C. K. BARTLETT.

Ditching-Plow.

No. 2,515. Patented Mar. 28, 1842.

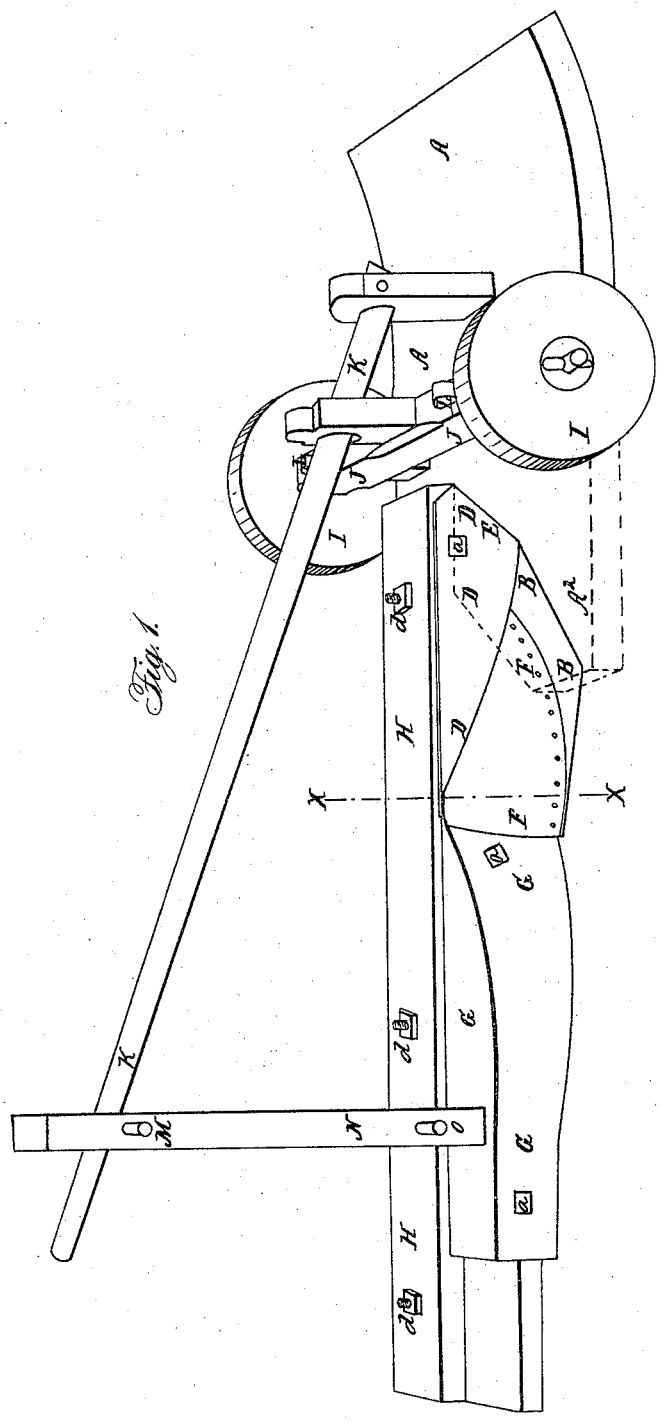

Fig. 1.

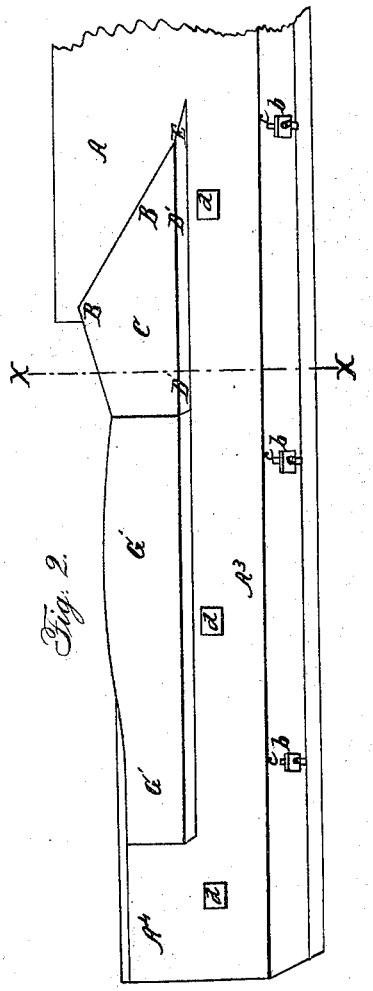

Fig. 2.

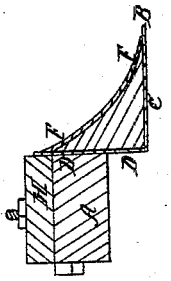

Fig. 3.

UNITED STATES PATENT OFFICE.

C. K. BARTLETT, OF GENESEO, ILLINOIS.

IMPROVEMENT IN THE CONSTRUCTION OF PLOWS FOR PRAIRIE LANDS, &c.

Specification forming part of Letters Patent No. **2,515**, dated March 28, 1842.

