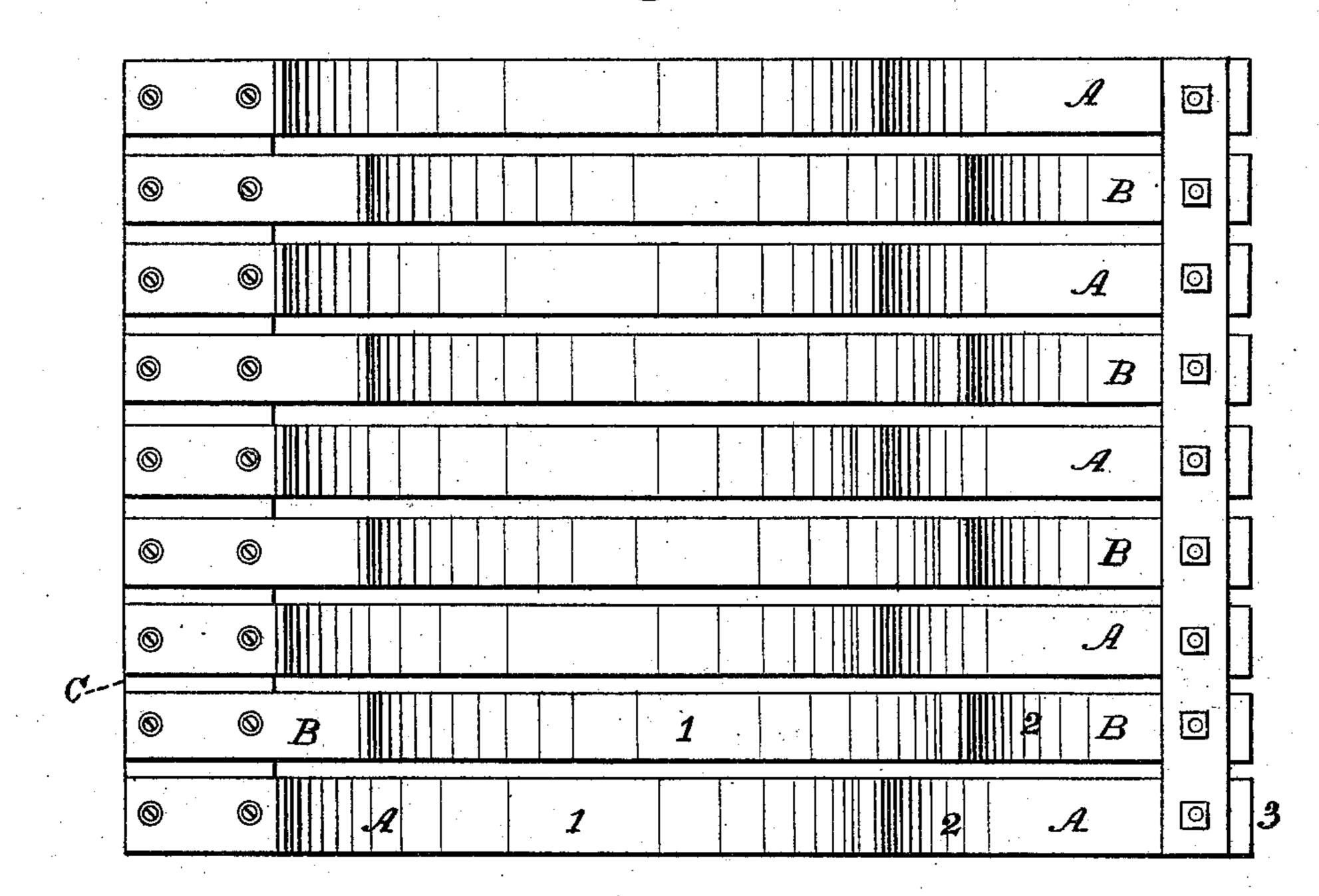
## J. M. CROCKETT.

