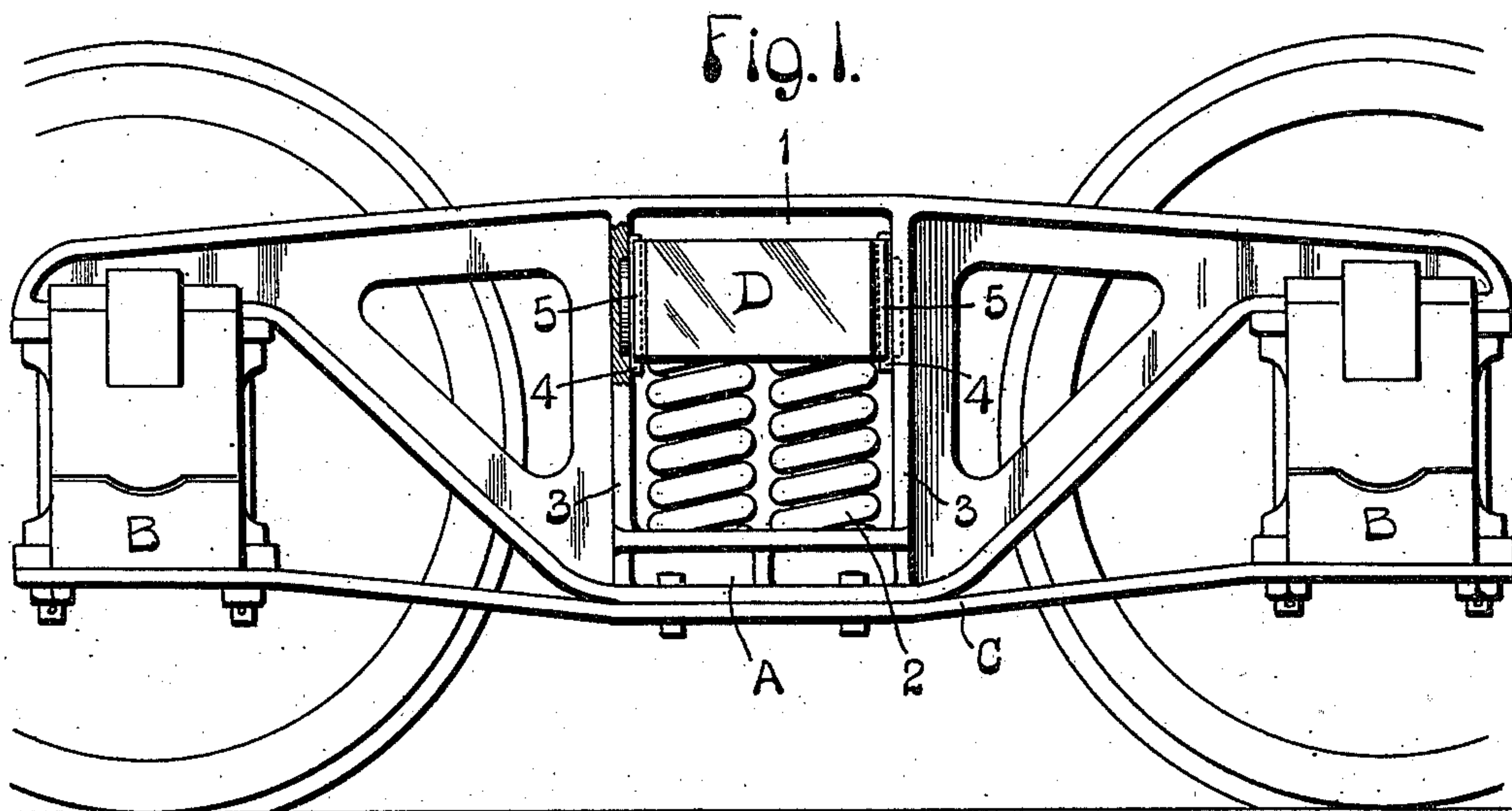


A. J. McCAULEY.  
CAR TRUCK.  
APPLICATION FILED OCT. 14, 1909

989,859.

Patented Apr. 18, 1911.

