

A. POTTS.
Car Spring.

No. 110,497.

Patented Dec. 27, 1870.

Fig. 1.

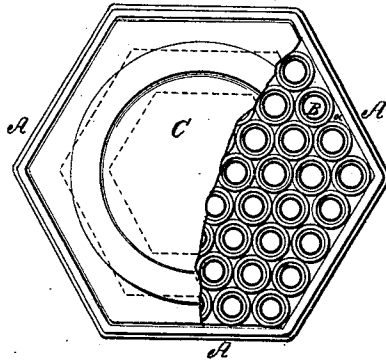
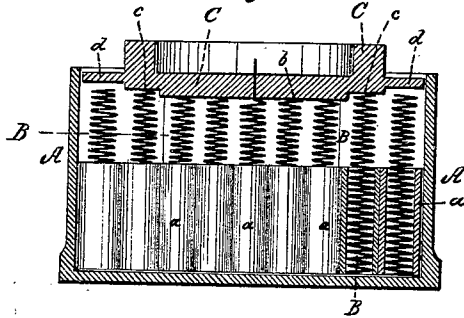


Fig. 2.



Witnesses:
L. S. Hoabee.
A. F. Roberts.

Inventor:
A. Potts
per Munn & Co.
Attys

UNITED STATES PATENT OFFICE.

ALBERT POTTS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN RAILWAY-CAR SPRINGS.

Specification forming part of Letters Patent No. **110,497**, dated December 27, 1870.

To all whom it may concern:

Be it known that I, ALBERT POTTS, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Railroad-Car Spring; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 represents a plan or top view, partly in section, of my improved railroad-car spring. Fig. 2 is a vertical central section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new manner of arranging and compressing the spiral springs for railroad-cars, so that the same will increase in power of resistance with the weight.

The case A, which contains the springs, is provided with a series of cells or short tubes, *a a*, that project from the bottom of the case, being rigidly secured thereto. These tubes or cells are placed as close together as it is desired to arrange the springs, and are of the same length to which it is desired to compress the springs. The spiral springs B B are with their lower ends fitted in said tubes, and are by the same always kept the requisite distances apart, and straight when contracted.

I provide the plunger or plate C, which rests on the springs B, with steps on the under side, so that it will not rest on all springs when light. As shown in the drawings, the central portion, *b*, of the said plate is deepest, so as to rest on the central springs as long as the car is light. When the plate C is weighted the central springs will be compressed, and the step *c* will bear on the next outer row of springs, so that the supporting-power is thus increased, while with a heavier load the outer step, *d*, will be brought down when all springs will be in action. The steps can be arranged in annular or other form in suitable number.

Some springs may have their upper ends fitted through the plate C and clinched, while their lower ends are riveted or otherwise fastened to the bottom of the case A, such springs serving to hold the plate C in place.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The plate C, provided with steps on its lower surface for compressing the springs successively, substantially as herein shown and described.

ALBERT POTTS.

Witnesses:

JNO. JAY WARD,
ERASTUS P. SERVER.