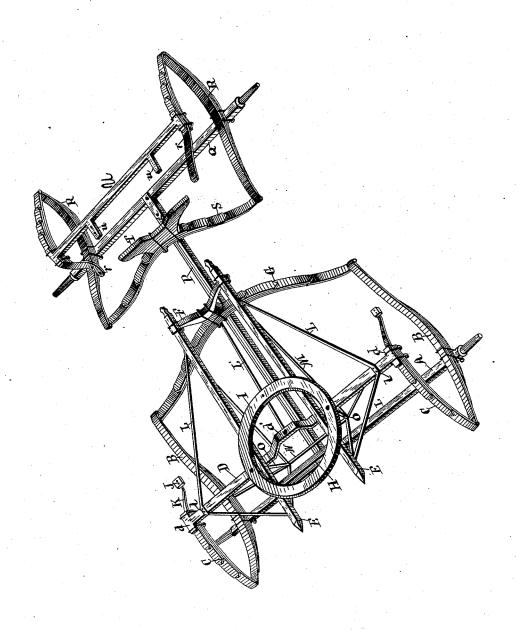
## R. BLUNT.

## PLATFORM SPRING FOR CARRIAGES.

No. 301,852.

Patented July 15, 1884.



WITNESSES:

W. J. Robertson.

INVENTOR

Robert Blunt

BY J. J.W. Robertson

ATTORNEY.

## UNITED STATES PATENT OFFICE.

ROBERT BLUNT, OF MAQUOKETA, IOWA.

## PLATFORM-SPRING FOR CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 301,852, dated July 15, 1884.

Application filed September 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, ROBERT BLUNT, a citizen of the United States of America, residing at Maquoketa, in the county of Jackson and State of Iowa, have invented certain new and useful Improvements in Carriages, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an improvement in the running-gear of carriages; and it consists in the peculiar construction and arrangement of parts hereinafter described, and then point-

ed out in the claims.

In the accompanying drawing, (which rep-15 resents a perspective view of the running-gear with the body, shafts, and wheels removed,) A represents the axle to which the lower part of the spring B is fastened by clips, the other portion, C, being attached to the spring-iron 2c D, on the top of which the spring-hounds E, made of wood, are secured, which hounds extend backward, and are secured to an iron head-block, F, by clips, and said head-block is secured to the center of a transverse spring, G, whose ends are connected to the side springs, B. The forward ends of the hounds are connected by a brace, H. Above these hounds is the fifth-wheel I. The spring-iron D extends across the gear from one spring to the other, 30 and has at each end a T-head, d, to which the springs are attached, one of the leaves of which is extended backward, as shown at K, to form a support for the step J, which is riveted there-The spring-bar D is raised in the center at d', to allow of screwing up the king-bolt, and to form a bearing-surface for the top gear. The hounds are stayed by braces L, running from near their ends to near the ends of the springiron D, and are bolted thereto at l. L' is a 40 brace running from the transverse spring G to the fifth-wheel I and spring-iron D.

At M are shown braces running longitudinally under the hounds and spring-iron, and at N is another brace running lengthwise of the spring-iron. The braces M and N are securely bolted to the hounds and spring-iron, respectively, and both pass under the studs O, which may pass through the hounds and spring-bar.

o P is the reach, attached to the front axle by spring G, connected to and supporting a bolt passing through it and through the reach-lead-block, substantially as described.

irons, and Q is the rear axle, also secured by irons, which are bolted fast or otherwise secured to the reach. To the rear axle are secured springs R, similar in form to those shown 55 attached to the front axle; but one of the leaves r of each rear spring is extended forward and inward, so as to form a means of attaching the spring to the body. The forward ends of the lower springs are connected to a transverse 60 spring, S, in the center of which is secured a head-block, T, by clips, which head-block is intended to be attached to the body of the carriage. At U is a transverse spring-iron extending from spring to spring, and fastened 65 thereto by clips. This iron is similar to the iron D, except that instead of having the rise in the center and the hole for the king-bolt it has two arms, u, by means of which it is attached securely to the body.

I have not indicated in the drawing any particular mode of connecting the transverse and side springs to each other; but any suitable connection may be employed at the will of the builder; nor have I indicated the ornamentation that may be employed on the various parts, which may of course be varied at

will.

What I claim as new is-

1. The combination, with the side springs 80 of a vehicle, of the spring-iron D, head-block F, hounds E, connected together and supported by said head-block, and the transverse spring G, arranged under, connected to, and supporting the head-block F, substantially as 85 described.

2. The combination, with the side springs of a vehicle and the spring-iron D, of the headblock F, connected to and supporting the hounds E, the transverse spring G, supporting said head-block, and having its ends connected to the side springs, and the braces L, connecting the hounds and spring-iron, substantially as described.

3. The combination, with the side springs 95 of a vehicle, of the spring-iron D, having T-shaped heads for receiving said side springs, circle I, head-block F, hounds E, connected by said head-block and arranged between said circle and spring iron, and the transverse 100 spring G, connected to and supporting said head block substantially as described.

E, head-block F, spring G, and brace I/, connecting the spring-iron and the spring G, substantially as described.

5. The combination, in a front running-gear, of the axle A, spring BC, spring-iron D, spring G, hounds E, connected with the spring G, diagonal braces L, connected to the spring. diagonal braces L, connected to the spring-10 iron near the spring and at their opposite ends to the hounds, longitudinal braces M, and transverse braces N, crossing each other under the stud O, substantially as described.

4. The combination, in the front running- 6. The combination, with a spring, C, of a gear of a vehicle, of the spring-iron D, hounds step, J, fastened directly to an extension of one 15 of the leaves, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 2d day of Au-

gust, 1883.

ROBERT BLUNT.

Witnesses:

R. P. BADER, O. A. BADER.