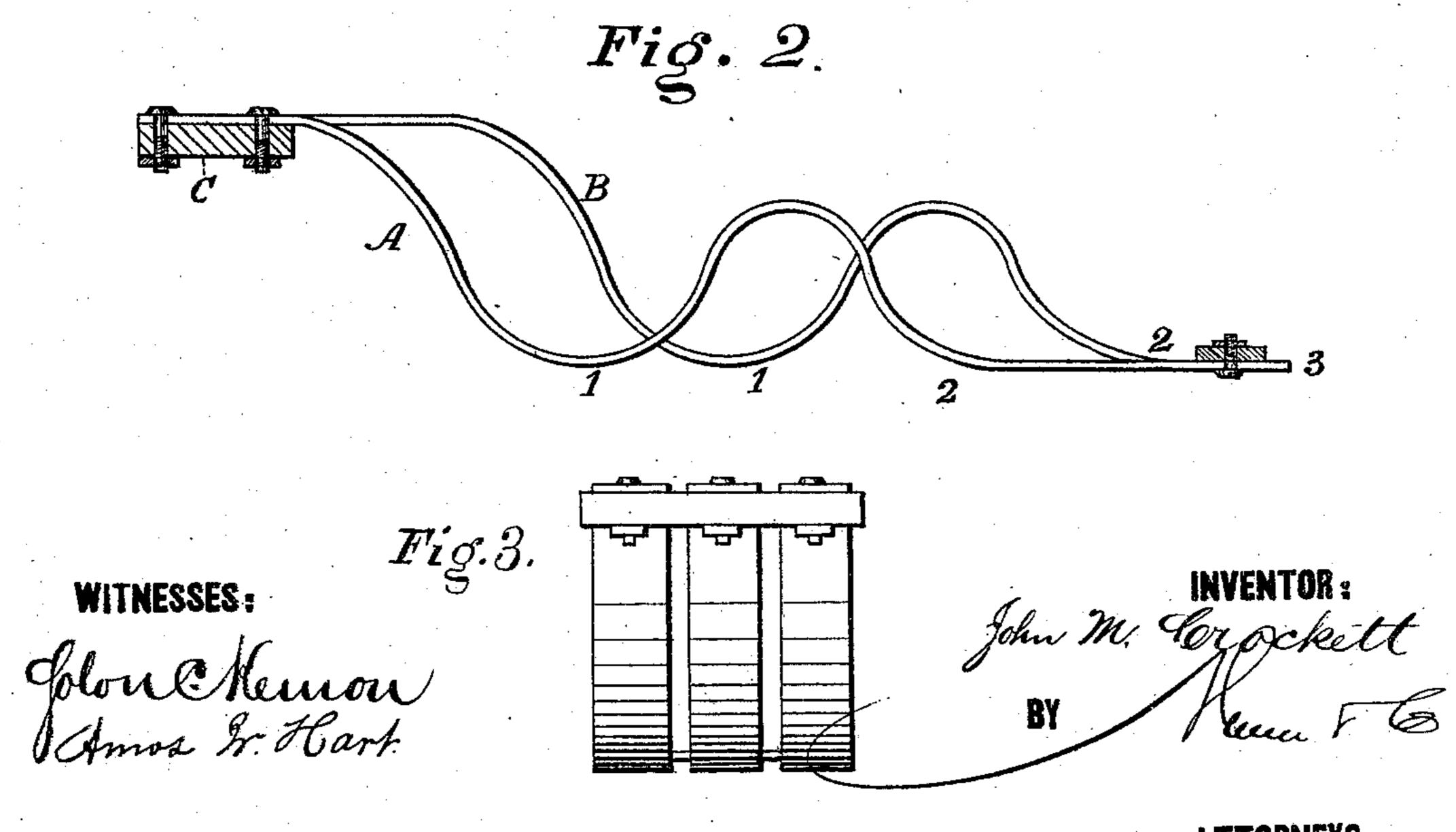
CLOD-CRUSHER.

No. 177,476.

Patented May 16, 1876.

Fig. 1





ATTORNEYS.

## UNITED STATES PATENT OFFICE.

JOHN M. CROCKETT, OF DALLAS, TEXAS.

## IMPROVEMENT IN CLOD-CRUSHERS.

Specification forming part of Letters Patent No. 177,476, dated May 16, 1876; application filed April 15, 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 Drag and Clod Crusher; and I do hereby declare that the following is a full, clear, and

exact description of the same.

The object of my invention is to supply a land-drag and clod-crusher that will effectually crush the clods, level the land, and pack the soil, at one and the same operation. It is composed of flat thin bars of iron, steel, or other suitable material, each of which is curved twice in such manner that the curves come to the ground at such an angle as to slide upon clods and press and rub them somewhat after the manner of the foot and shoesole in the act of walking, thus effectually breaking or crushing them. The bars are placed so that the curves alternate, each being in advance or rear of the curve of the contiguous bar, the object being that in case a clod shall be pushed aside by the one bar, it will have room to fall under the next bar, and so on throughout the whole width of the drag.

In the accompanying drawing, forming part of this specification, Figure 1 is a plan view, and Fig. 2 a sectional elevation, of my improved drag; Fig. 3, a front view of a frag-

ment of the drag.

The bars A B are curved upward in the middle, and also at their front ends, which are each secured to a head-block, C, by means of two bolts, so that they are held rigidly at a right angle thereto, and parallel each to the other. The effect of the middle bend is to

produce two points, 12, of bearing or contact of the several bars with the earth. Each alternate bar A has its first bend nearer the head-block C than the adjacent bar B, and the same local relation exists between the bends of the second series. The tails 3 of the bars lie flat upon the earth, and are bolted to a crosspiece, D, which serves to weight that portion of the drag, so that it overbalances the front end. The ends of the bars may be thickened in lieu of the bar D, if preferred.

The operation is as follows: A clod coming in contact with the first bend, 1, of one of the bars A, is either pulverized, pressed down, or pushed aside. In the latter case it passes laterally into the path of the next bar B, and comes similarly in contact with bend number 1 of the same. The like result will ensue as before, and thus the clod will be eventually pulverized, or else reduced in size so that the flat tail pieces will press it down into the soft earth flush or nearly so with its surface.

The means or mode of attachment of the team to the drag may be such as judgment or necessity dictates.

What I claim is—

1. The improved drag, composed of a series of flat and curved metal bars attached to a head-block, substantially as described.

2. The combination of the two series of bars A and B, each curved at two points, 12, and arranged in the alternation specified.

JNO. M. CROCKETT.

Witnesses:

JOHN J. EAKINS, H. F. HASWELL.