

(No Model.)

R. E. ROSE.

PLOW.

No. 249,404.

Patented Nov. 8, 1881.

Fig. 1.

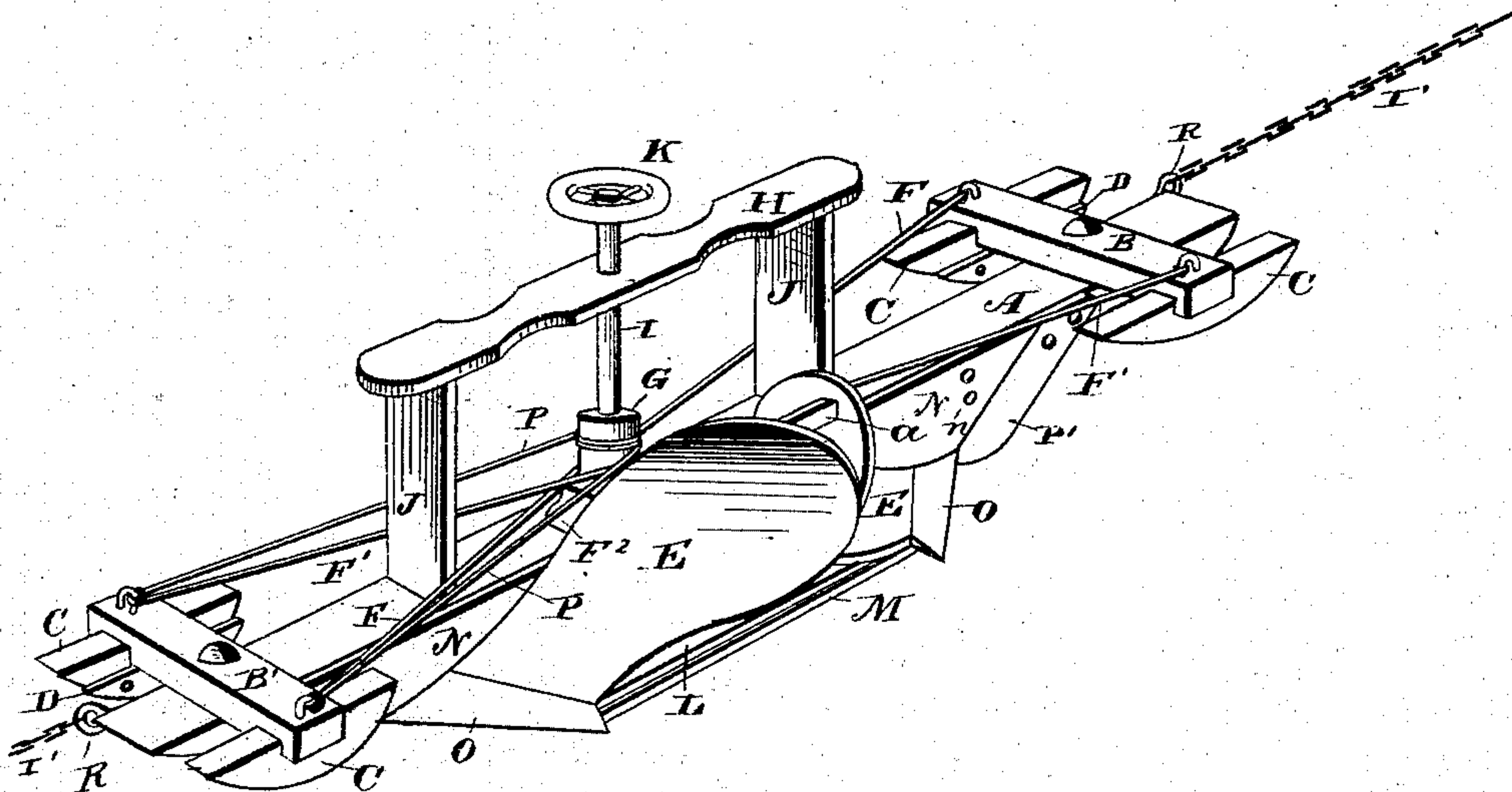
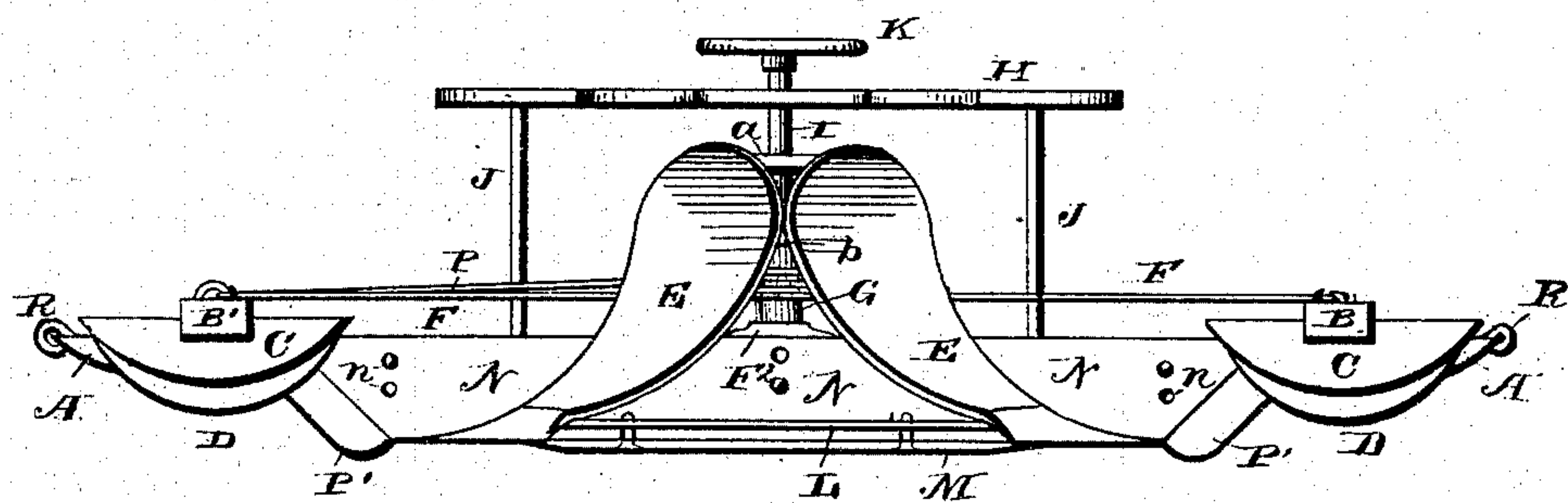


