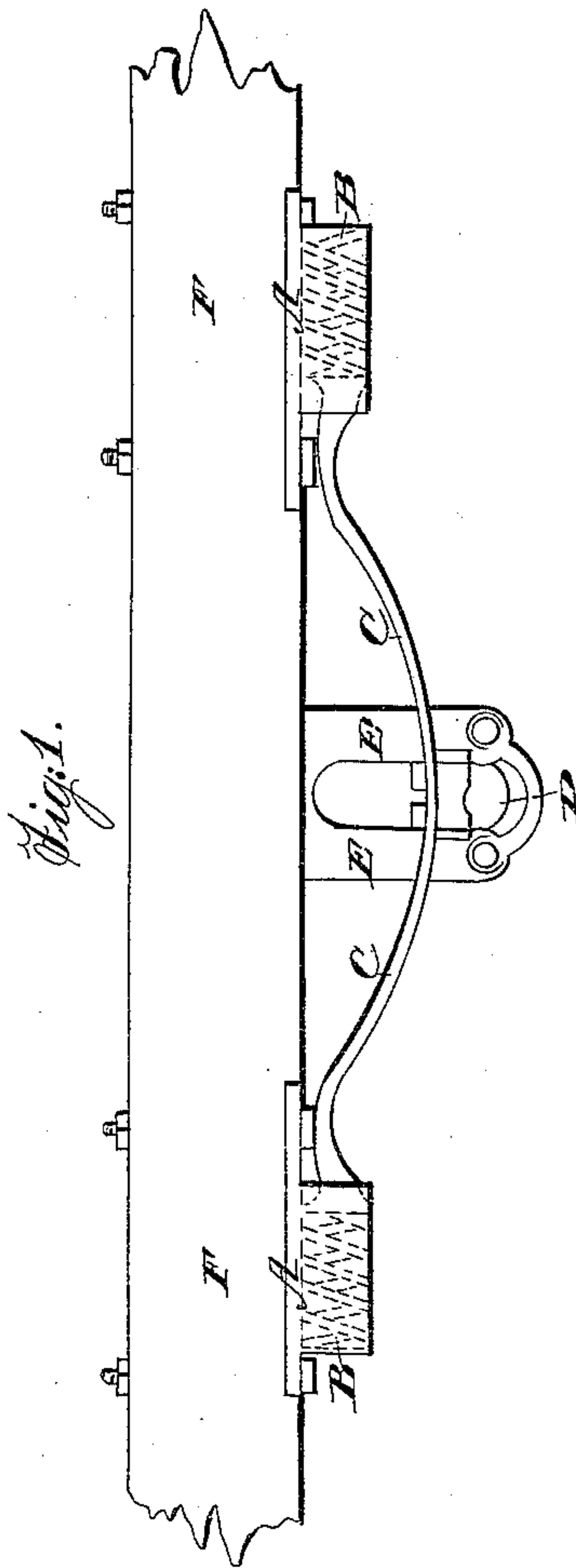
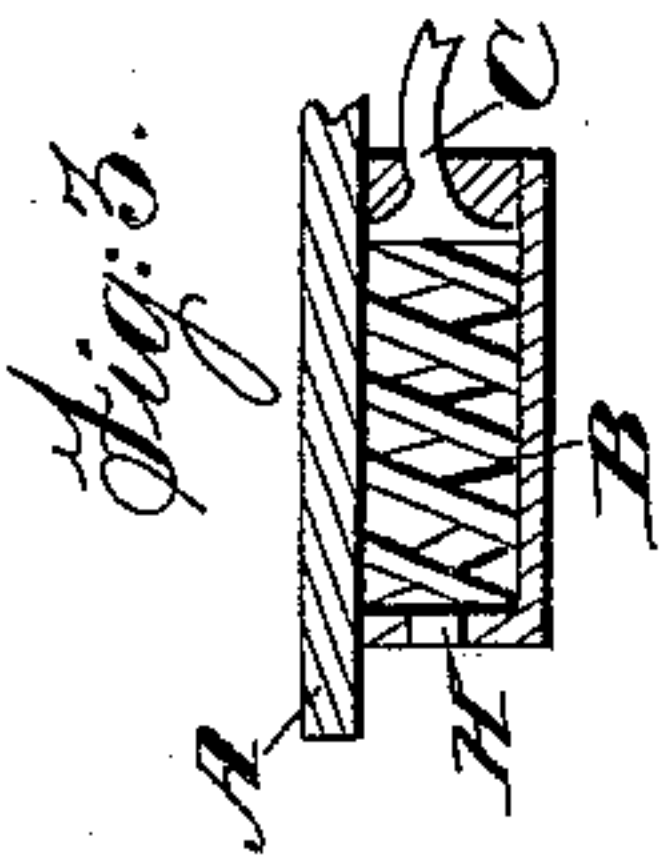
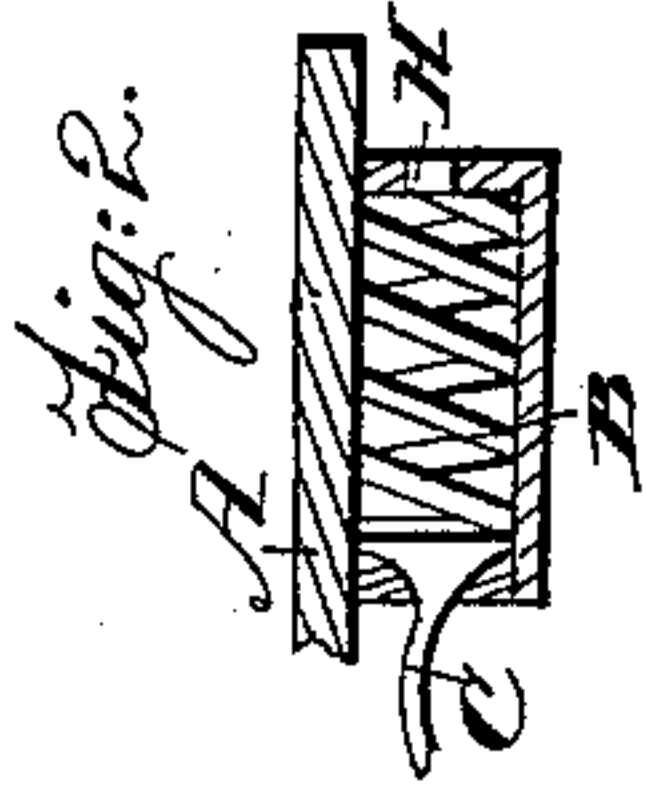


P. RILEY.
Car Spring.

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 North-
umberland 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 draw-
ing of the same, making part of this specifi-
10 cation.

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
section of the same part, through the boxes
15 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.

30 C represents the bow-spring, or arch
plate. This is made of good steel and is fas-
tened 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 de-
scriptions, 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 in-
verted arch spring, is, the great saving of ex-
pense 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 sustain-
ing the same weight.

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

The application of the spiral springs com- 55
bined with the inverted arch or bow spring
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.