

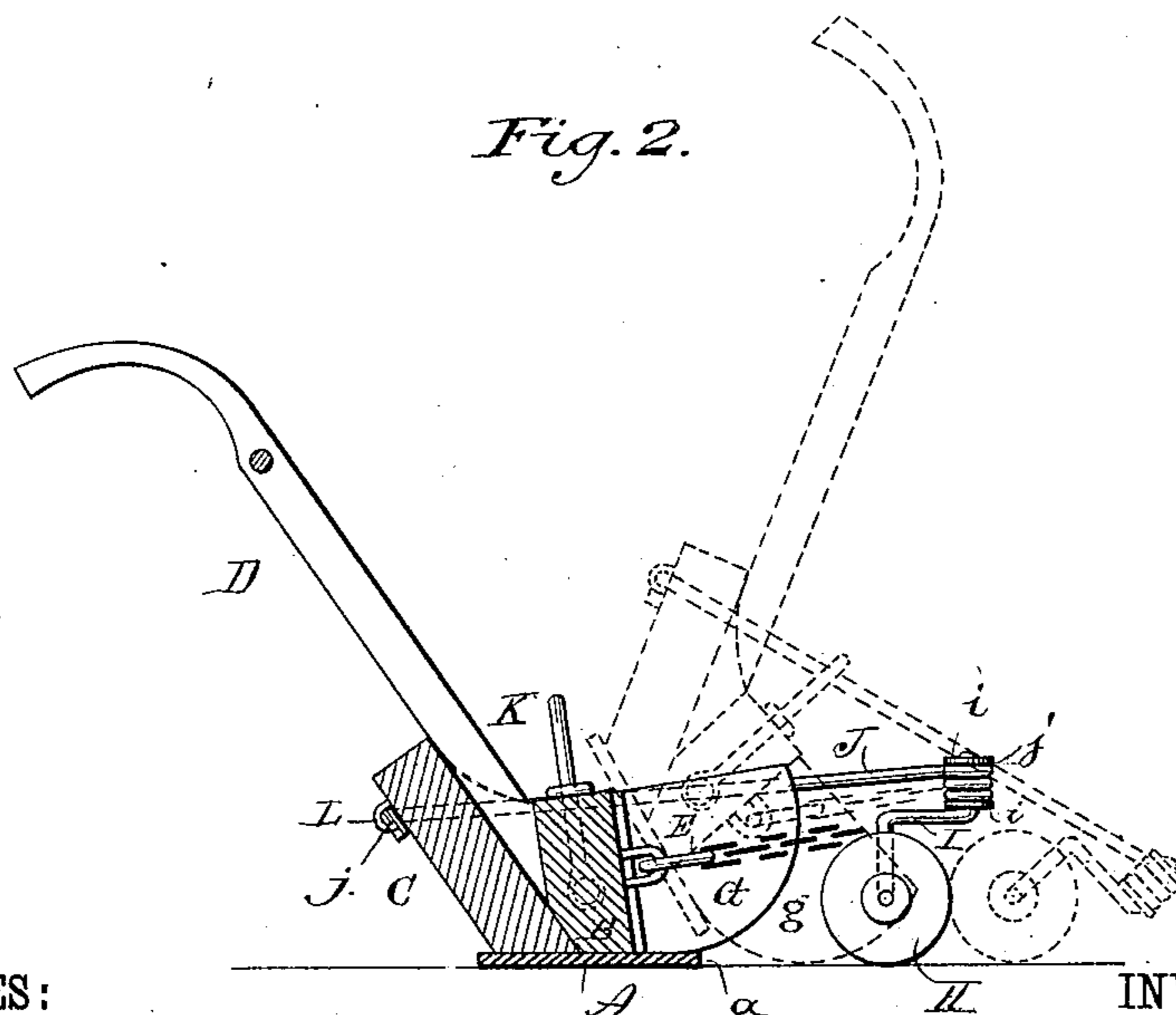
