

(No Model.)

W. N. RUMELY.

ROAD ENGINE.

No. 273,396.

Patented Mar. 6, 1883.

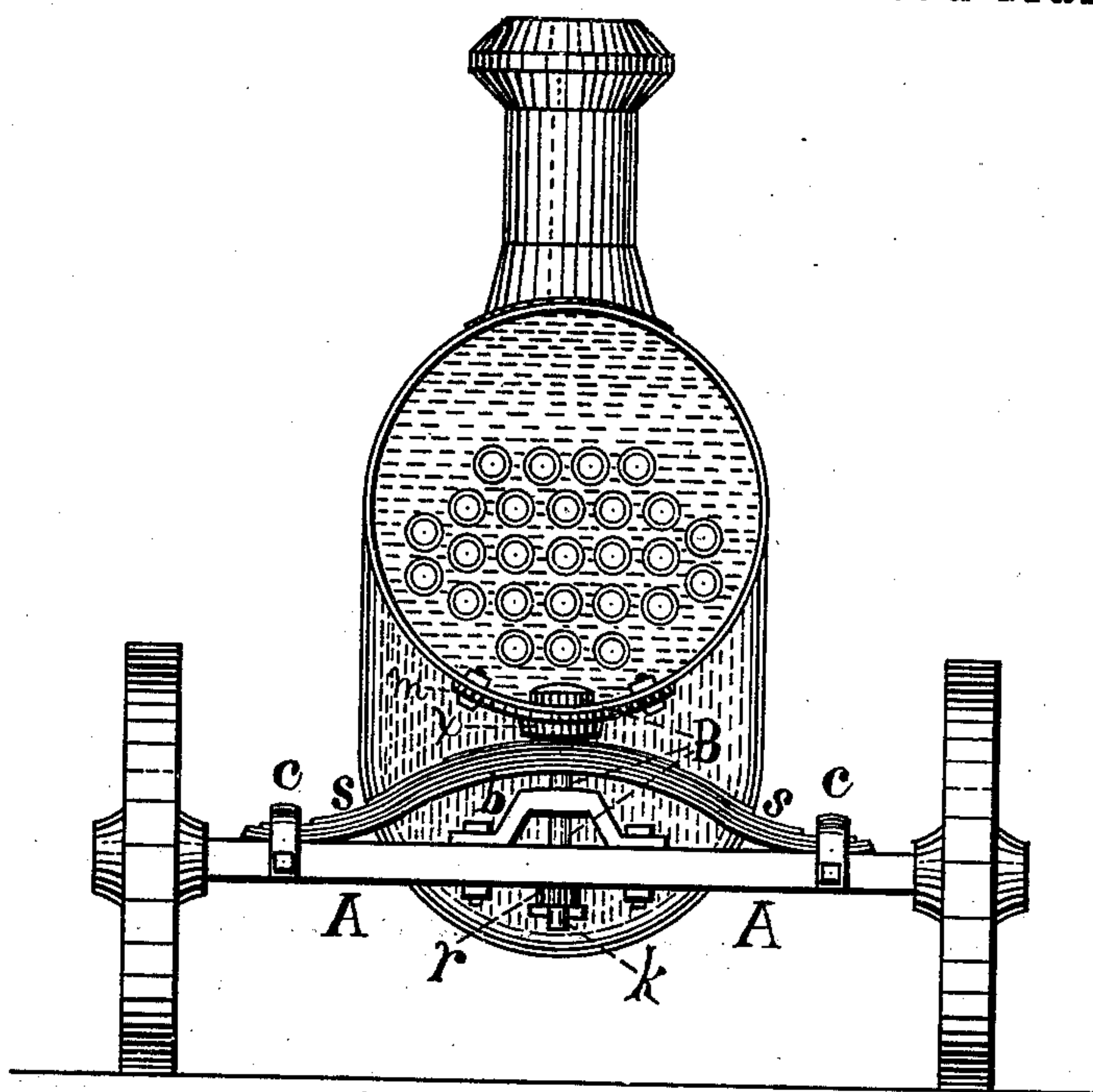


Fig. 1.

