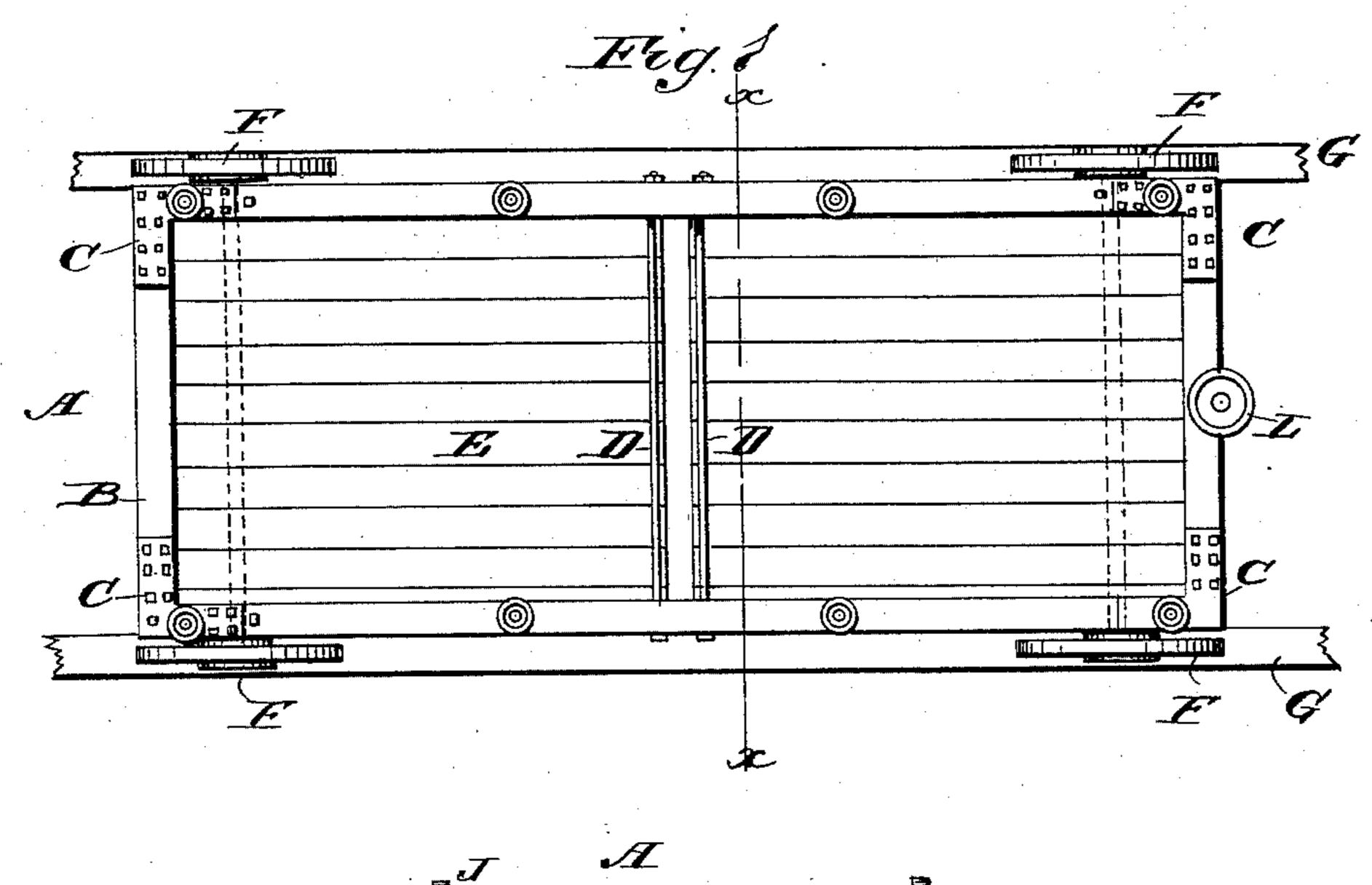
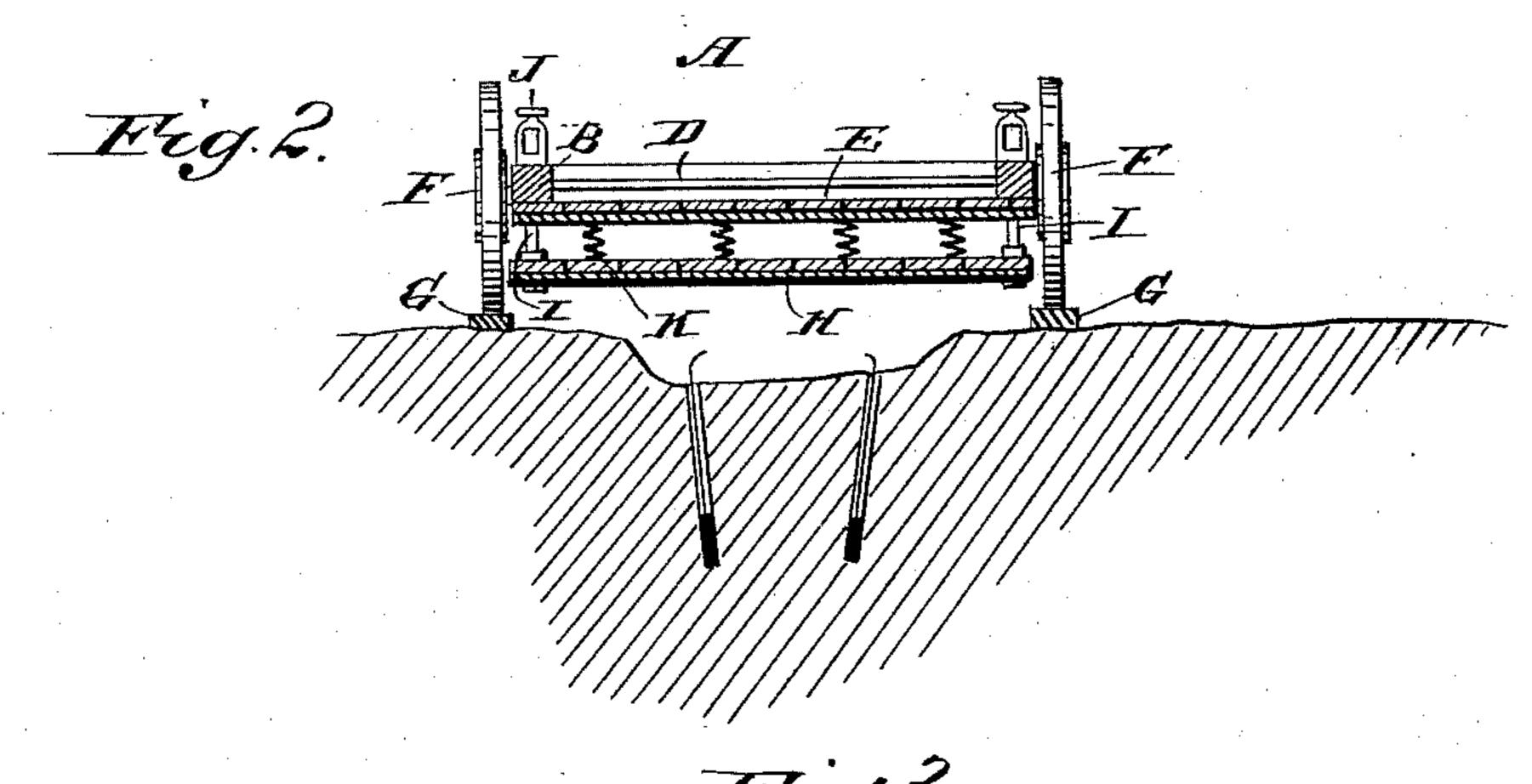
(No Model.)