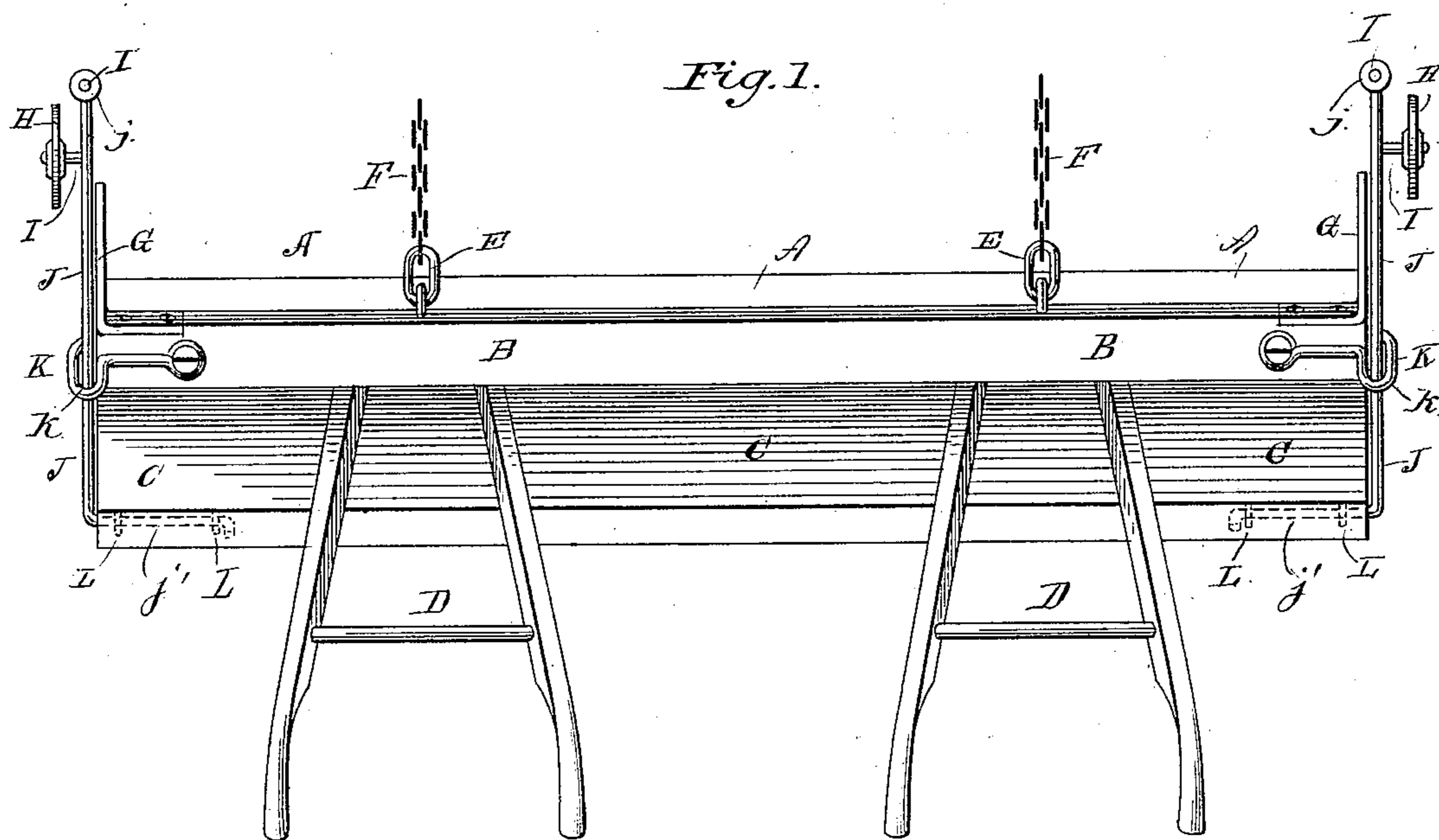
(No Model.)