Fig. 2.



WITNESSES

Herman Moran

Frank B. Bowen.

INVENTOR

Rufus E. Rose.

By S. S. Suggitt & Suggitt.
ATTORNEY

UNITED STATES PATENT OFFICE.

RUFUS E. ROSE, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF ONE-HALF
TO CHARLES J. ALLEN, OF SAME PLACE.

PLOW.

SPECIFICATION forming part of Letters Patent No. 249,404, dated November 8, 1881.

Application filed June 3, 1881. (No model.)

To all whom it may concern:

Be it known that I, RUFUS E. ROSE, of New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in plows, the object of the same being to furnish a plow to be used in conjunction with steam-plow tackle, capable of performing heavy as well as light work, and is designed more especially to obviate the great delays and loss of time caused by the old system of balancing, turning at the head-rows, and in changing cables.

With these ends in view, my invention consists in certain details in construction and combinations of parts, as will be more fully explained, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved plow, and Fig. 2 is a side elevation of the same.

A represents the plow-beam, extending throughout the entire length of the machine, and provided with rounded or curved extremities, which cause it to ride up over obstructions, and also prevents the beam from engaging with the ground and retarding the forward movement of the plow. This beam A is straddled near each end by the cross-beams B B', the said beams being pivotally secured to the top of the beam A, and provided at their ends with the runners C, made of metal or wood, as desired, each runner being provided with a sharp metallic flange, D, extending considerably below the runners and adapted to penetrate the ground and give the runners sufficient purchase to allow the machine to be guided from the furrow just completed to new land. These cross-beams B B' are connected together by the ropes or chains F F', which latter run diagonally from one set of runners to the other, so that any motion transmitted to the runners at either end of the machine

will be communicated to the runners at the other end and allow the machine to turn or move out of the complete furrow to the new land in a much smaller space than could be accomplished if only one runner were pivoted, thereby leaving only a small portion of the land at the head-rows unplowed. The steering motion is transmitted to these runners through the medium of the chain or rope P, which latter is attached at one end to one end of the cross-beam B', and is then passed backward toward the center of the machine, where it is passed two or three times around a drum, G, rigidly secured to the shaft I, and then returned to the cross-beam B' and secured to the opposite end thereof.

From the above it will be seen that any movement of the cross-beam B' will be transmitted to the cross-beam B through the intervention of the chains F and F'.

