E. WRIGHT.

Wagon Spring.

No. 109,095. Patented Nov. 8, 1870.

Fig. 1

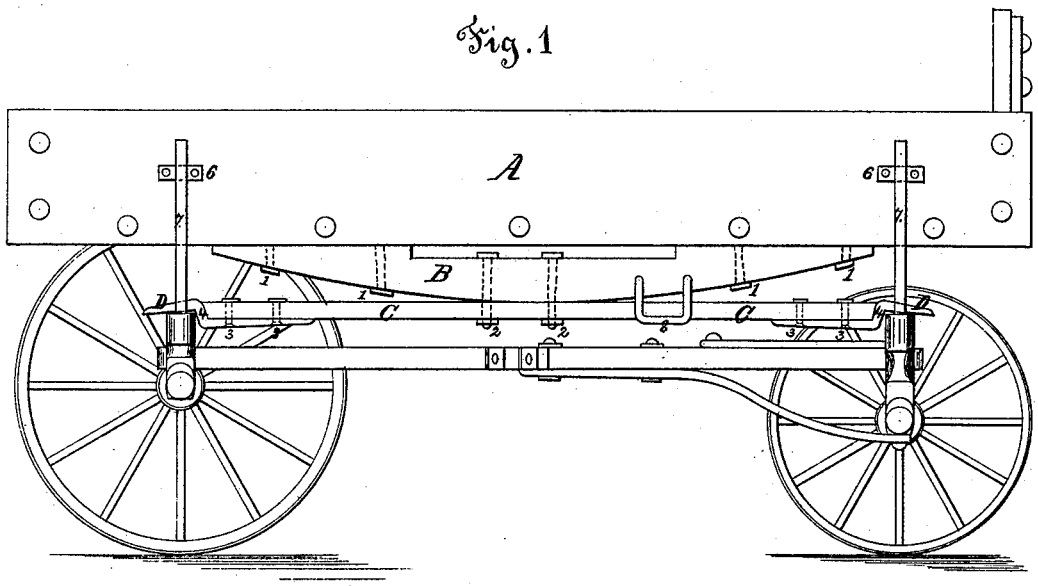

Fig. 2.

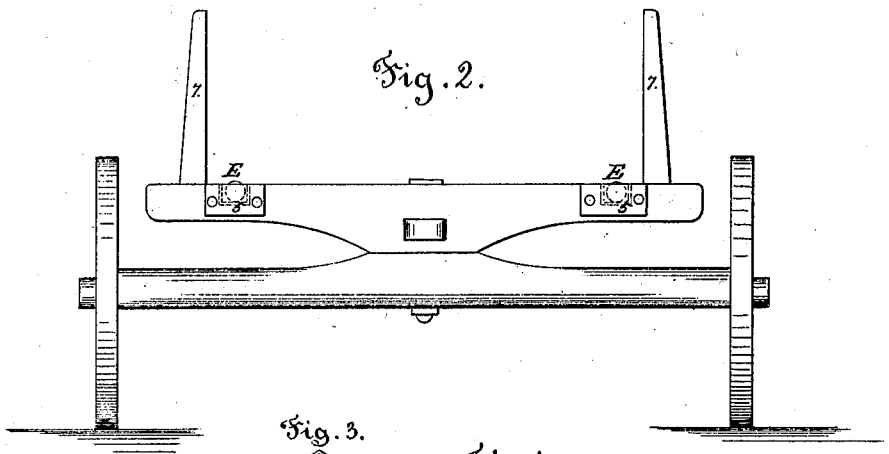

Fig. 3.

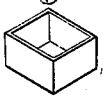

Fig. 4.

Witnesses.

Henry A. Mygatt

R. A. Whittlesey

Inventor.

Enos Wright

by His attorney

N. W. Wright

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

ENOS WRIGHT, OF LEE COUNTY, IOWA.

Letters Patent No. 109,095, dated November 8, 1870.

IMPROVEMENT IN SPRINGS FOR VEHICLES.

