Aug. 2, 1927. 1,637,928

S. P. BUSH

CAR TRUCK

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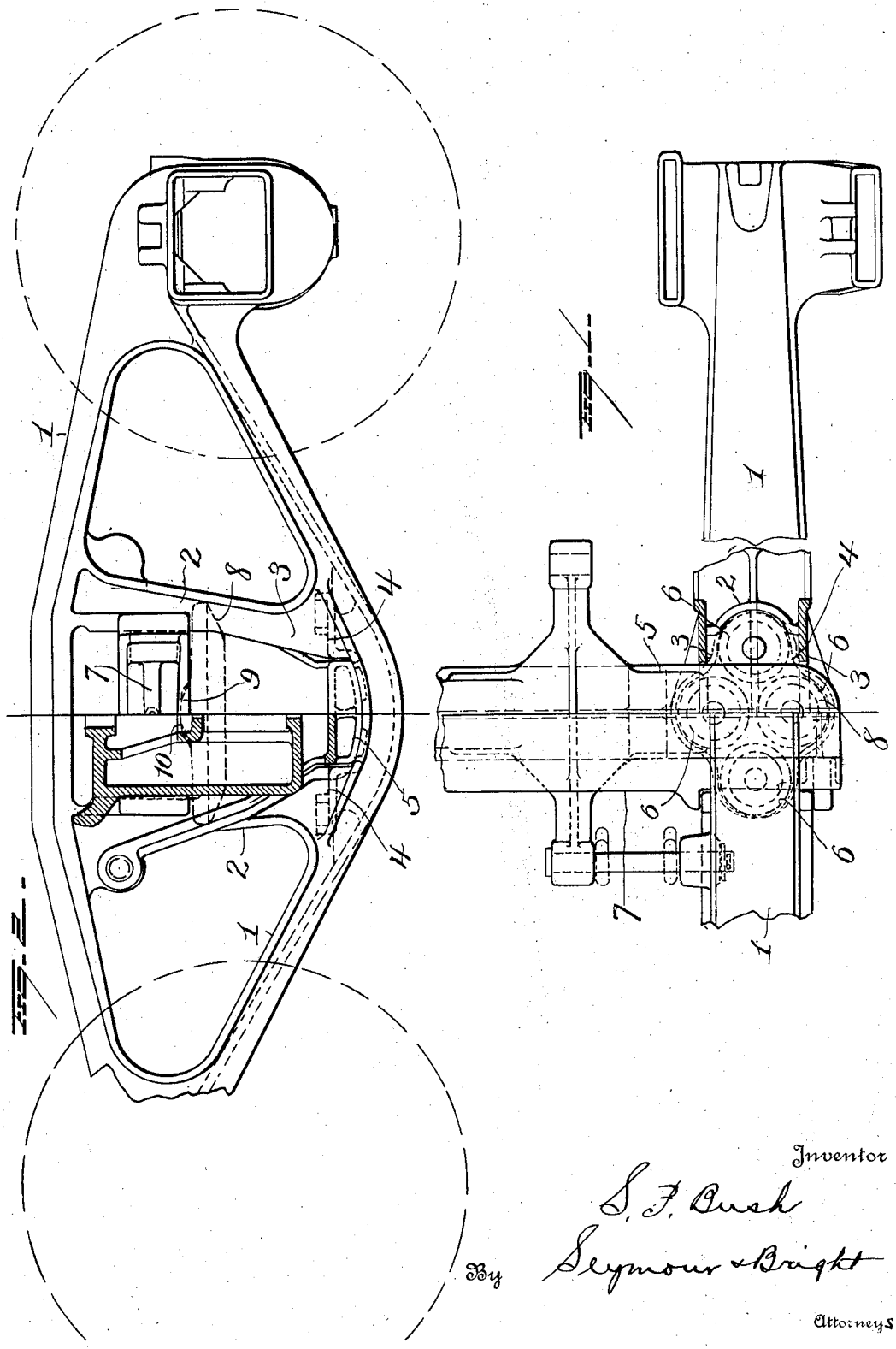


Fig. 2.