2 SHEETS—SHEET 1.



Witnesses  
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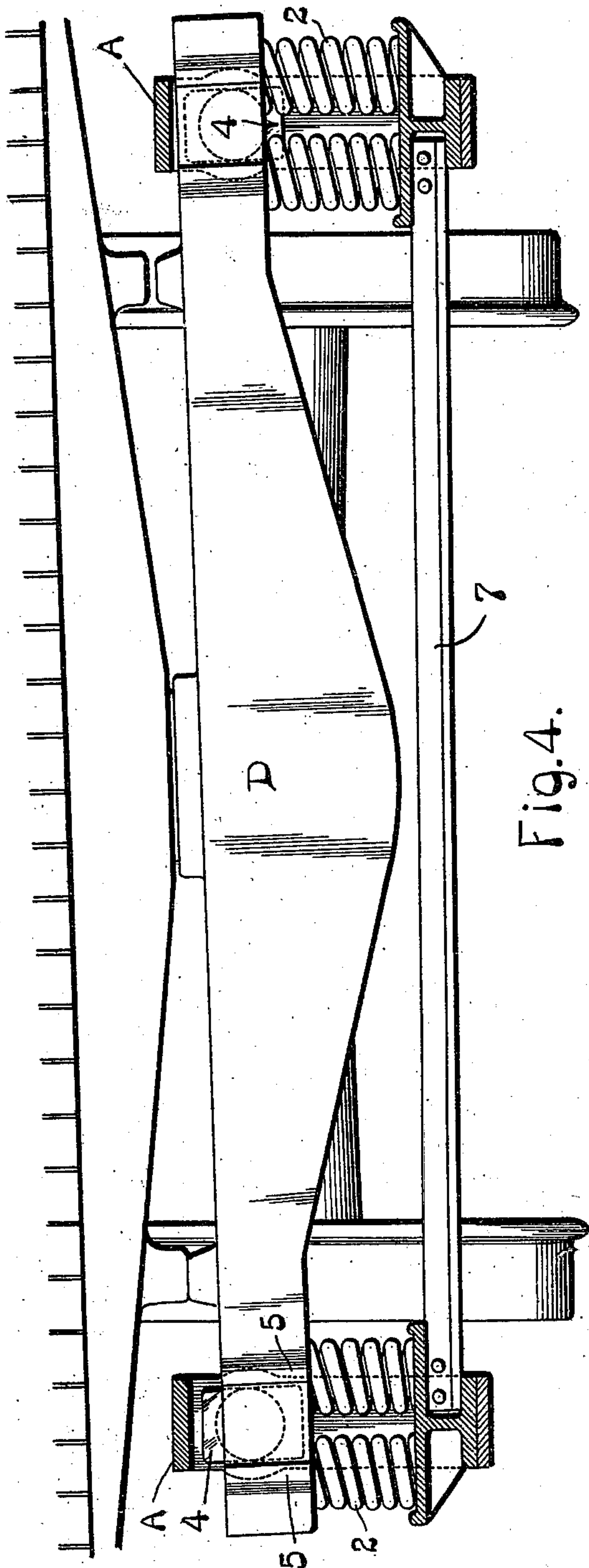


Fig. 4.

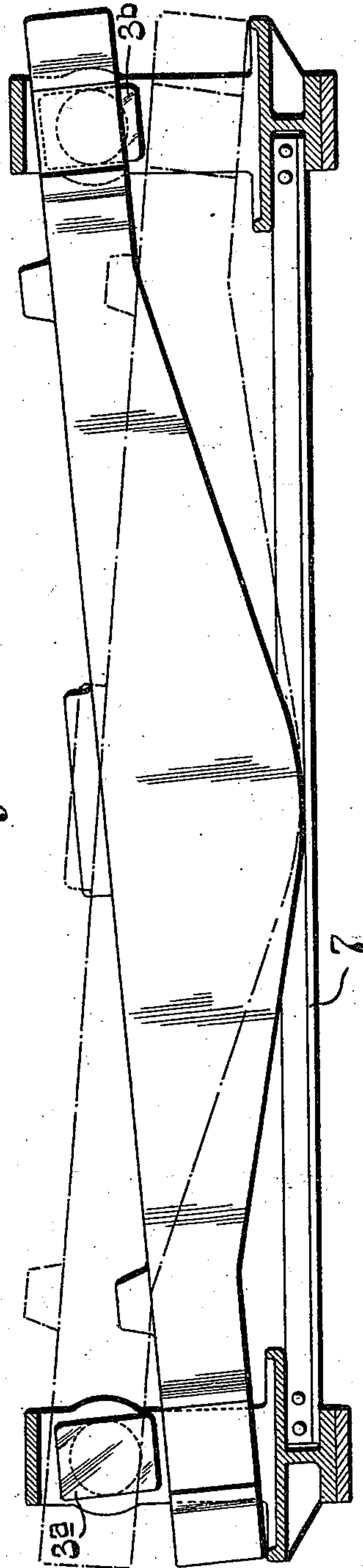


Fig. 5.

Witnesses

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# UNITED STATES PATENT OFFICE.

ALBERT J. MCCAULEY, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE J. S. ANDREWS COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF WEST VIRGINIA.

## CAR-TRUCK.

989,859.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed October 14, 1909. Serial No. 522,638.

To all whom it may concern:

Be it known that I, ALBERT J. MCCAULEY, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Car-Trucks, 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, in which—

Figure 1 is a side elevational view, partly in section; Fig. 2 is a perspective view showing the bolster disengaged from the pivoted guide bars; Fig. 3 is a detail view of one of the guide bars; Fig. 4 is a vertical sectional view of the truck, showing a car body mounted thereon, and Fig. 5 is a vertical sectional view showing one method of removing a bolster.

This invention relates to improvements in car trucks, one of the objects being to provide a car truck possessing maximum strength and minimum weight.

Another object is to provide a car truck in which the usual type of bolster can be very easily removed from the side frames.