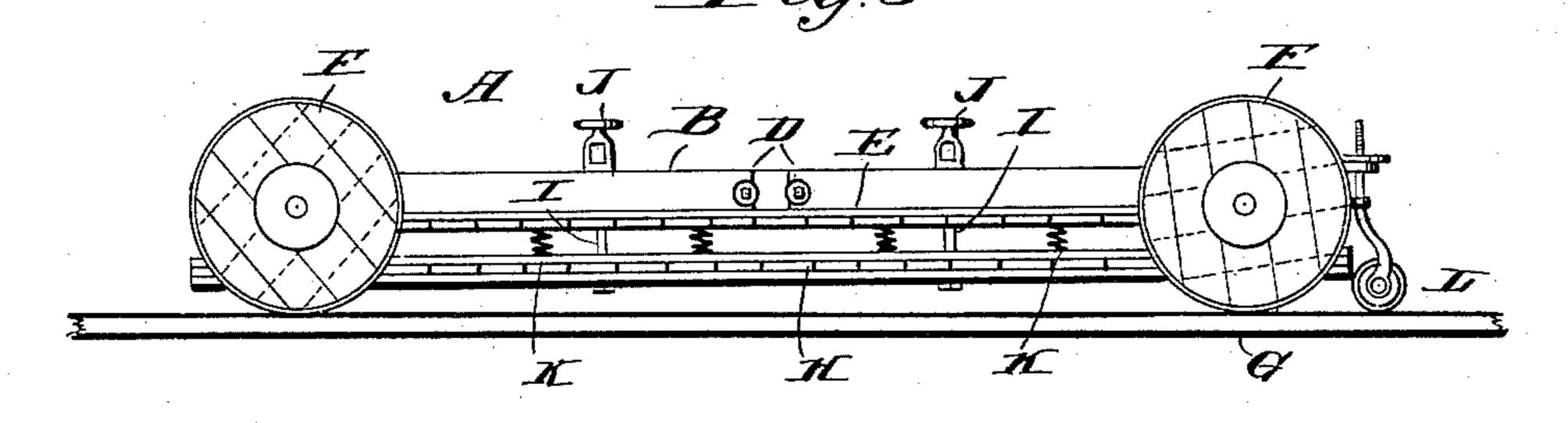
## A. R. SHANNON. BLASTING CAR.

