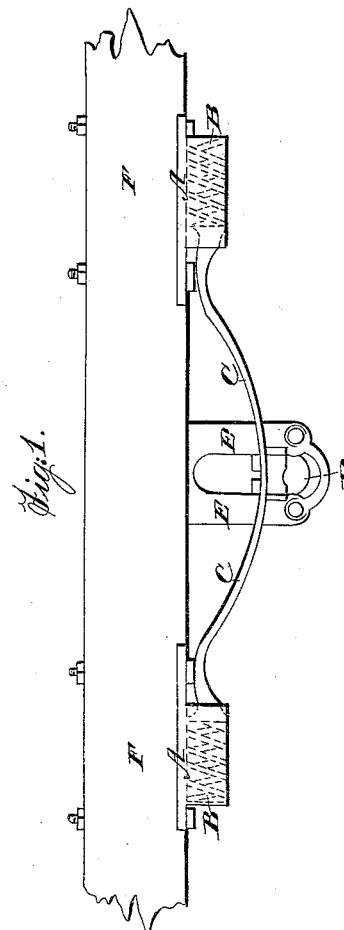
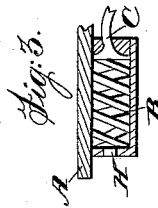
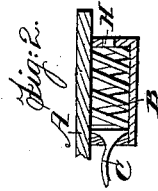


P. RILEY.
Car Spring.

No. 1,180.

Patented June 21, 1839.



UNITED STATES PATENT OFFICE.

PATRICK RILEY, OF SHAMOKIN, PENNSYLVANIA.

SPRINGS FOR RAILROAD-CARS.

Specification of Letters Patent No. 1,180, dated June 21, 1839.

To all whom it may concern:

Be it known that I, PATRICK RILEY, of the town of Shamokin, in the county of Northumberland and State of Pennsylvania, have
5 invented a new and useful Improvement in the Arrangement of Springs for Railroad-Cars, &c., which is described as follows, reference being had to the annexed drawing of the same, making part of this specification.

Figure 1, represents a side elevation of a part of a car to which one set of the springs are applied. Fig. 2, represents a vertical
15 section of the same part, through the boxes containing the spiral springs.

A A Figs. 1 and 2 represent the boxes for containing the spiral springs and the ends of the bow-spring. These boxes are made of cast iron, of suitable size and shape
20 to receive the spiral springs and the ends of the bow spring and to allow them to play easily therein and are fastened to the under side of the side timber F of the car or other situation where it may be required to place
25 them.

B B are the spiral springs made of good steel in the usual manner, and placed in the boxes A A.

C represents the bow-spring, or arch
30 plate. This is made of good steel and is fastened at its center to the journal box—its ends extending from said journal box to

the right and left into the boxes A A and pressing against the spiral springs therein.

F represents a section of one of the side
35 timbers of a car to which the spiral spring boxes and adjusting plate are fastened.

E represents the guard or adjusting side plate for adjusting the car or journal box.

This description refers to the application
40 of this improvement to rail road cars; but it may be applied to carriages of various descriptions, and to other objects.

One great advantage to be derived from the before described mode of application of
45 spiral springs in combination with the inverted arch spring, is, the great saving of expense in the construction of rail road cars—one set of springs of this description being furnished for less than one third the expense
50 of the ordinary elliptic spring and sustaining the same weight.

What I claim as my invention and desire to secure by Letters Patent, is—

The application of the spiral springs combined with the inverted arch or bow spring
55 or plate to locomotive rail road cars, and other objects in the manner before described, or in any other mode substantially the same.

PATRICK RILEY.

Witnesses:

WM. P. ELLIOT,
J. L. RADCLIFF.