The Schedule referred to in these Letters Patent and making part of the same.

I, ENOS WRIGHT, of the county of Lee and State of Iowa, have invented certain Improvements in the Mode of Applying Springs to Vehicles, of which the following is a specification.

Nature and Objects of the Invention.

The first part of my invention relates to the construction of a spring bearer, in such a manner that its upper side shall be attachable to the under side or bottom of the body of the vehicle, and its under side shall form a curve, which may be the arc of a circle, or vary somewhat from it, as the case may be, and around which curve the spring, which is attached to said bearer at or near the center of both spring and bearer, shall bend, touching and resting against said bearer, from the center or point of attachment, toward both ends, just in proportion as the weight of the load is increased, thus causing the spring to adjust itself to the weight of the load, and to be pliable with either a light or heavy load.

The second part of my invention relates to the construction and combination with the spring-bearers and springs, of spring-holders or couplings, roller-boxes and rollers, and rub-irons and plates, in such a manner that they may be applied to all kinds of vehicles.

Description of the Accompanying Drawing.

Figure 1 is the body of a lumber-wagon, with spring-bearer and spring attached.

Figure 2 is a bolster, containing roller-boxes and rollers, and to which wearing-plates are attached.

Figure 3 is a roller-box.

Figure 4 is a roller.

General Description.

A is body of lumber-wagon, with spring bearer, spring, and spring holders attached.

B is the spring bearer, which is made of wood, and is of a thickness to correspond with the width of spring, and of a sufficient depth to give as much spring room between ends of spring and under side of wagon-body, as is desired.

Said bearer is connected with the wagon-body by bolts 1 1 1 1.

C is the spring, and is a single bar, either of wood or steel, and is connected with the bearer by bolts, 2 2.

D D are the spring-holders, and are made of iron, the object of said holders being to hold the spring, being secured to the under side of the same by bolts, 3 3 3 3, to form a connection with the running part of wagon, by resting at points directly beneath D D, on rollers, in the top of bolsters, shown by E E in fig. 2; and also to hold the wagon-body from sliding back and forward, by the perpendicular part of the holders at 4 4 coming in contact with the side of the bolsters at points 5 5, in fig. 2, and to which points wearing-plates are attached, to prevent wearing by the holders, into the sides of the bolsters.

6 6, in fig. 1, are wearing-plates, to prevent the bolster-stakes 7 7 from wearing into the sides of the wagon-body.

8 is the rub-iron, for the wheel to rub against when the wagon is cramped, as in turning, and is connected with the bearer by the points at the upper end being turned at right angles and driven into it.

Fig. 3 is box, made of cast-iron, and is sunk in the top of the bolster at E E, the object of the box being to form a firm cavity or trench for the roller to work in.

Fig. 4 is a roller, which is of iron, and is of the right length to drop easily into the roller-box lengthwise with the bolster, but it must not have room enough to work much in that direction, and must be of sufficient diameter to fill about two-thirds the width of the box, and to rise about one-fourth of its diameter above the top or upper surface of the bolster, the box being of proportions suitable for the purpose.

The object of the roller is to prevent wearing and friction by the holders on the top of the bolster.

The object of the small section, is—

First, to show a different style of finish of the bearer for light wagons and carriages.

Second, to show, by the spring attached thereto, on the end marked A, a different kind of holder from that hereinbefore described. This kind, though objectionable on account of raising the wagon-body higher, may be preferred by some on account of being cheaper, therefore I desire to have it included.

Third, on the end of said spring, marked B, is the kind of couplings used for light wagons and carriages.

This mode of applying springs may be used either for side or end springs.

Claim.

I claim as my invention—

The spring bearer B, secured to the body A, the spring C and spring holders D D, the roller-boxes and rollers E E, with all the various parts hereinbefore mentioned and described, substantially as and for the purpose hereinbefore mentioned and set forth.

Witnesses: ENOS WRIGHT.

N. W. WRIGHT,

HENRY N. MYGATT.