J. M. CROCKETT.

LAND-DRAG AND CLOD-CRUSHER.

No. 182,417. Patented Sept. 19, 1876.

Fig. 1.

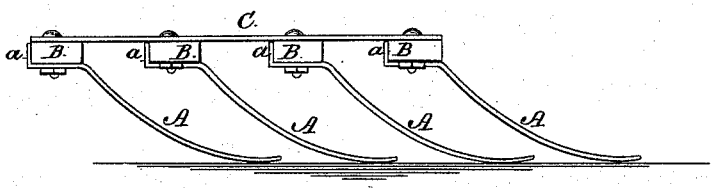
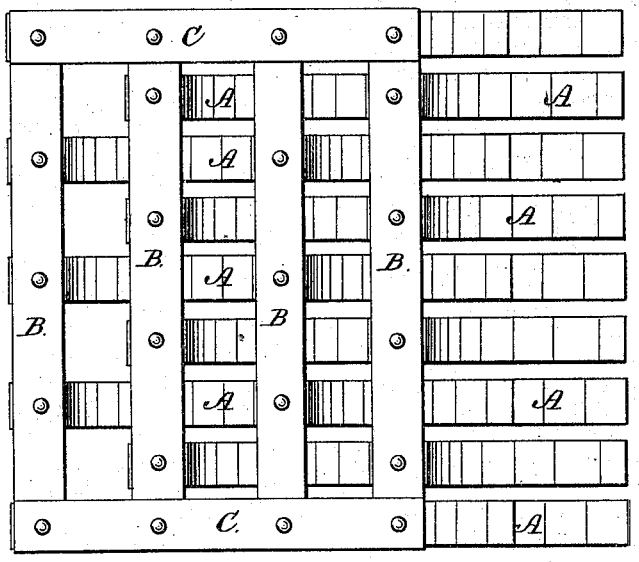


Fig. 2.



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JOHN M. CROCKETT, OF DALLAS, TEXAS.

IMPROVEMENT IN LAND-DRAG AND CLOD-CRUSHER.

Specification forming part of Letters Patent No. **182,417**, dated September 19, 1876; application filed August 14, 1876.

To all whom it may concern:

Be it known that I, JOHN M. CROCKETT, of the city and county of Dallas and State of Texas, have invented a new and Improved Land-Drag and Clod-Crusher; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention is an improvement upon the clod-crusher and drag for which Letters Patent No. 177,476 were granted to me May 16, 1876. In that implement a series of flat metal bars are secured in ranks or rows to front and rear wooden cross-bars, each of said metal bars having two curves so arranged that they alternate in position with the curves of the contiguous metal bar or bars, for the purpose of more quickly reducing the clods to a pulverulent condition in passing over them.

The object of the present invention is to simplify the construction, reduce the cost, and increase the efficiency of the drag. To this end the construction and arrangement of parts are as hereinafter described.

In the accompanying drawing, forming part of this specification, Figure 1 is a side view, and Fig. 2 a plan view, of my improved drag.

In this instance I employ short flat metal bars A, and attach them at the front end only to wooden cross-bars B, which are arranged in the same horizontal plane, and connected at the ends by metal plates or bars C. The metal bars have a single curve, and I arrange them in such manner that each bar of any rank after the first alternates in position with the two bars in the next front rank, so that a clod which escapes one bar of any rank will encounter one of the bars next in rear of and alternating with it. In other words, the arrangement is such that the bars of one rank cover and work over half the ground, and the bars of the next rear rank cover and work over the remaining portion. Thus the whole ground is worked over to the extent of the size of the drag. The said bars are each curved or bent upward at the front end, to form shoulders or flanges *a*. These flanges form an important element in the means of attachment of the bars A to the wooden cross-bars B, since they bear against the front edge of the latter, and thus enable each of the metal bars to be held firmly in place by a single bolt.

This construction and mode of attaching the metal bars increase their elasticity, thus enabling them to yield and pass over a large clod, or other obstruction, without raising or lifting one side or end of the whole drag, as is frequently the case when the bars are made longer, and provided with two curves in place of one. The labor and difficulty, and thereby the cost of manufacturing the drag, are likewise considerably decreased, and the facility of repair promoted.

What I claim is—

As the improvement hereinbefore described, the drag formed of a series of rows or ranks of short flat flexible metal bars A, and parallel wooden cross-bars B, each of the former having a single curve, also provided with a flange, *a*, and attached to the cross-bars at their front ends, the rear ends being left free, as shown and described, for the purpose specified.

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Witnesses:

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