

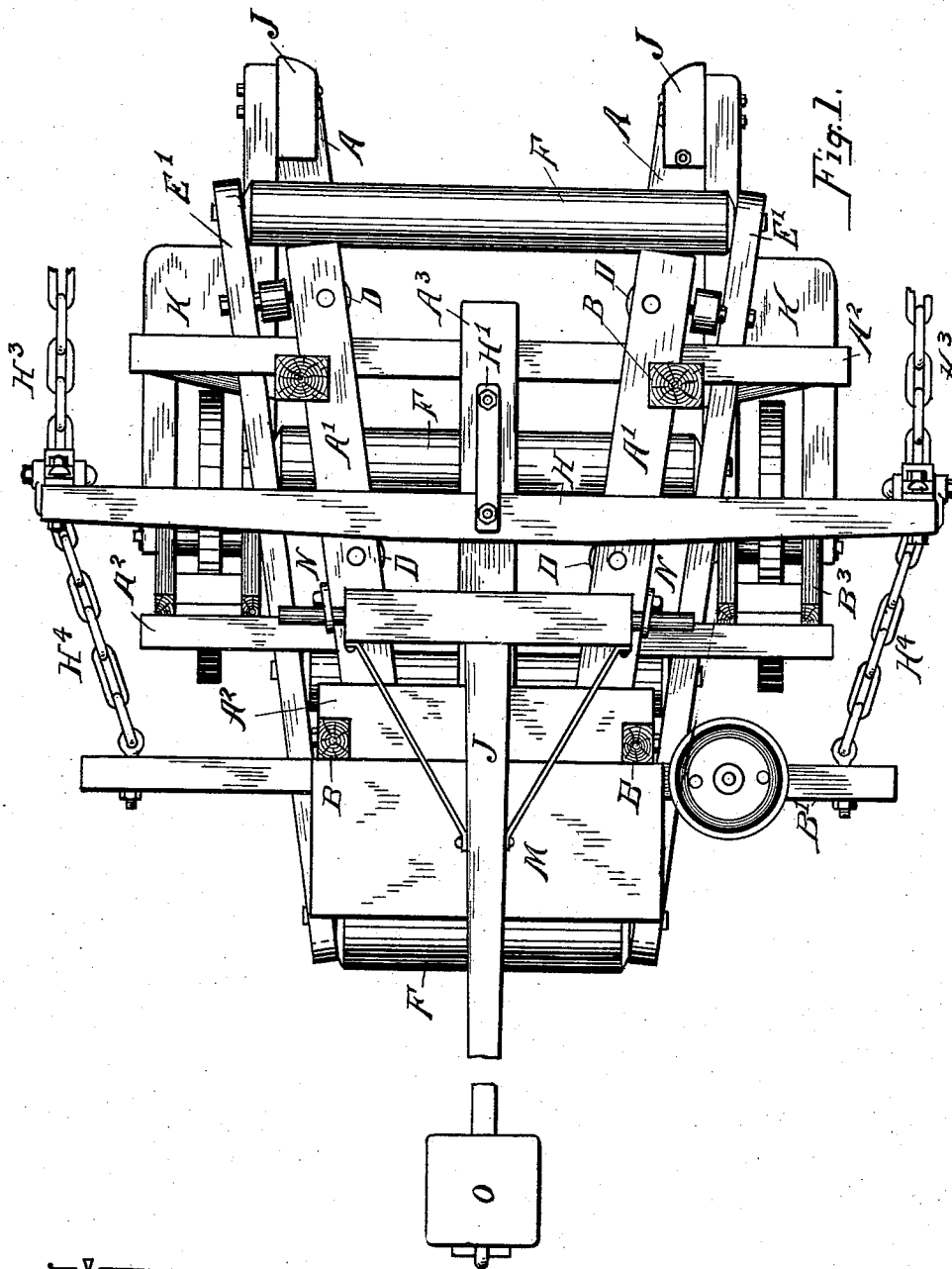
(No Model.)

