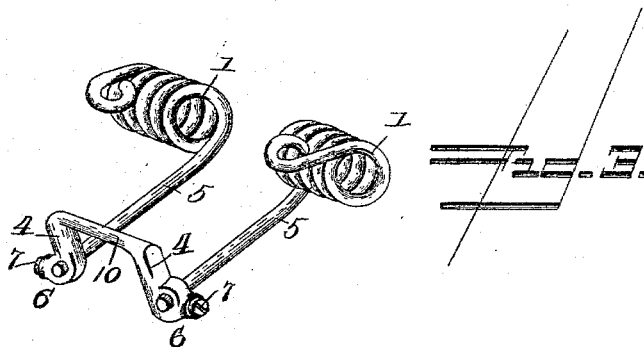
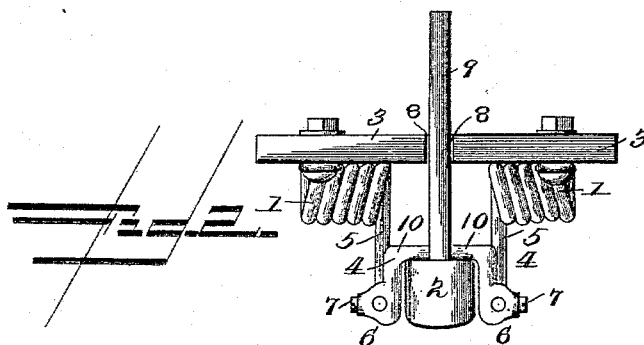
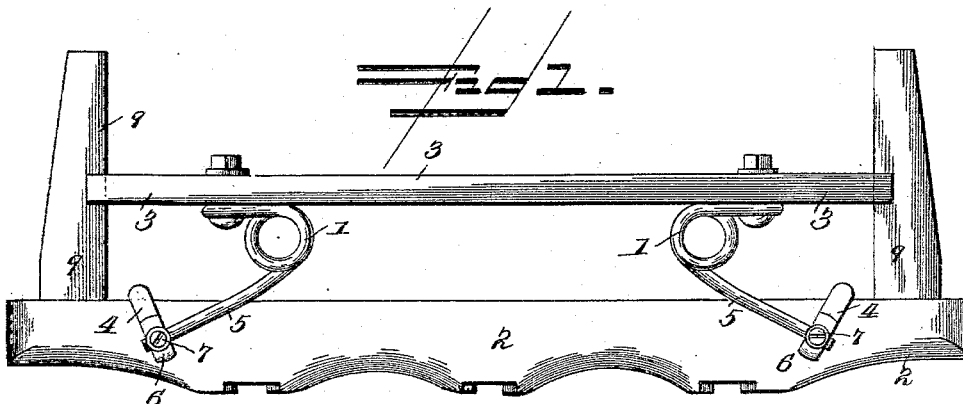


(No Model.)

G. S. & H. C. NEAL.
BOLSTER SPRING.

No. 490,083.

Patented Jan. 17, 1893.



Witnesses
C. H. Stewart.
H. J. Riley.

Inventors
George S. Neal.
and
Henry C. Neal.
By their Attorneys,
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

GEORGE S. NEAL AND HENRY C. NEAL, OF EDDYVILLE, NEW YORK.

BOLSTER-SPRING.

SPECIFICATION forming part of Letters Patent No. 490,083, dated January 17, 1893.

Application filed August 10, 1892. Serial No. 442,688. (No model.)

To all whom it may concern:

Be it known that we, GEORGE S. NEAL and HENRY C. NEAL, citizens of the United States, residing at Eddyville, in the county of Cattaraugus and State of New York, have invented a new and useful Bolster-Spring, of which the following is a specification.

The invention relates to improvements in bolster springs for vehicles.

The object of the present invention is to provide a simple and inexpensive bolster spring for vehicles, which may have its tension readily adjusted to suit the character of the load to be supported, and to prevent the body of a vehicle bumping against its bolsters.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a side elevation of a bolster spring constructed in accordance with this invention. Fig. 2 is an end elevation of the same. Fig. 3 is a detail perspective view showing the oppositely disposed springs and the adjustable connecting yoke.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates oppositely disposed springs arranged in pairs at each end of a bolster 2 and supporting a spring board 3 and having spring arms depending at opposite sides of the bolster and connected by adjustable yokes 4. The spring-board is adapted to support a body or wagon bed, and each pair of springs is bolted to the lower face of the board and consists of coils disposed transversely of the spring-board, and having their depending spring arms 5 arranged at their inner ends. The adjustable yoke 4 which connects the spring-arms of each pair of springs straddles the bolster, and is rectangular and is provided at the ends of its depending sides with sockets 6 to receive the spring arms and with set screws 7 which engage the arms and secure

the yoke at any desired adjustment. By adjusting the yoke on the arms the tension of the springs is regulated and adjusted to the weight to be supported, and by such adjustment the height of the spring-board and wagon body to be supported thereon may be regulated.

It will be seen that the bolster spring is simple and comparatively inexpensive in construction, and is adapted to be applied to any vehicle having bolsters.

The ends of the spring board are provided with recesses 8 to receive the standards 9 which rise from the ends of the bolster. The cross pieces 10 of the yokes are rounded and bear upon the bolster and are adapted to be turned in the adjustment of the yoke.

What we claim is—

1. The combination of a bolster, a spring board, springs arranged on opposite sides of the bolster and secured to the spring board and provided with spring arms depending from the spring board and arranged at the sides of the bolster, and a yoke straddling the bolster and adjustably secured to the spring arms, whereby the tension of the springs is adjusted substantially as described.

2. The combination of a bolster, a spring board, springs secured to the latter and arranged on opposite sides of the bolster and having depending spring arms, and a yoke straddling the bolster and provided with sockets receiving the spring arms and having set screws to engage the arms and secure the yoke at any desired adjustment, whereby the tension of the springs is regulated substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

GEORGE S. NEAL.
HENRY C. NEAL.

Witnesses:

ENOS EDDY,
NELSON J. MORTON.