E. SELL.

LAND SCRAPER AND LEVELER.

No. 356,557.

Patented Jan. 25, 1887.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ERNST SELL, OF CAÑON CITY, COLORADO.

## LAND SCRAPER AND LEVELER.

SPECIFICATION forming part of Letters Patent No. 356,557, dated January 25, 1887.

Application filed June 9, 1886. Serial No. 204,613. (No model.)

*To all whom it may concern:*

Be it known that I, ERNST SELL, of Cañon City, in the county of Fremont and State of Colorado, have invented a new and Improved Land Scraper and Leveler, of which the following is a full, clear, and exact description.

My invention relates to machines of that class used for scraping and leveling lands while making roads, or for farming and gardening purposes, and has for its object to provide a simple, inexpensive, strong, and durable machine of this character, which may be operated effectively with economy of time and labor.

The invention consists in certain novel features of construction and combinations of parts of the land scraper and leveler, all as hereinafter fully described and claimed.

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 both the figures.

Figure 1 is a plan view of my improved land scraper and leveler, and Fig. 2 is a transverse vertical sectional elevation of the machine, and shows also in dotted lines the position of the scraper when dumping material at low places in the ground.

The scraper-blade A is fixed to and along the lower edges of two pieces of timber, B C, which are strongly fastened to each other, the front timber, B, standing nearly vertical, and the rear timber, C, leading backward at about an angle of forty degrees, as shown in Fig. 2, whereby a strong frame is provided to carry the scraper-blade.

Handles D D, like ordinary plow-handles, are fixed to the timber-frame B C and directly behind the links E E, which are fixed to the front of the timber B, and to these links E E are attached draft-chains F F, to which the horses will be hitched to haul the machine.

At each end of the timber B there is fixed a plate or block, G, the forward and lower edge, g, of which is rounded, as in Fig. 2. These plates G G hold the earth onto the scraper-blade and frame at the ends of the machine.

Wheels H H are journaled to bent axle-arms I I, which are swiveled to swing in horizontal plane in the forward ends, j j, of bars J J, which extend backward through long guide and retaining loops k k, formed at the outer ends of

irons K K, fixed to the timber B, to the back of the frame-timber A, where the bars are bent at a right angle to form hinge rods j' j'', which have bearings in staples or eyes L L, fixed to the timber A, as shown in the drawings.

With this construction the bars J J may move up and down freely at their forward ends, and the wheels H H may swing around bodily as their axle-arms I I turn in their bearings at the ends of arms J J when the machine is turned around to either side.

I show the axle-arm bearings j at the ends of the bars J formed by coiling the bars, and a washer, i, is fixed to the axle-arm I at each end of the coil, as in Fig. 2; but these bearings may have any other suitable construction.

The operation is as follows: To level lands the scraper will be run with its plate A resting flat upon the ground, as in full lines in Fig. 2, and on approaching high places in the soil the handles D will be raised slightly until the scraper is filled with earth, and the handles will then be let down again to let the blade A rest flat on the ground until a low place requiring to be filled is reached, whereupon the handles will be raised considerably, or until the arms J strike the tops of the loops k and the wheels H lift the nose a of the scraper-blade clear of the earth, when the dirt may be discharged from the scraper in larger or smaller quantities, as required to fill up the hollow places and level the ground. By throwing the handles D forward the scraper-blade may be lifted considerably from the ground, as in Fig. 2, and the machine then may be moved from place to place without operating on the earth, and in making short turns, when the machine is so thrown forward on the wheels H, the team hitched to one chain F will be urged forward while the team hitched to the other chain will be held back.

This scraper may be made in various sizes, or about five feet long for draft by two horses, ten feet long for four horses, and fifteen feet long for six horses, and is adapted for use in working ordinary roads, in grading road-beds of railways, and in leveling lands for farming or gardening purposes.

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

1. The combination, in a land scraper and leveler, of a frame, a scraper-blade fixed thereto, handles fixed to the frame, bars J J, pivoted to the frame, wheels H H, journaled to the bars, and loops, as at k, held to the frame and receiving the bars J, substantially as herein set forth.

2. The combination, in a land scraper and leveler, of a frame, B C, a scraper-blade, A, fixed thereto, handles D, fixed to the frame, bars J J, pivoted to the frame, bent axle-arms I I, swiveled to bars J to swing in horizontal plane, wheels H H, journaled on the axle-arms, and loops k, fixed to the frame and receiving the bars J, substantially as herein set forth.

3. The combination, in a land scraper and leveler, of a frame, B C, a scraper-blade, A, fixed thereto, handles D D, fixed to the frame, draft-links E E, fixed to the frame in front of the handles, bars J J, pivoted to the frame, bent axle-arms I I, swiveled in the bars J, wheels H H, journaled on the axle-arms, and loops k, fixed to the frame and receiving the bars J, substantially as herein set forth.

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Witnesses:

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