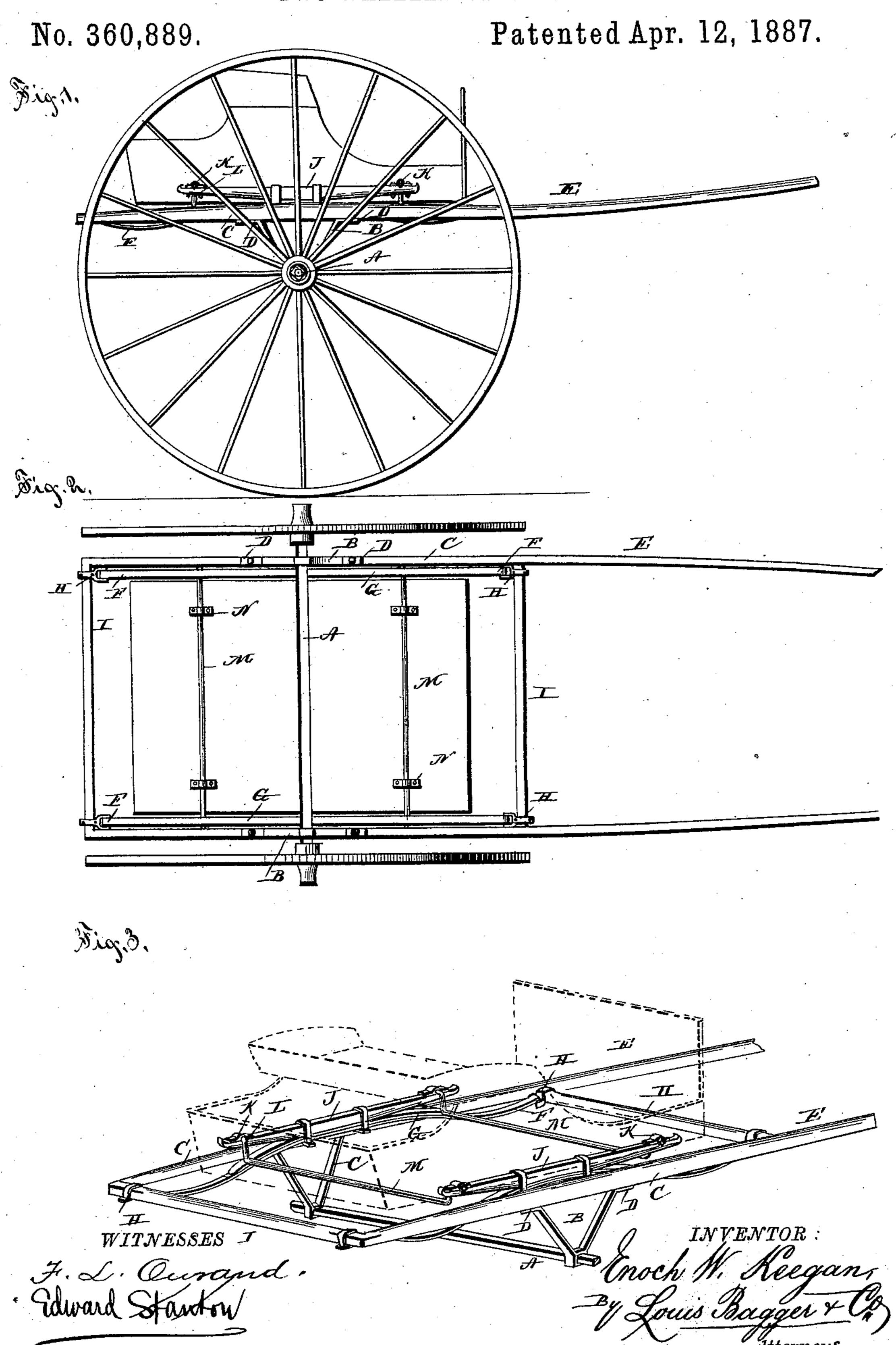
## E. W. KEEGAN.

### TWO WHEELED VEHICLE.



# United States Patent Office.

ENOCH WOOD KEEGAN, OF CRAWFORDSVILLE, INDIANA.

### TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 360,889, dated April 12, 1887.

Application filed July 17, 1886. Serial No. 208,246. (No model.)

To all whom it may concern:

Be it known that I, ENOCH WOOD KEEGAN, a citizen of the United States, and a resident of Crawfordsville, in the county of Mont-5 gomery and State of Indiana, have invented certain new and useful Improvements in Two-Wheeled Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will ento able others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which-

Figure 1 is a side view of as much of my improved two-wheeled vehicle as is necessary to illustrate its construction. Fig. 2 is a bottom view of the same; and Fig. 3 is a perspective view of the frame and the supports for the 20 body, showing the body in dotted lines.

Similar letters of reference indicate corre-

sponding parts in all the figures.

My invention has relation to that class of two-wheeled vehicles in which the body is sup-25 ported by cranks, which allow the body to receive a longitudinally-swinging motion, counteracting the horse motion; and it consists in the improved construction and combination of parts of such a vehicle, as hereinafter more 30 fully described and claimed.

In the accompanying drawings, the letter A indicates the axle, to the upper side of which two V-shaped brackets, BB, are secured near the spindles, the apices of the brackets being

35 clipped to the axle.

The side pieces of the rectangular frame C are secured to the divergingly-bent upper ends, D D, of the brackets, the downwardlycurved inner ends of the thills E E being se-40 cured so as to form continuations of the forward ends of the said side pieces, and the upwardly-curved ends F of two double-curved springs, GG, are secured by means of eyed clips H to the under sides of the end pieces, I 45 I, of the frame, having their middle portions bulging upward.

Two side bars, J J, are clipped with their middles to the upwardly-bulging middle portions of the springs, and the upper sides of so these side bars are provided near the ends with

transverse bearings K.

The outwardly-bent ends L of two wide i

double cranks, M M, are journaled in these bearings, the body being secured by means of transverse bearings N upon the under side of 55 its bottom to these double cranks, the central portions of the cranks depending. It will thus be seen that the body will be hung down between the side bars by means of the cranks, so that it will have a longitudinal swinging 60 play, which, when the vehicle is in motion, will yield to the horse motion, preventing the lat-

ter from being felt.

The side bars will be supported by the springs, which have a slight motion at their 65 ends, so that they will yield to jars from obstructions on the road, and at the same time allow the body and springs to move in a longitudinal direction, and the frame is supported above the axle by means of the V-shaped 70 brackets, so as to raise the body sufficiently, the body being supported below the side bars by hanging between the said bars from the double cranks and by the springs being supported from the under sides of the side rails of 75 the frame.

The vehicle will have an easy yielding motion on account of being supported from the cranks, and the springs, having a double curve, will be sufficiently yielding to cushion all jars 80 caused by obstructions on the road.

Having thus described my invention, I claim and desire to secure by Letters Patent of the

United States—

In a two-wheeled vehicle, the combination 85 of the axle, two V-shaped brackets or supports secured thereto, the thills secured at their rear ends to said brackets, a cross-piece at the rear ends of said thills and a crosspiece near the ends, a pair of side springs se- 90 cured at their ends to said cross-pieces, a side bar secured to each of said springs having bearings at each end, two double cranks pivotally secured in said bearings, and a body secured to said cranks between and below said 95 side bars.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

#### ENOCH WOOD KEEGAN.

Witnesses:

R. C. SMITH,

T. L. STILWELL.