

No. 885,341.

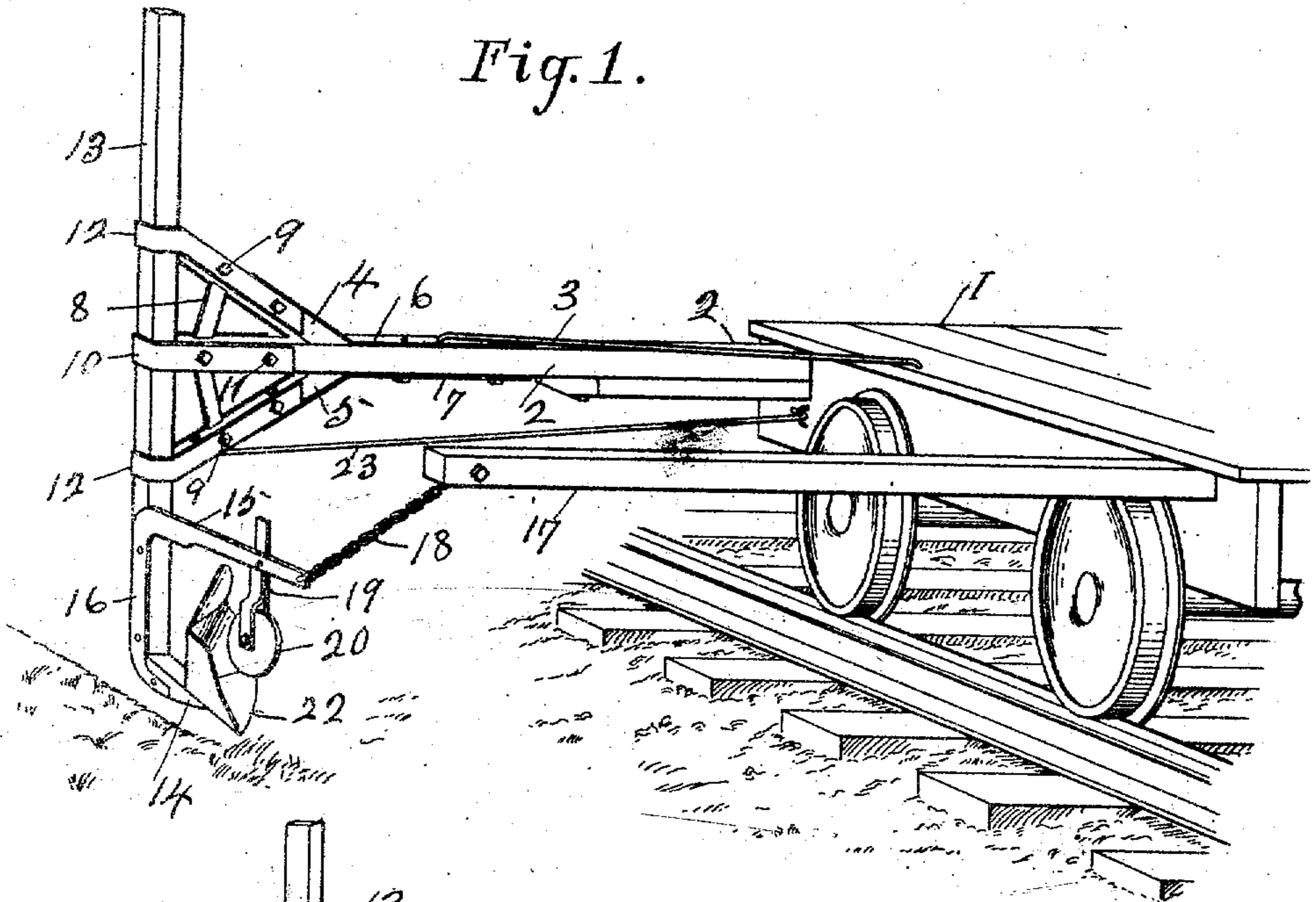
PATENTED APR. 21, 1908.