No. 431,289.

Patented July 1, 1890.







WITNESSES: Francis Ma artle. C. Sedgwick N. R. Shannon
BY Munn + &

## United States Patent Office.

ANDREW R. SHANNON, OF WATERTOWN, ASSIGNOR OF ONE-HALF TO MOFFETT, HODGKINS & CLARKE, OF SYRACUSE, NEW YORK.

## BLASTING-CAR.

SPECIFICATION forming part of Letters Patent No. 431,289, dated July 1, 1890.

Application filed March 25, 1890. Serial No. 345,237. (No model.) Patented in Canada July 11, 1888, No. 29,322.

To all whom it may concern:

Be it known that I, Andrew R. Shannon, of Watertown, in the county of Jefferson and State of New York, have invented a new and Improved Blasting-Car, (for which I have obtained Letters Patent in Canada, No. 29,322, dated July 11, 1888,) of which the following is a full, clear, and exact description. ing-charg in Fig. 2.

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The object of the invention is to provide a new and improved blasting-car specially designed for firing a blasting-charge in a quarry, street, or other place without injury to persons or property from the flying material thrown up by the explosion.

The invention consists of a spring-pressed false bottom, held to slide vertically below the bottom of a platform-car.

The invention also consists of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improvement. Fig. 2 is a transverse section of the same on the line xx of Fig. 1 and as applied, and Fig. 3 is a side elevation of the same.

The improved blasting-car is provided with a platform A, having a strong rectangular frame B, made of wood, its corners being reenforced by metallic binding-plates C. The sides of the rectangular frame B are bound together by suitable rods D, as shown. On this frame B is formed a bottom E, made of two layers of planks, the upper layer running longitudinally and the lower layer transversely, the bottom of the under layer being plated with one-half-inch boiler-plate, as is plainly shown in the drawings.

The frame B is mounted on wheels F, preferably constructed of wood with iron bands, so as to be able to withstand any concussion from the blasting. The axles are preferably of metal and square in cross-section, with journals passing through the wheels having a cast-iron hub-plate. A steel tire is also bolted on each of the wheels, which latter are adapted to run on wooden tracks G, placed alongside on the presses that tween the tween the control of the

the trench or other place in which the blasting-charge is located, as is plainly illustrated in Fig. 2.

Below the bottom E of the platform-car A is arranged a false bottom H, made of two layers 55 of planks, of which the uppermost layer runs longitudinally and the lowermost one transversely, the latter being also covered on the under side with sheet metal. This false bottom H is supported on bolts I, passing through 60 the sides of the frame B and provided at their upper ends with nuts J, so as to raise or lower the false bottom H to any desired distance below the bottom E of the platform-car. The bolts I are so arranged that the false bottom 65 H can slide upward on them. Between the false bottom H and the bottom E of the platform-car A are held springs of any desired shape, form, or material, so as to hold the false bottom H in a lowermost position, at the 70 same time making said bottom yielding in case of pressure from underneath.

On the front beams of the rectangular frame B is held a caster-wheel L, adapted to be raised or lowered and serving to raise the forward 75 wheels of the car from the ground, in order to facilitate the moving of the car from place to place or to more easily change the direction of the car.

The purpose for which this car is specially 80 designed is to enable any person to excavate a trench in the street of a populous town, or any other exposed locality, in solid rock, firing each blast under the car, which latter is placed in position over the trench and over 85 the blasting-charge, as illustrated in Fig. 2, so that the charge, when fired, throws the material against the false bottom H. The effect of such material being thrown forcibly against the lower or false bottom is to raise 90 it, whereupon it slides on the bolts I and compresses the springs which are interposed between the two bottoms. As soon as the blast is fired the car is easily and quickly rolled out of the way, leaving the excavation clear 95 of obstructions for the removal of the material loosened by the blast.

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

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1. A blasting car comprising a platform-car and a spring-pressed false bottom held to slide vertically below the bottom of the said platform-car, substantially as shown and described.

2. The combination, with a car, of a springpressed false bottom held to slide below the bottom of the said car, substantially as shown

and described.

3. In a blasting-car, the combination, with a platform-car, of bolts projecting downward from the said car, a false bottom supported on the said bolts, and springs interposed between the said false bottom and the car, substantially as shown and described.

4. In a blasting-car, the combination, with a platform-car, of bolts projecting downward from the said car, a false bottom supported

on the said bolts, springs interposed between the said false bottom and the car, and nuts 20 screwing on the said bolts for raising and lowering the false bottom, substantially as shown and described.

5. In a blasting-car, the combination, with a platform-car, of bolts projecting downward 25 from the said car, a false bottom supported on the said bolts, springs interposed between the said false bottom and the car, nuts screwing on the said bolts for raising and lowering the false bottom, and an adjustable caster- 30 wheel held on one end of the said car, substantially as shown and described.

ANDREW R. SHANNON.

Witnesses:

L. McGorm, Fred Hooper.