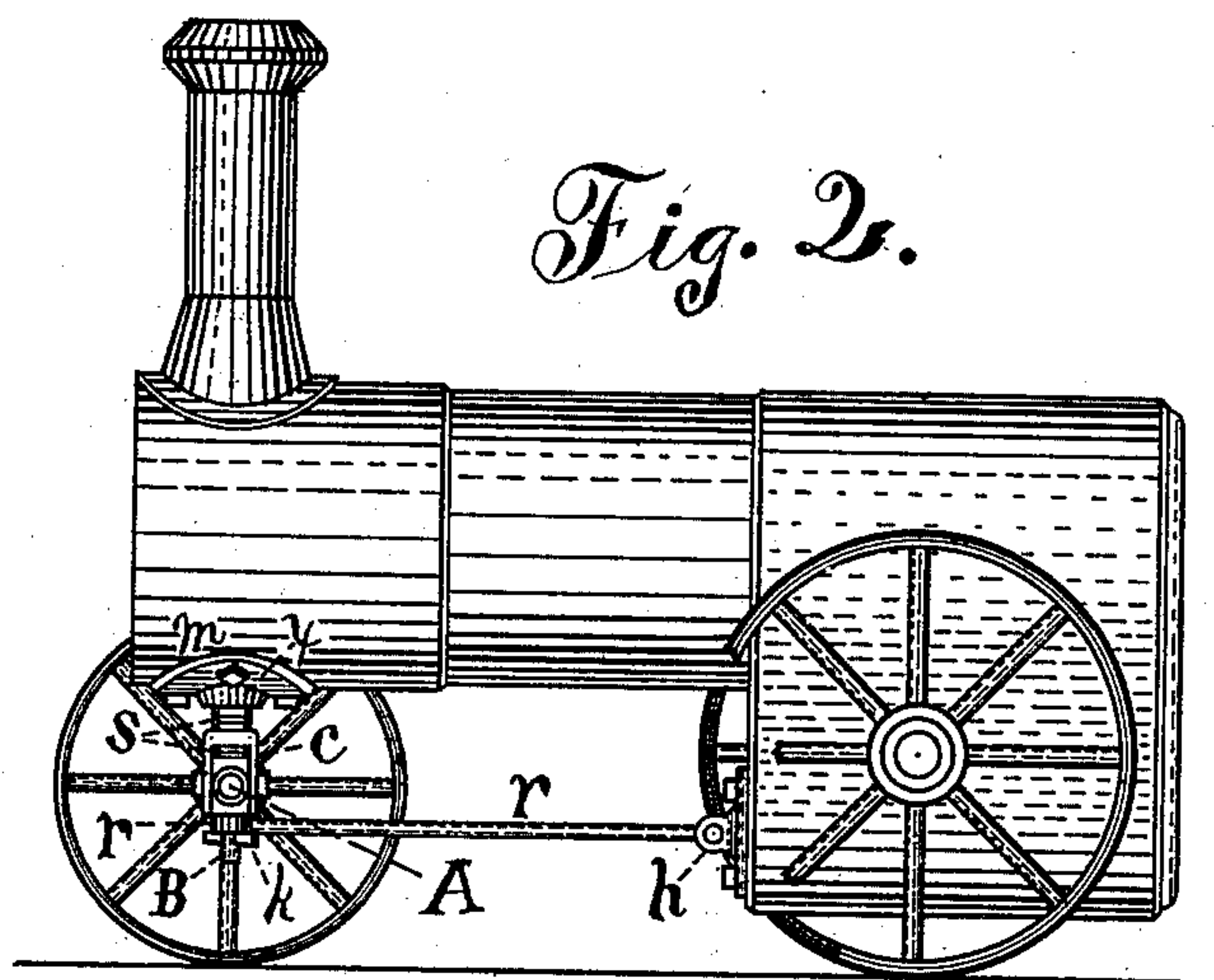


Fig. 2.