3 Sheets—Sheet 1.

J. V. LATTNER.
HEDGE LAYING MACHINE.

No. 578,408.

Patented Mar. 9, 1897.



WITNESSES:
A. D. Du Bois.
W. Q. Olden.

INVENTOR:
JACOB V. LATTNER
by Atty, N. Du Bois,

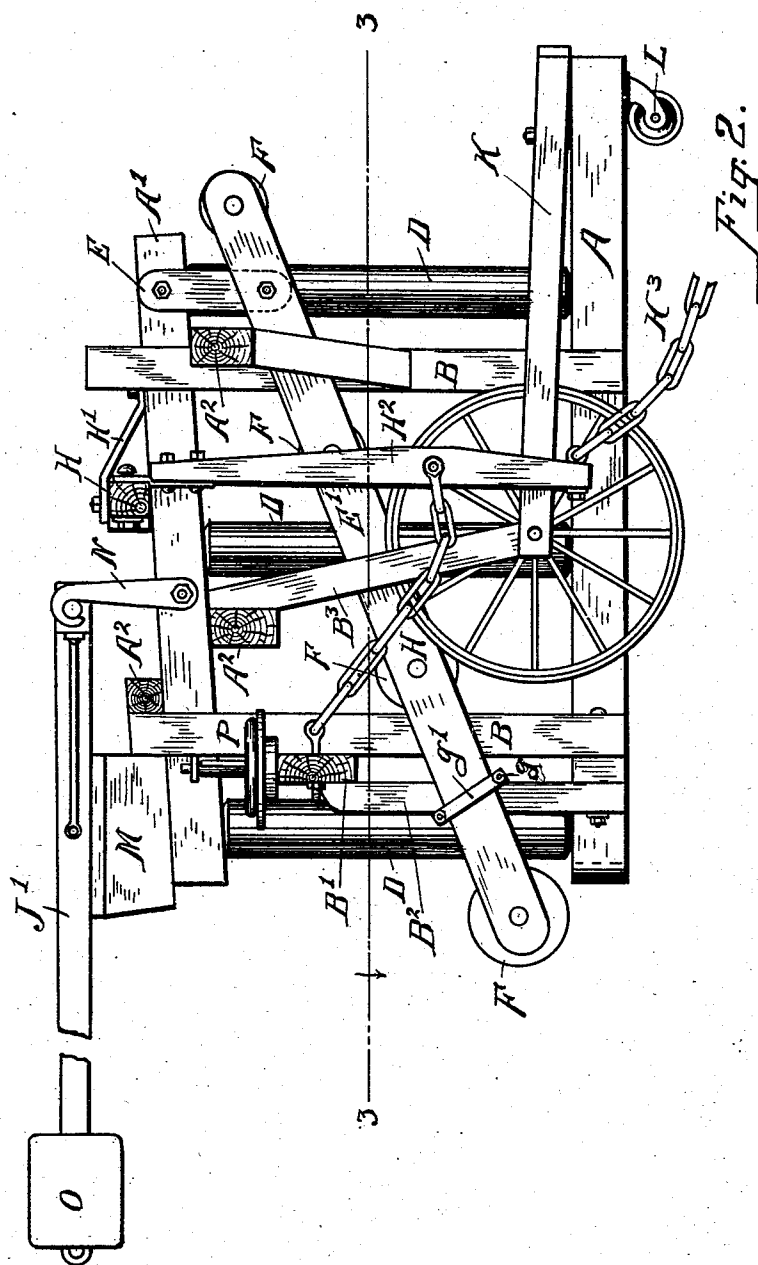
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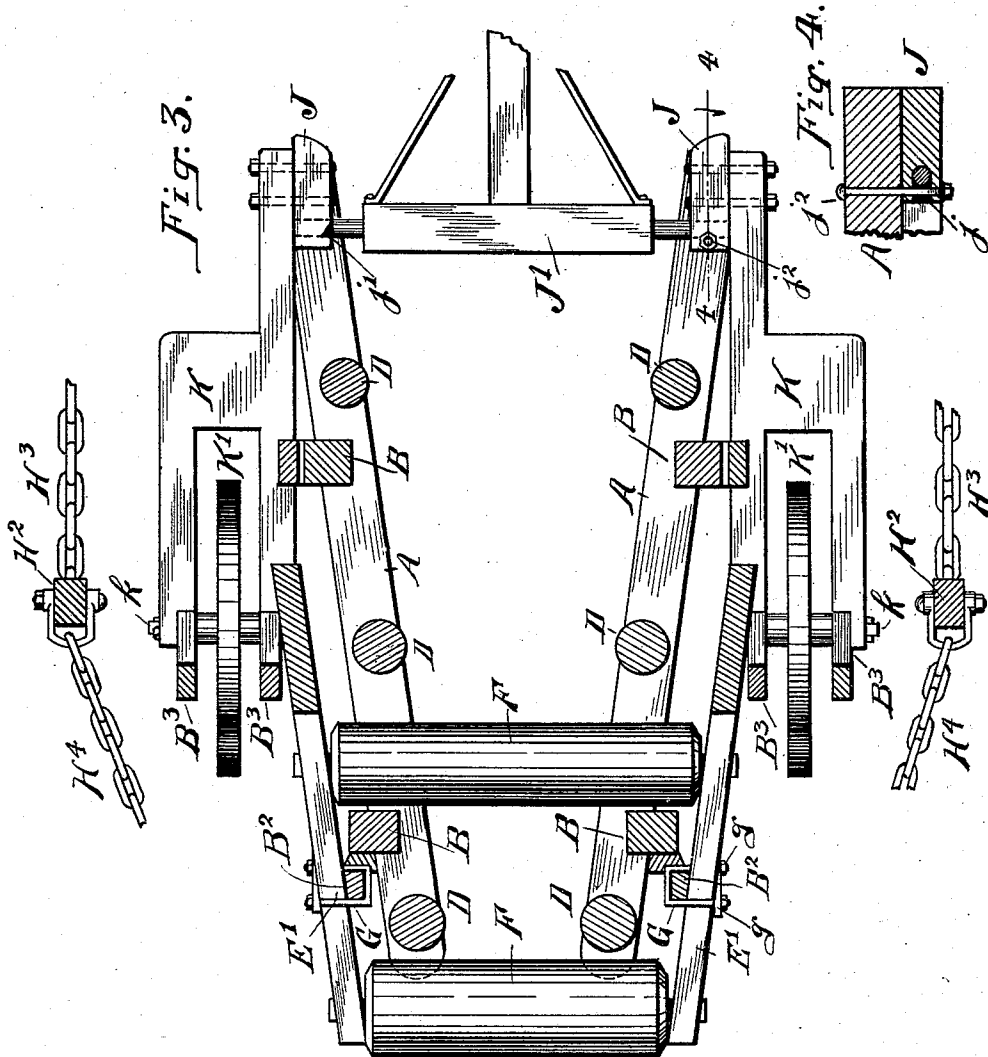
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A. DuBois,