In a well known type of car truck the side frames are provided with rigid columns and the bolster has guide lugs which coöperate with said columns. When the car is passing over uneven parts of the track, around curves, or when the lading is located on one side of the car, the car body leans to one side and thereby causes one end of the bolster to move downwardly. As the bolster guide lugs are engaged with rigid columns, when unequal movement is imparted to the opposite bolster ends, the bolster acts similar to a wrench and tends to rock the rigid columns. Obviously, this action causes severe stresses at various points in the truck.

In the preferred form of my invention, each column is provided with a pivoted bar which engages the bolster guide lugs. These pivoted bars are located on the upper part of the columns and normally maintain the bolster in operative position, the truck springs being arranged below the bolster. To remove the usual type of bolster it is only necessary to remove the truck springs, allow the bolster to drop on the spring seats and then slide the bolster through the space between the columns.

In the accompanying drawings, which illustrate the preferred form of my inven-

tion, A indicates a cast metal truck frame resting on journal boxes B, the latter being connected by a tie bar C. A bolster D is slidably mounted in an opening 1 and supported by springs 2 which rest on a rigid spring seat. Columns 3 constitute the side walls of opening 1, said columns being preferably formed integral with the top and bottom walls of this opening. Bars 4, interposed between the bolster and columns, are each provided with a circular boss which extends into a circular recess in a column 3. When the parts are in operative position, as shown in Fig. 1, bars 4 coöperate with the usual rigid guide lugs 5 on the bolster. It is not necessary to employ fastening devices for securing the bars 4 to the columns, because the bolster normally retains said bars in position.

In removing the bolster, the first step is to remove springs 2, and then allow the bolster to drop on the spring seat, as shown in Fig. 2. When in this latter position, lugs 5 are out of alinement with the guide bars 4 and the bolster may be moved longitudinally through the space between the columns.

In Fig. 4 I have shown a portion of a car body mounted on the truck. By referring to this view it will be seen that the bolster is free to rock in response to movements of the car body and that the pivoted bars 4 prevent this rocking movement from being transmitted to the columns.

In trucks having deep bellied bolsters as shown in Fig. 4 and Fig. 5, the spring planks 7 will prevent the bolster from occupying the position shown in Fig. 2. In removing a bolster of this type, the first step is to remove the springs and move the bolster to the position shown in full lines in Fig. 5. The next step is to remove the guide bars 3<sup>a</sup> and thereafter move the bolster to the position shown in dotted lines. When the latter occupies the dotted position, it is disengaged from bars 3<sup>b</sup> and may be moved through the truck frames.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A car truck having a frame, a bolster, a rigid spring seat, springs interposed between the bolster and spring seat, and a rockable bolster guide adapted to rock in response to movements of the bolster.

2. A car truck having a frame provided



with a spring seat, a bolster, springs interposed between the bolster and spring seat and a rockable bolster guide mounted on said frame so as to rock in response to movements of the bolster, said bolster guides being movable independently of the spring seat.

3. A car truck comprising side frames each having a bolster receiving opening, a bolster mounted in said openings, spring seats, springs interposed between the bolster and spring seats, and rockable bolster guides connected to the side frames so as to rock in response to movements of the bolster said bolster guides being movable independently of the spring seats.

4. A side frame for car trucks having a bolster receiving opening, all of the walls of said opening being integrally connected together, and removable bolster guides pivoted to the side walls of said opening so as to rock in response to movements of the bolster.

5. A car truck having side frames each of which is composed of a casting having a bolster receiving opening, the walls of each of said openings being integrally connected together, a bolster arranged in said openings, and rockable bolster guides mounted in the upper portion of said openings so as to rock in response to movements of the bolster.

6. A car truck comprising side frames each having a bolster receiving opening, guide bars pivotally mounted in the upper portion of each of said openings, and a bolster having rigid guide lugs which cooperate with and rock said guide bars.

7. A car truck comprising side frames

each having a bolster receiving opening, spring seats rigidly secured to said side frames, springs on said spring seats, a bolster supported by said springs, and guide bars pivotally mounted in said openings so as to rock in response to movements of the bolster, the bolster being provided with rigid lugs which engage said guide bars.

8. A car truck having a frame composed of side members and means for connecting said side members, a non-swinging bolster mounted in said frame, and rockable bolster guides mounted on said frame so as to rock in response to movements of the bolster.

9. A car truck having a side frame composed of a casting provided with a bolster receiving opening, the walls of said opening being integrally connected together, a bolster mounted in said opening, guide lugs on said bolster, the width of said bolster measured across said guide lugs being less than the distance between the side walls of said opening, and pivoted bolster guides mounted in said opening so as to rock in response to movements of the bolster.

10. A side frame for car trucks having a bolster receiving opening, the side walls of said opening being provided with recesses, a rigid spring seat and rockable bolster guides having curved projections which extend into said recesses.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 9th day of October, 1909.

ALBERT J. MCCAULEY.

Witnesses:

JEAN A. MACDONEL,  
MATHEW A. HARMON.