**J. L. HART.**

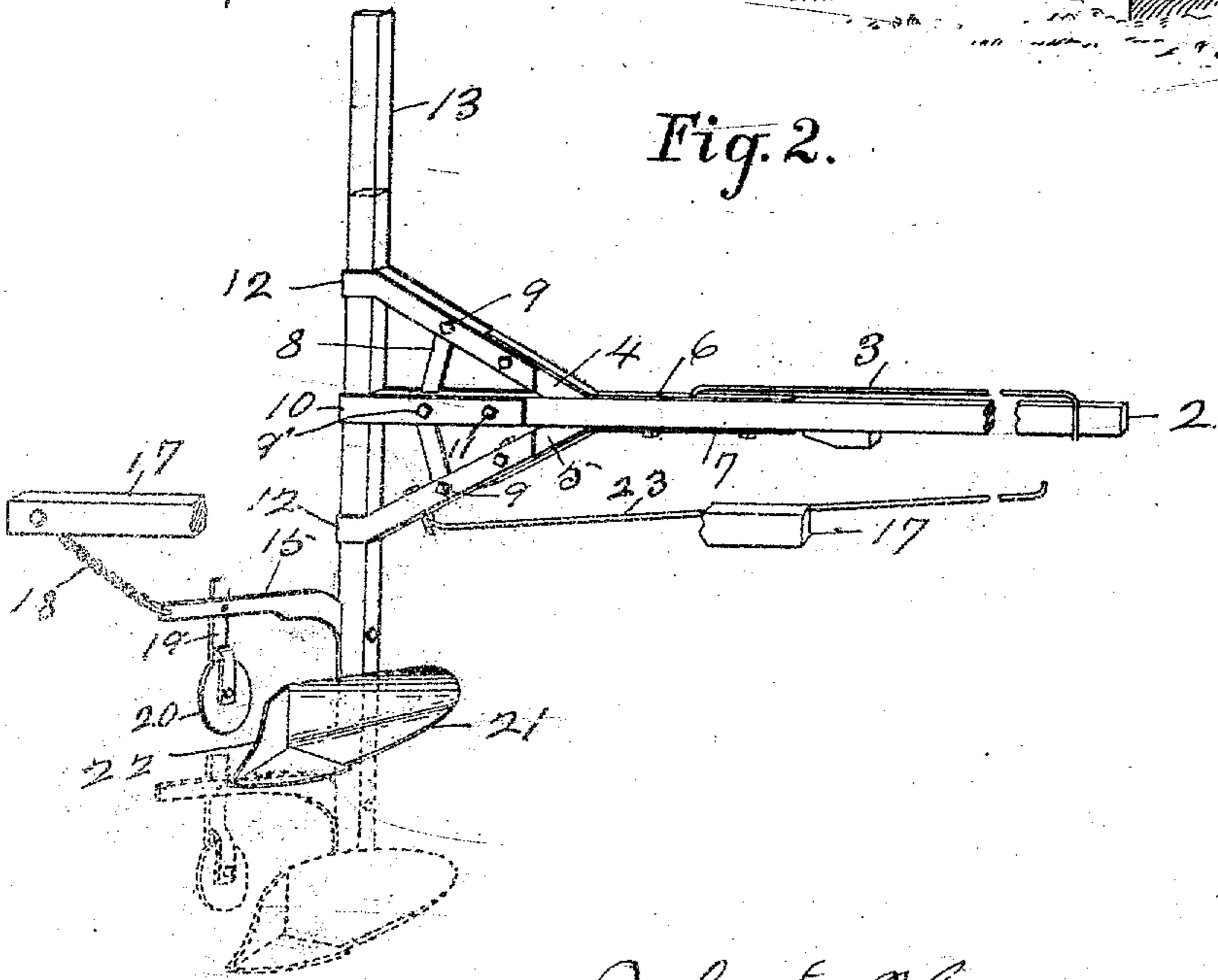
SOD LINE PLOW.

APPLICATION FILED AUG. 16, 1907.

*Fig. 1.*



*Fig. 2.*



WITNESSES

S. Milton McFerran

Auguste Spiegel

John L. Hart

INVENTOR

BY *Chapin & Denny*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN L. HART, OF VALENTINE, INDIANA.

## SOD-LINE PLOW.

No. 885,341.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed August 15, 1907. Serial No. 388,595.

*To all whom it may concern:*

Be it known that I, JOHN L. HART, a citizen of the United States, residing at Valentine, in the county of Lagrange, in the State of Indiana, have invented certain new and useful Improvements in Sod-Line Plows; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in sod line plows.

It is well known that on all railways on both sides of the track, a space about 5 feet in width measured from the railway rails, is kept free from grass and weeds, and that the outer line of this space is known as the "sod-line"; that it is desirable to have this line practically straight or at least parallel with the track; that the common if not universal way of cutting this "sod-line" is by stretching a line parallel with the track and then using hand-shovels; and that to cut the sod-line for one mile of track upon both sides thereof in the common way by hand-shovels requires the labor of four men for two days or more.

The object of my invention is to provide a comparatively cheap, simple, convenient and easily operated labor-saving sod-line plow, adapted to be carried by a common hand-car or push-car, and adapted for a vertical adjustment thereon, so constructed as to throw the dirt away from the line and so arranged that three men in less than one hour can cut the sod-line upon both sides of one mile of track.

My invention consists of a supporting frame detachably mounted in one side of a push-car of common form; a vertical standard adjustably mounted in the outer end of said standard and provided upon its lower end with a plow having a special form of plow-share; and means connected to the plow-beam for aiding in the propulsion of the plow.

The principal novel feature of my invention resides in the special construction of the plow and its cooperative relation with the push-car.

Similar reference numerals indicate like parts throughout the drawings, in which

Figure 1 is a perspective view of my inven-

tion in position upon a push-car, showing the relative arrangement of the operative parts. Fig. 2 is a perspective detail of my invention partly broken away, and showing by dotted out-line the vertical adjustment of the plow and its supporting standard in the main frame.