The lower end of the shaft I is journaled in a bearing, F², in the beam A, and passes upward through the center of the double seat H, and is provided with a steering or hand wheel, K, by which motion is imparted to the runners C to move the machine sidewise. The double seat H is supported on the standards J, and enables the operator or plowman to change his position at the end of each head-row and constantly watch the forward movement of the machine and direct its movements without inconvenience.

The right and left hand or double plow is composed of two mold-boards, E, and points O, the mold-boards being placed back to back and connected together by braces a and b, and sole M, and one landside or stock, N, the latter extending throughout the length of the plows and a slight distance beyond, and inclined from the end of the points upward and outward, which inclination affords a solid and stiff bearing for the removable colters P', which latter are secured to the beam A, immediately in front of the landside N. These colters are curved at their lower ends, and extend down to a depth slightly in excess of the plow-points or landside, so as to make a clean cut the entire depth of the ditch, and consequently take the wear from off the plow-points.

The plows are attached to the beam A by

the landside or stock N, which latter is provided with holes *n*, formed therein at suitable distances apart, by which the plows are elevated or lowered, and retained in such elevated or lowered position by bolts passing through the landside and beam, thereby enabling the operator to cut any required depth, and also cut all the furrows of the same size, for after the plows have been adjusted on the beam A it is impossible for the plow to penetrate the soil any deeper than the portion thereof exposed below the level of the beam A and runners C C, as the latter are adapted to ride on the surface of the ground, and consequently act as a gage.

The sole M of the plows runs between and connects the outer ends of the plow-points O, and serves as a bearing for the machine on this side, and holds same in an upright position, which is absolutely necessary in marsh lands. This foot is connected to the brace L in any suitable manner, so that it can be adjusted and the central portion be made to run slightly below the under side of the plows, with the corners or ends so rounded and protected as not to present a surface or edge for stones and dirt to collect and impede the progress of the machine.

R are hooks placed on opposite ends of the beam A, having pieces of rope or chain I' secured thereto, by which the machine is secured to the cable and steam-plow tackle.

Any suitable means for operating the plow may be employed—such, for instance, as two engines placed on opposite sides of the field, having winding-drums placed thereon, around which the cable is alternately wound and unwound to draw the machine backward and forward; but I do not limit myself to such means, as one engine and one windlass placed on opposite sides of the field will accomplish the same object.

My machine can be employed in heavy as well as light soil, and is preferable to the machines ordinarily employed, in that no balancing or changing cable is necessary; neither are derricks required to turn the plow completely over, as my machine is ready to start on the return in the new land without removing it from the ground, and the contour of the plows is such that the one behind follows in the path of the preceding one, and does not in any manner impede the progress thereof. On arriving at the head-row the plowman has only to reverse himself in his seat, put his steering-wheel into position, and immediately return on another furrow. In the old style of plows, on arriving at the head-rows the cutting-shears are in the ground and the idle one up in the air, several men being required to balance the

plow and adjust the cable before the return can be made.

My machine is simple in construction, of small cost, can be operated by one man, and is equally well adapted for heavy as for light plowing.

I would have it understood that I do not limit myself to the exact construction shown and described, but consider myself at liberty to make such changes as come within the spirit and scope of my invention.

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

1. In a plow, the combination, with a beam mounted on suitable runners, of a right and left hand plow placed back to back and connected together by suitable braces, a landside or stock for the double plow, by which it is adjusted vertically, and a vertically-adjustable sole placed on a level with the bottom of the plow and extending between the outer ends of the points, substantially as set forth.

2. In a plow, the combination, with a beam curved at both ends and mounted on suitable runners, a landside or stock, right and left hand plows and sole, of inclined cutters placed on a line with the landside or stock at both ends thereof, and adapted to protect the projecting end of the landside and point, substantially as set forth.

3. In a plow, the combination, with a beam mounted on pivoted runners, the said beam and runners adapted to move on the surface of the ground, of a right and left hand plow adjustably secured to the beam by a single landside or stock, and adjustable cutters secured to said beam at both extremities of the landside, substantially as set forth.

4. The combination, with a beam mounted on runners and carrying a right and left plow, of cords or chains connecting the said runners, and a chain connecting one set of runners with a winding-drum rigidly secured on the steering-wheel shaft, substantially as set forth.

5. In a plow, the combination, with a beam having a right and left hand plow adjustably secured thereto, of runners pivoted to said beam, having metallic flanges adapted to penetrate the ground, and suitable mechanism for turning the runners simultaneously, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of May, 1881.

RUFUS E. ROSE.

Witnesses:

P. A. ORY,
JNO. J. WARD.