UNITED STATES PATENT OFFICE.

JACOB V. LATTNER, OF CHATHAM, ILLINOIS.

HEDGE-LAYING MACHINE.

SPECIFICATION forming part of Letters Patent No. 578,408, dated March 9, 1897.

Application filed December 18, 1896. Serial No. 616,181. (No model.)

To all whom it may concern:

Be it known that I, JACOB V. LATTNER, a citizen of the United States, residing at Chatham, in the county of Sangamon and State of Illinois, have invented a certain new and useful Hedge-Laying Machine, of which the following is such a full, clear, and exact description as will enable those skilled in the art to which it appertains to make and use my said invention.

My invention relates to machines of that class which are employed to lay growing hedge, so as to form a compact barrier against live stock, also so as to produce a hedge of uniform height and width and of neat and attractive appearance.

The purposes of my invention are to provide a hedge-laying machine adapted to be drawn by horses walking on opposite sides of the hedge row and so constructed and arranged that the machine will gather in and draw together the laterally-extending branches of the hedge and will press down the upwardly-growing hedge sprouts or stocks, so as to form a compact mass, said machine having sufficient weight for this purpose, to provide simple and effective means whereby the degree of vertical compression on the hedge may be regulated, to provide simple and effective draft attachments whereby teams walking on opposite sides of the hedge may propel the machine uniformly forward, to provide simple and effective means whereby the tongue which is used to draw the machine on the road may be connected with the machine so that a weight adjustable on the rearwardly-extending end of the tongue may serve to regulate the pressure on top of the hedge, and to provide simple and effective means for detachably connecting the tongue with the main frame of the machine.

With these ends in view my invention consists in certain novel features of construction and combinations of parts shown in the annexed drawings, to which reference is hereby made and hereinafter particularly described and claimed.

Referring to the drawings, Figure 1 is a top plan view of the complete machine. Fig. 2 is a side elevation of the complete machine. Fig. 4 is a horizontal longitudinal section on

the line 3 of Fig. 2. Fig. 4 is a partial vertical section on the line 4 of Fig. 3.

Similar letters of reference designate like parts in all of the views.

Rearwardly-converging bottom rails A support posts B, which are secured in a vertical position. The top rails A', which are secured to the upper ends of the posts B, converge rearwardly and are respectively parallel to the bottom rails A. Vertical rollers D have their lower ends journaled in the bottom rails A and their upper ends journaled in the top rails A'. A link E is pivotally connected with each of the top rails A' near the front end of said rail. Side bars E' are pivotally connected with the lower ends of the links E. Transverse rollers F are supported and turn in suitable bearings in the side bars E'. Cross-pieces A² extend across the top rails A' and connect them securely together.

A cross-piece B' extends across the rear part of the machine and is secured to and projects laterally beyond the rear posts B. The cross-pieces A² and B' serve to prevent spreading of the frame. Vertical rails B² have their lower ends secured in any suitable manner to the bottom rails A and their upper ends suitably secured to the cross-pieces B'. A stirrup G incloses the vertical rails B² and the side bars E'. The outer ends of the stirrups are threaded and are provided with nuts g, which serve to clamp the plates g' against the faces of the side bars E', so as to press the side bars against the vertical rails B² in such manner as to retain the side bars firmly in any position in which they may be set, and so that by loosening the nuts on the stirrups the rear ends of the side bars may be raised or lowered, as occasion may require.

A central beam A³ is suitably secured on top of the cross-pieces A². An evenner-bar H is pivotally connected with the beam A³, and a strap H' of the usual well-known form serves to steady and guide the evenner-bar. Vertical draft-bars H² have their upper ends pivotally connected with the ends of the evenner H and have at their lower ends chains H³, to which the horses are hitched which propel the machine. Stay-chains H⁴ have one of their ends connected with the draft-bar H² and their other ends connected with the cross-

piece B'. The ends of these chains which are connected with the draft-bars H² may be moved up or down, as may be necessary, to equalize the draft of the teams which are
 5 hitched to the machine. Blocks J are secured at the ends and on top of the bottom rails A. One of these blocks has a notch *j* and the other a transverse hole *j'*, in which the ends of the cross-bar of the tongue J' fit. A bolt
 10 *j*² serves to retain the end of the cross-bar in the notch *j*, and when it is desired to detach it is only necessary to remove the bolt *j*², when one end of the cross-bar may be slid out of the notch *j*, permitting the other end to be
 15 withdrawn from the hole *j'*.

On each side of the machine are horizontal wings K, which are secured at their front ends to the blocks J and near their central part are secured to the posts B. The rear ends of
 20 these wings are secured to braces B³, the upper ends of which are secured to the intermediate cross-piece A². The wheels K' turn on shafts *k*, which extend transversely across the wings K. Caster-wheels L are connected
 25 with the under side of the front end of the bottom rails A and serve to support the front end of the machine.