In a suitable lateral opening in one side of a push-car 1 of common form is removably mounted the inner end of the supporting frame 2, and is secured therein by means of the horizontal rod 3 having one end thereof bent into a right-angular relation and loosely secured in a vertical opening in the upper face of the said frame, and having its similarly bent other end loosely secured in a suitable vertical opening in the top of the car, Fig. 1. The outer end of this main frame 2 is provided upon its upper end and lower faces with the oppositely inclined arms 4 and 5 rigidly fixed thereto by means of the metal straps 6 and 7 respectively. These arms are further braced and connected with the frame 2 by means of the metal strap 8 secured to one side thereof by proper bolts 9.

The free end of the beam 2 is provided with a metal strap 10 secured thereto by the bolts 9 and 11. This strap projects beyond the end of the beam in the form of a loop as shown to receive the upright standard about to be described.

The outer ends of the arms 4 and 5 are each provided with a metal strap 12 having a loop on the end thereof each of which is in vertical alinement with the loop of the strap 10. In these loops is loosely mounted the vertically arranged standard 13 carrying upon its lower end a special form of plow of proper proportions, consisting of a slightly inclined forwardly projecting foot 14 rigidly mounted on the lower extremity of the said standard, Fig. 1; a metallic forwardly projecting beam 15 whose rear end 16 is downwardly inclined in a right angular relation and rigidly secured to the standard 13 and the foot 14 in any proper manner.

In a second lateral opening in the side of the car 1 the inner end of the horizontal beam 17 is detachably mounted in any proper manner. To the outer end of this beam is secured one end of the draft chain 18, the other end of which is detachably secured to the forward end of the plow beam 15.

Near the forward end of the plow beam 15 is fixed a hanger 19 in whose bifurcated

lower end is rotatably mounted a wheel or roller 20 adapted to run upon the surface of the ground gage the depth of the furrow as usual.

6 On the upper face of the shoe 14 is rigidly fixed the metallic plow-share 21, trough-shaped in cross-section in order to throw the excavated material away from the sod-line, and is provided with a rigidly connected  
10 point 22 whose upright side is in substantially right-angular relation to its lower side as shown.

The outer end of the frame 2 is stayed against the lateral strain of the draft thereon  
15 by means of the rod 23 whose outer end is secured to the arm 5 and whose inner end is secured to the adjacent side of the car 1.

The operation and manner of employing my invention thus described is obvious and  
20 briefly stated is as follows: When my invention is placed in position upon the car 1 the beams 3 and 17 will be in a horizontal position and in parallel relation with the inner ends detachably mounted in the side  
25 of the car as shown, and the standard 13 being loosely mounted in its bearings will normally rest upon the ground by gravity.

To operate the invention one or two men walk at the rear side of the beam 2 and push  
30 upon the same with their hands, one of the men resting one of his hands upon the top of the standard 13 to hold the plow-share to its work, which only cuts about four inches deep, and generally in gravelly soil. A third  
35 man walks between the beams 2 and 17 and pushes upon the latter beam which through the medium of the draft-chain 18 aids in the operating of the plow. The chain 18, of course can readily be lengthened or shortened  
40 as desired to suit the vertical adjustment of the plow. I have also successfully used one draft-horse by hitching him to the forward beam 17, the driver walking at the rear of the beam 2 with one hand upon the top of  
45 the standard 13, though as a rule, three section men can operate it more economically, and can readily cut a sod-line one mile in

length upon one side of the track in less than half an hour.

Obviously my invention can be variously 50 modified in numerous details of construction without departing from the spirit thereof which consists broadly in the coöperative combination of a sod-line plow adjustably mounted in a supporting frame in coöpera- 55 tive relation with a supporting hand-car.

Having thus described my invention and the manner of operating the same what I desire to secure by Letters Patent is:

1. A sod-line plow consisting of a support- 60 ing frame provided upon its outer end with a pair of guide arms and having its inner end mounted in a moving support; a vertical standard loosely mounted in the said guide-arms; a plow fixed upon the lower end of the  
65 said standard; a draft-bar mounted at its inner end in the said support and having a suitable draft connection with the said plow.

2. A sod-line plow consisting of a horizontal frame provided at its outer end with 70 aligned vertical guides for the plow standard; a vertical standard loosely mounted in the said guides and provided upon its lower end with a fixed plow beam and share; a draft-bar in substantially parallel relation with the  
75 said frame and having a draft connection with the said bar.

3. The combination with a rolling support of a sod-line plow consisting of a horizontal frame mounted at its inner end on 80 said support; and provided at its outer end with vertical guides; a plow carrying standard loosely mounted in the said guides and provided upon its lower end with a suitable  
85 plow; a draft-bar in coöperative relation with the said frame; and means for connecting the draft-bar to the plow.

Signed by me at Valentine, in the county of Lagrange, and State of Indiana, this 10th day of August, A. D. 1907.

JOHN L. HART.

Witnesses:

W. H. DUFF,  
JACOB NEUMAN.