To all whom it may concern:

Be it known that I, CROMWELL K. BARTLETT, of Geneseo, in the county of Henry and State of Illinois, have invented an Improved Plow, intended principally for the plowing of prairie lands, but which is applicable also to lands of other descriptions; and I do hereby declare that the following is a full and exact description thereof.

The wood or frame work of my plow differs materially from that of plows in general use. Its main body consists of a plank of oak or other timber, which may be from six to twelve feet in length, from two feet six inches to three feet in width, and two or three inches in thickness. This plank is intended, in general, to run directly on the ground, the share, colter, and landside reaching or extending down from the under side of the plank to the depth of the intended furrow, the lower side of the plank thus constituting the gage to this depth, which may be increased or diminished by making that part of the plow adjustable to which the colter and share are attached. To cause the plank above named to pass readily over the ground it is made to curve up at its fore end, and when it is necessary to turn the plow round, as at the end of a furrow, or to draw it on without making a furrow, the fore end of it, and the share and colter attached to it, are lifted up by means of a lever and a pair of wheels, upon which said lever operates in a manner to be presently described. The landside of this plow is of unusual length, and serves to aid in guiding it in a direct line without its being necessary to use handles, as in the ordinary plow.

In the accompanying drawings, Figure 1 is a perspective view of my plow; Fig. 2, a representation of a part of the lower side and back of it, and Fig. 3 a vertical section in the line *x x* of Figs. 1 and 2.

A A is the plank, which constitutes the main body of the wood-work of the plow. The part A′ is the fore end, which is represented as curving upward, as above noticed. The part A^2 is shown in dotted lines, or transparent, for the purpose of giving an unobstructed view of the share, colter, and mold-board. In the rear of the part A^2 the plank is cut away, so as to leave it in the general form shown at A^3 A^4, Fig. 2. The share, colter, and the metallic part of the landside I make in one piece, usually forming it of sheet-steel, or of iron edged with steel, although it may be made of cast-iron. The part of this which forms the sole or bottom of the plow, and the edges of which constitute the share, stands at right angles, or nearly so, with that which constitutes the colter and landside.

B B is that portion of the steel or other plate which forms the share, C being the sole or bottom of the plow. D D is the part of said plate which stands at right angles to B C, the fore part of which, E, forms the colter. An additional colter may, if desired, be placed in front of this, in the manner common in other plows. Such a colter may pass through a mortise in the plank A and be held by a wedge.

F F is the mold-board, which may be of cast or of wrought iron, and may be attached to the plate B C D by rivets, or otherwise.

G G is a piece of timber, which forms a continuation of the metallic mold-board and of the landside, and to this the plate B C D is attached. The face G G forms the continuation of the mold-board, and may receive any curvature for turning over the sward which may be deemed expedient. The under part, G′ G′, of this piece of timber forms the continuation of the sole C of the plow, and of the metallic landside D′ D′, and passing along in the furrow serves to guide the plow in a straightforward course. The timber G G and the plate D D are bolted to the plank A A by bolts *a a a*, the heads of which are let in flush. The nuts of these bolts are seen at *b b b*, Fig. 2. The holes through which these bolts pass in the plank A A are widened out, as shown by the lines *c c*, which admits of the raising or lowering of the share and landside, so as to regulate the depth of the furrow.

H H is a piece of timber, which is bolted onto the plank A A by the bolts *d d*, serving to thicken it out and to make a proper bearing for the piece G G and the plate D D.

I I are two wheels, by means of which the share and colter are to be raised out of the ground when the plow is to be turned or is to be drawn forward without making a furrow. These wheels revolve on an axle, J J, and they may be raised up so as to clear the ground, or may be depressed so as to raise the share and colter from the furrow, by means of a lever, K K. The axle J J has mortises through it, through which pass the guide-standards L L,

upon which the axle slides. The wheels are represented as raised and the lever K held in place by a bolt, M, passing through the standard N. When the wheels are lowered the lever K is kept down by the bolt O.

In using the above-described plow the lower side of the plank A A is intended, in prairie land, to rest upon the ground; but in land which is gravelly or stony this may be objectionable, while its construction in other respects may render its use desirable. It may, in this case, be made to run upon four wheels, like the wheels I I, which may raise it two or three inches above the ground, more or less. The operating parts of the share, colter, and mold-board must be adapted to this arrangement.

Having thus fully described the manner in which I construct and use my prairie-plow, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The forming of the main body of the woodwork thereof of a plank which is to run on the ground, in the manner herein set forth, and having combined with it a share, colter, mold-board, and landside, the operating parts of which extend below the bottom of the plank to the depth of the intended furrow.

2. The forming of the share, colter, and landside of one continuous piece of metal bent at right angles, in the manner and for the purpose herein fully made known.

3. The manner of combining and arranging the timber G G and the share, colter, and mold-board of the plow so as to constitute one piece by their combination with each other, which combined piece may be adjusted so as to regulate the depth of the furrow by means of screws and nuts or other devices substantially the same with that described.

CROMWELL K. BARTLETT.

Witnesses:

THOS. P. JONES,

E. L. BRUNDAGE.