A tool-box M extends transversely across the top of the machine and is secured to the
 30 top of the rails A'.

Hooks N are secured to the sides of the top rails A' and extend vertically upward.

When the machine is in operation, the tongue is detached from the front of the machine and is placed on top of the tool-box,
 35 with the ends of the cross-bar of the tongue resting in the hooks N, as clearly shown in Figs. 1 and 2. A weight O is placed and is adjustable on the rearwardly-projecting end
 40 of the tongue and serves to increase the pressure of the rear roller F on top of the hedge.

On one side of the machine and on top of the cross-piece B' is a spool T, carrying wire with which the hedge is tied down at intervals as the operation of laying the hedge progresses.
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I am aware that hedge-laying machines have been made having rearwardly-converging bottom rails, rearwardly-converging top
 50 rails, vertical rollers turning in bearings between said top rails and bottom rails, and transverse rollers rolling on top of the laid hedge. I therefore do not claim those features, broadly.

55 What I claim as new, and desire to secure by Letters Patent, is—

1. In a hedge-laying machine the combination of, rearwardly-converging bottom rails, rearwardly-converging top rails, vertical rollers turning in bearings on said bottom rails
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and top rails, a tongue detachably connected with said bottom rails, links connected with said top rails, side bars connected with said links, stirrups adjustably connecting said side bars with the main frame, transverse rollers
 65 turning in bearings on said bars; hooks secured to said top rails and adapted to support the tongue on the top of the machine and a weight carried on said tongue, substantially as set forth.

2. In a hedge-laying machine the combination of, a main structure consisting of rearwardly-converging bottom rails, rearwardly-converging top rails, vertical rollers turning in bearings on said top rails and bottom rails,
 70 side bars, transverse rollers turning in bearings on said side bars; a cross-piece secured to said top rails; an evener pivotally connected with said main frame, draft-bars pivotally connected with said evener, draft-chains connected with said draft-bars and stay-chains connecting said draft-bars with said cross-piece, as set forth.
 75

3. In a hedge-laying machine the combination of, rearwardly-converging bottom rails, rearwardly-converging top rails, vertical rollers turning in bearings on said bottom rails and top rails, side bars having a hinge connection with said top rails, transverse rollers turning in bearings on said side bars, vertical
 80 posts and rails connecting said bottom rails and top rails, stirrups adjustably connecting said side bars with said vertical rails, wings connected with said bottom rails, supporting-wheels turning on shafts carried on said wings, an evener-bar pivotally connected with the main frame, draft-bars pivotally connected with said evener-bar, draft-chains connecting with said draft-bars, stay-chains connecting
 85 said draft-bars with the main frame, a tongue connectible with the front ends of the bottom rails, a tool-box supported on the top rails, hooks connected with the top rails and adapted to retain the tongue in position on top of the tool-box and a weight adjustable on said
 90 tongue, as set forth.
 95

4. In a hedge-laying machine the combination of a main frame, a tool-box supported on said main frame, hooks connected with the main frame, a tongue adapted to rest on said
 100 tool-box and engage with said hooks and a weight adjustable on said tongue, as set forth.
 105

In witness whereof I have hereunto subscribed, at Chatham, Illinois, this 8th day of July, 1896.

JACOB V. LATTFNER.

Witnesses:

THOMAS C. MATHER,
 E. W. DANA.

Correction in Letters Patent No. 578,408.

It is hereby certified that in Letters Patent No. 578,408, granted March 9, 1897, upon the application of Jacob V. Lattner, of Chatham, Illinois, for an improvement in "Hedge-Laying Machines," an error appears in the printed specification requiring correction as follows: In line 51, page 1, the word and numeral "Fig. 4" should read *Fig. 3*, and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 30th day of March, A. D., 1897.

[SEAL.]

JNO. M. REYNOLDS,
Assistant Secretary of the Interior.

Countersigned:

S. T. FISHER,
Acting Commissioner of Patents.