Fig. 1.

Inventor

S. P. Bush

By Seymour & Bright

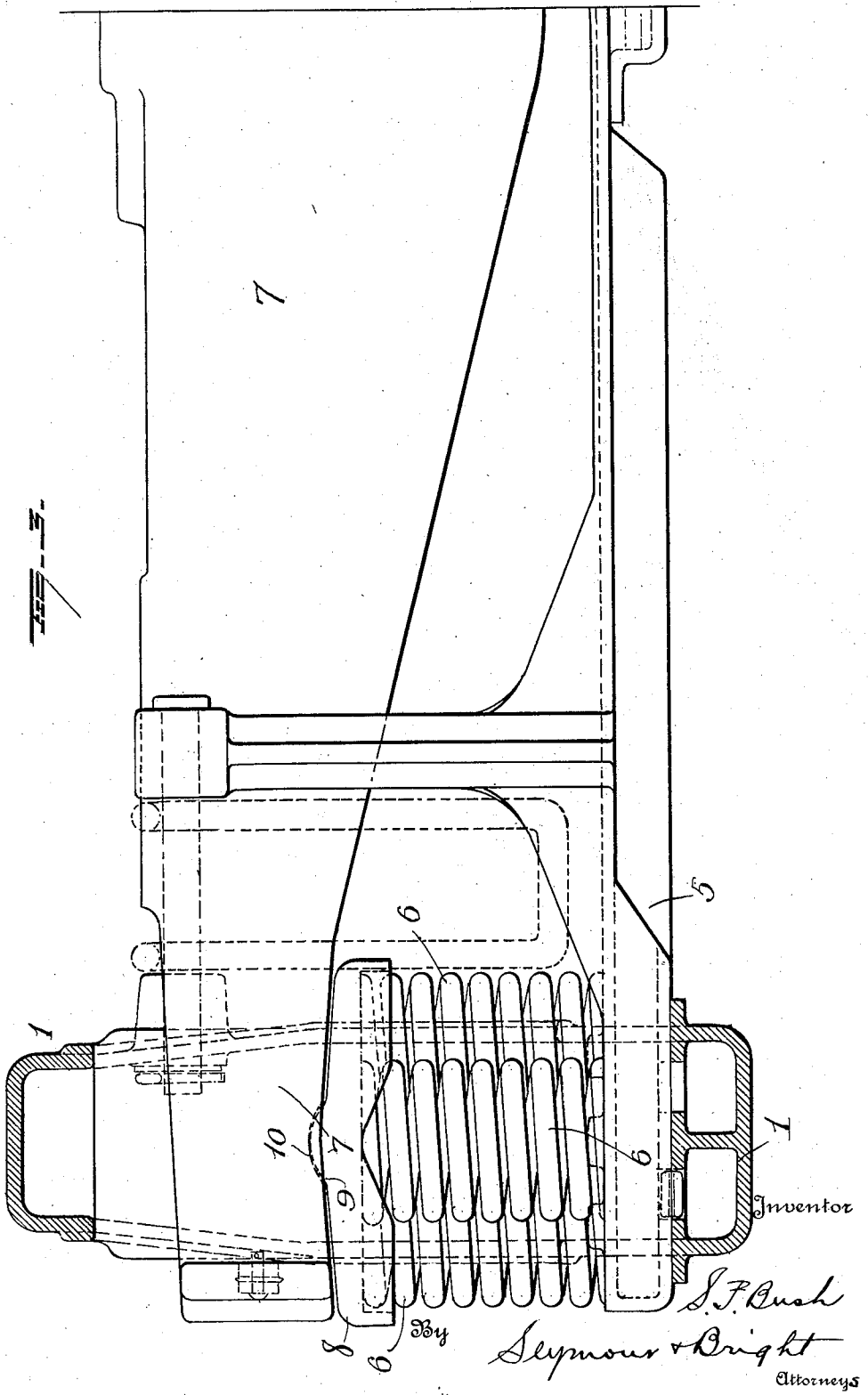
Attorneys

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CAR TRUCK

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UNITED STATES PATENT OFFICE.

