

(No Model.)

J. J. WISHARD.
EARTH CARRIER.

No. 508,589.

Patented Nov. 14, 1893.

Fig. 1.

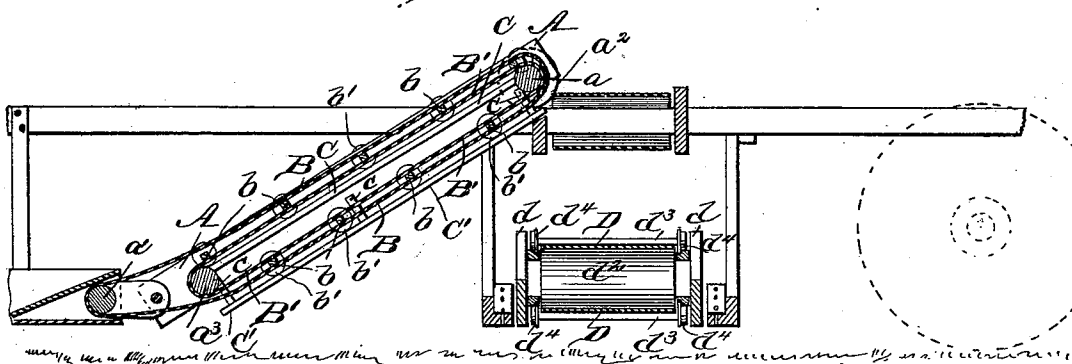


Fig. 2.

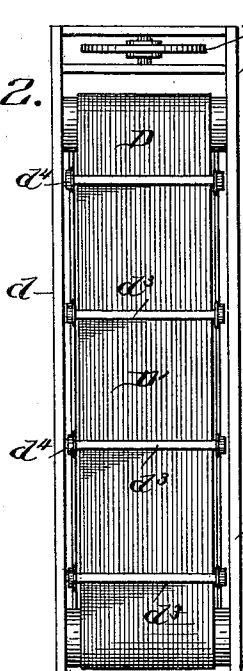
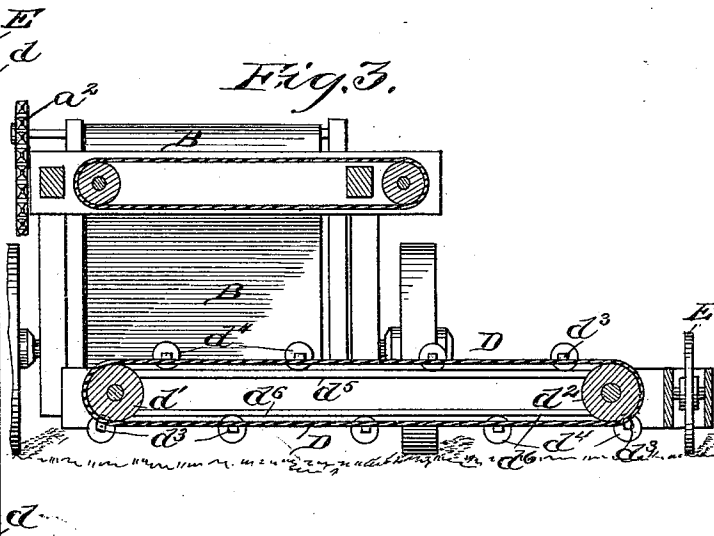


Fig. 3.



WITNESSES:

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JAMES JAHSON WISHARD, OF WATSONVILLE, CALIFORNIA.

EARTH-CARRIER.

SPECIFICATION forming part of Letters Patent No. 508,589, dated November 14, 1893.

Application filed December 21, 1891. Serial No. 415,820. (No model.)

To all whom it may concern:

Be it known that I, JAMES JAHSON WISHARD, of Watsonville, in the county of Santa Cruz and State of California, have invented a new and Improved Earth-Carrier, of which the following is a full, clear, and exact description.

This invention relates generally to ditching machines and particularly to certain improvements upon my Patent No. 473,279, granted April 19, 1892.

The object of my present invention is to provide a novel form of earth elevator for conveying the earth from the plow to the body of the ditcher, and also to provide a novel form of belt for delivering the earth to one side of the road, said belts being of such construction that a heavier load can be carried with less exertion than heretofore and a lighter frame can also be employed for supporting the belt.

My invention consists in the peculiar construction of the parts and their novel combination or arrangement all of which will be fully described hereinafter and pointed out in the claims.

In the drawings hereto annexed Figure 1 is a sectional view of the inclined elevator belt and the side delivery belt. Fig. 2 is a plan view of the side delivery belt and Fig. 3 is a longitudinal sectional view of the side delivery belt.

The main portion of the ditching machine proper is the same as shown and described in my patent before referred to so that a description thereof will not be necessary, and as my present invention relates only to the inclined elevator, and the side delivery belts of said machine these are the only parts I have shown in the drawings and referring thereto, A indicates the inclined side pieces of the frame between which are journaled the upper and lower rollers *a* and *a'* respectively, and around said rollers passes the upper or outer belt B, the lower end of said belt projecting beneath the rear end of the plow, whereby the earth is delivered to the belt. The upper end of the belt B, discharges upon a transverse conveyor belt, whereby the earth is carried to-

ward the delivery belt, which latter belt will be described more fully hereinafter.

The upper roller *a* has a pulley or wheel *a*² at one end by means of which motion is transmitted to said roller and consequently the belt B.

Beneath the belt B is arranged a supplemental belt B', said belt passing also around the upper roller *a* and around the roller *a*³ at the lower end. The inner belt B' is entirely within the outer belt and when said outer belt passes around the roller *a* it rests upon and contacts with the inner belt so that it is obvious that as the roller revolves, the inner belt will move and by frictional contact the outer belt will move also. The belt B' is in the nature of a support for the belt B, and is provided with a series of cross strips *b* carrying roller wheels *b'* at their ends, which roller wheels are supported by and travel upon the upper rails C, in their ascent and by means of the lower rails C', in their descent, the upper rails being secured to the inner faces of the side pieces and the lower rails are supported beneath the side pieces by means of the depending standards *c*. By means of this construction a very strong conveyor belt is provided, one that dispenses with the multitude of transverse rollers and one that will elevate a very heavy load with less power than would be required to elevate the same load without the use of the supplemental belt.

The side delivery belt D is arranged below the transverse conveyor belt and receives the earth therefrom. This belt D I also construct in novel manner, and employ the side pieces *d*, the end rollers *d'* and *d*², and the belt D' provided with strips *d*³ carrying rollers *d*⁴ which travel upon the rails *d*⁵ and *d*⁶. In addition to this I extend the side pieces *d* beyond the roller *d*², and between the extended ends mount a supporting caster wheel E by means of which the outer end of said belt is supported as it travels along and thus avoids all strain upon the main frame of the machine.

Having thus described my invention, what I claim is—

1. In a ditching machine, the combination with a frame of the outer belt, the inner belt arranged within the outer belt and provided with roller wheels, and the tracks secured to
5 the frame for the wheels to bear against, substantially as shown and described.
2. In a ditching machine, an elevator belt comprising the inclined frame, the outer
belt, the inner belt, the cross strips, the roller wheels mounted upon said strips and the 10 upper and lower rails, substantially as described.

JAMES JAHSON WISHARD.

Witnesses:

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