Witnesses.
Adolph Mayer
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per E. P. Robbins, M. E.,
his att.

UNITED STATES PATENT OFFICE.

WILLIAM N. RUMELY, OF LA PORTE, INDIANA.

ROAD-ENGINE.

SPECIFICATION forming part of Letters Patent No. 273,396, dated March 6, 1883.

Application filed December 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. RUMELY, a citizen of the United States, residing at La Porte, in the county of La Porte and State of Indiana, have invented a new and useful Improvement in Traction-Engines, of which the following is a specification.

My invention relates to improvements in the running-gear of a traction-engine; and the object of my invention is to produce a simple, substantial, and efficient cushioning device for the forward end of the boiler.

In traction and similar engines it is desirable to have the boiler and all machinery attached thereto relieved of shocks occasioned by jostling where such engines are driven over rough roads.

Figure 1 is a front end view of the boiler of a traction-engine shown mounted upon my improved running-gear. Fig. 2 is a side view of the same.

In the figures, A indicates the front axle; B, the king-bolt or center-pin; *b*, a brace for the king-bolt; *s s*, a half-elliptical spring; *c c*, clips for keeping the ends of the springs in position; *m*, a casting bolted to the under side of the shell and provided with a boss, *x*, through which the king-bolt B passes. *r* is a stay-rod hinged at *h* to the fire-box at one end and having an eye at the other, through which the king-bolt B passes.

In Fig. 1 the smoke-box head is removed, so that the interior of the smoke-box can be seen and a better idea of the construction of my improvements obtained. This view, then, shows the tube-head and the tube ends.

As seen in Fig. 1, the forward end of the boiler is supported by means of a half-elliptical spring, *s s*, consisting of a number of steel leaves, which is the usual construction of such springs. In the center of the spring *s s* there is a hole, through which the king-bolt B passes and is free to move. The ends of the spring *s s* rest upon the axle A, and when the spring is pressed down or rises up these ends adjust themselves along the top of the axle. The clips *c c* are bolted onto the axle A and serve to keep the spring ends in place on the axle.

The casting *m* is bolted to the under side of the smoke-box sheet, as shown, and its boss *x* bears upon the top of the spring *s s*. The casting has a hole through the center of the boss, through which the king-bolt B passes. The head of the king-bolt, which is shown in Fig. 1, may rest upon the inside of the smoke-box sheet or upon a plate or a casting through which there is a hole for the king-bolt, and which may be bolted to the shell by means of the same bolts which are used to fasten the casting *m* to the shell. A wrought-iron brace, *b*, for the king-bolt, and through which there is a hole suitable for the king-bolt to pass freely, is bolted to the upper side of the axle, as shown. This brace prevents the king-bolt from being bent or pushed to one side by any severe side vibrations of the boiler.

Fig. 2 is intended to show how provision is made for preventing any derangement of the device on account of thrusts or vibrations in the direction of the length of the boiler. This figure shows a stay-rod, *r*, hinged at one end to the fire-box head at *h*, and having an eye at the other, through which the king-bolt B passes. The eye for the king-bolt is shown placed under the axle A; but it might be placed above the axle.

A key, *k*, may be used to prevent the king-bolt from being drawn out of the axle; but one or more nuts might answer the same purpose.

I claim—

1. The combination of the half-elliptical spring *s s* with the king-bolt B and the axle A, substantially as shown and described.

2. The combination of the half-elliptical spring *s s* with the king-bolt B, the axle A, and the stay-rod *r*, all substantially as shown and described.

3. The combination of the half-elliptical spring *s s* with the king-bolt B, the axle A, the king-bolt brace *b*, the casting *m*, the clips *c c*, and the stay-rod *r*, all substantially as shown and described.

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Witnesses:

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