SAMUEL P. BUSH, OF COLUMBUS, OHIO, ASSIGNOR TO THE BUCKEYE STEEL CASTINGS COMPANY, OF COLUMBUS, OHIO.

CAR TRUCK.

Application filed July 20, 1926. Serial No. 123,721.

This invention relates to car trucks and has special reference to the arrangement of the bolster-supporting springs, the object being to distribute the load equally through the several springs. The invention is illustrated in the accompanying drawing and consists in certain novel features which will be first fully described and then particularly defined.

In the drawing, Figure 1 is a view partly in plan and partly in horizontal section of a portion of a car truck embodying my present invention;

Figure 2 is a view partly in side elevation and partly in section;

Figure 3 is a view showing the side frame in transverse section and the ends of the bolster and spring plank in elevation.

The side frame 1 is cast in one integral structure, and is shown as having columns 2 connecting an upper compression member and a lower tension member and defining an opening through the side frame to receive the ends of the bolster and the spring plank. The columns, in their lower portions have extensions 3 projecting toward the center of the bolster-receiving opening. Spring seats 4 are formed on the side frame at or near the bases of the respective columns and between the sides of the same, and the spring plank 5 rests on the tension member between the spring seats, as shown in Fig. 2. The springs, indicated at 6, are arranged in two intersecting series, one series carried by and extending longitudinally of the spring plank and the other series carried by and extending longitudinally of the side frame with the springs of the latter series mounted on the spring seats and the springs of each series fitting partly between the springs of the other series. The bolster 7 has its end inserted through the opening in the side frame and is supported by the springs. A cap 8 is fitted over the springs and is of a generally cruciform design having a depending rim whereby it may fit closely about the upper ends of all the springs and effectually hold them in the relation in which they are set. It will be noted that the cruciform contour of the cap and the cruciform arrangement of the springs brings two of the springs within the respective columns and portions of the cap engage in the columns and through the opening in the side frame so that displacement of the springs is avoided. The cap is provided at its center on its top with a convex projection or bearing 9 and contacts with the under side of the bolster, the bolster being thus carried by the springs in such a manner that a limited relative rocking movement of the bolster will be permitted, and the load will be distributed equally to all the springs.

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

1. The combination with a side frame having an opening therethrough a spring plank having an end supported by the side frame at the bottom of the opening, springs carried by the spring plank and by the side frame, respectively, the springs carried by the side frame being housed by the columns thereof, a bolster having an end inserted in the opening in the side frame over the springs, and means engaged with all the springs for supporting the bolster for relative rocking movement.

2. The combination with a side frame having an opening therethrough, a spring plank having an end supported by the side frame at the bottom of the opening, springs carried by the spring plank and by the side frame, respectively, the springs carried by the side frame being housed by the columns thereof, a bolster having an end inserted in the opening in the side frame over the springs, and a restraining device engaged with all the springs and supporting the bolster thereover for relative rocking movement.

3. The combination with a side frame having an opening therethrough, a spring plank having an end supported by the side frame at the bottom of the opening, springs carried by the spring plank and by the side frame, respectively, the springs carried by the side frame being housed by the columns thereof, a bolster having an end inserted in the opening in the side frame over the springs, and a cap fitted closely about the upper ends of the springs and provided on its top with a central bearing engaging a bearing on the under side of the bolster.

4. The combination of a side frame having columns and spring seats at the bases of the columns, a spring plank supported by the side frame between the spring seats, springs mounted on the spring plank,

springs mounted on the spring seats and partly housed by the columns, a bolster having an end inserted through the side frame over the springs and provided with a bearing on its under side, and a cap fitted closely about the upper ends of all the springs and having a central bearing on its top engaging the bearing on the bolster.

5. The combination of a side frame having columns and a bolster-receiving opening between the columns, springs mounted in the opening, other springs mounted to enter the columns, a restraining device engaged about the upper ends of all the springs and having portions entering the columns and portions in the opening in the side frame, and a bolster mounted on the restraining device for relative rocking movement.

In testimony whereof, I have signed this specification.

SAMUEL P. BUSH.