

A. W. DANIELS.
CORN FLOW.
APPLICATION FILED JULY 23, 1910.

1,027,998.

Patented May 28, 1912.
2 SHEETS—SHEET 1.

Fig. 1.

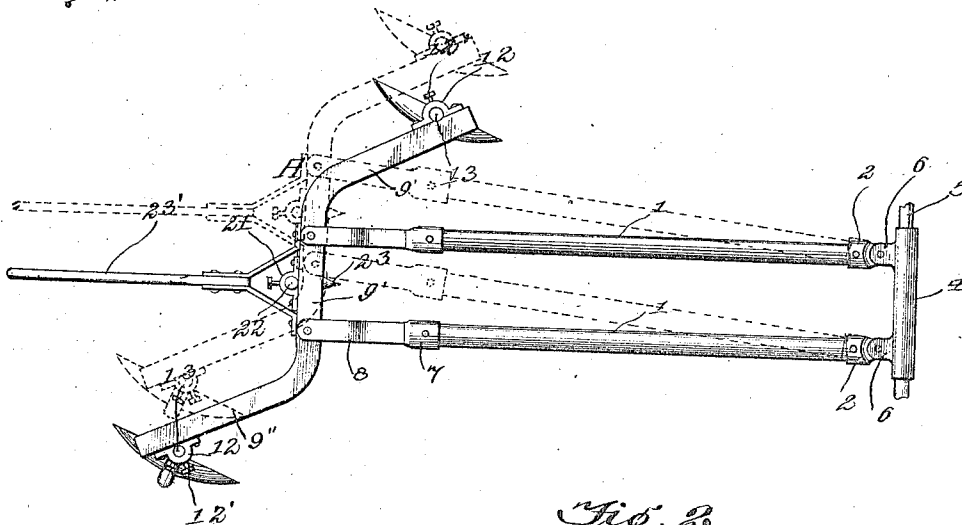
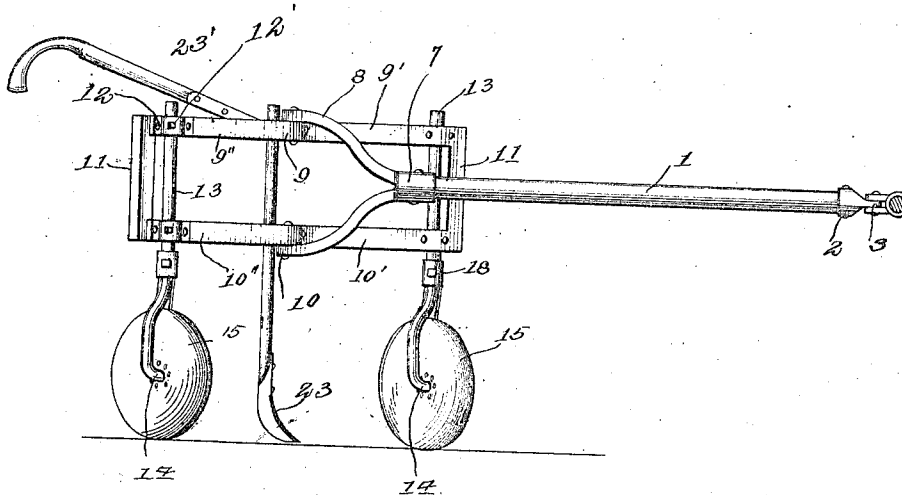


Fig. 2.



Witnesses
Frederick L. Fox.
Wm. Ragger.

Inventor
Adelbert W. Daniels
By Victor J. Evans
Attorney

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Fig. 3.

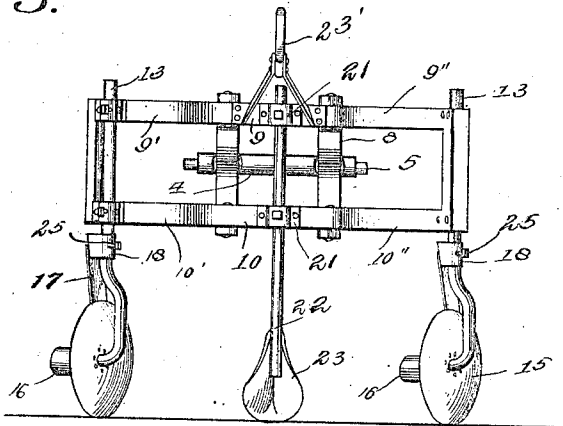


Fig. 4.

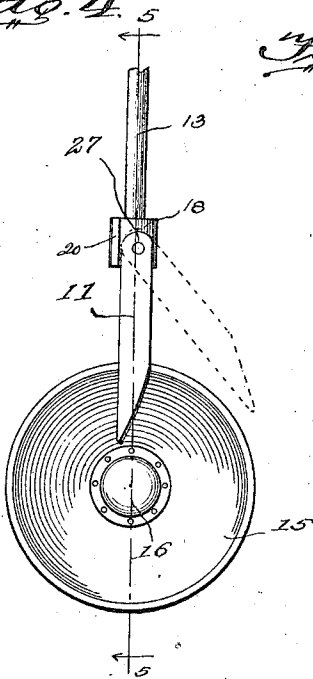


Fig. 5.

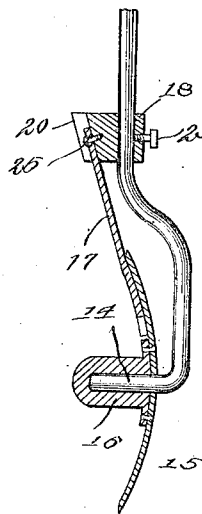
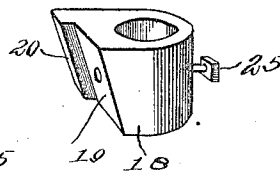


Fig. 6.



Witnesses

Frederick L. Fox,
Wm. Bagger,

Inventor
Adelbert W. Daniels
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

ADELBERT W. DANIELS, OF MORRISON, ILLINOIS.

CORN-PLOW.

1,027,998.

Specification of Letters Patent.

Patented May 28, 1912.

Application filed July 23, 1910. Serial No. 573,384.

To all whom it may concern:

Be it known that I, ADELBERT W. DANIELS, a citizen of the United States of America, residing at Morrison, in the county of Whiteside and State of Illinois, have invented new and useful Improvements in Corn-Plows, of which the following is a specification.

This invention relates to corn plows or cultivators, and it has for its object to provide a device of this class which shall possess superior advantages in point of simplicity, durability and general efficiency.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claim.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the claim may be resorted to when desired.

In the drawings,—Figure 1 is a top plan view, showing a cultivator gang and a portion of the axle or frame upon which it is mounted. Fig. 2 is a side elevation of the same. Fig. 3 is a rear elevation. Fig. 4 is a side view of one of the disk carrying shanks showing the disk in position. Fig. 5 is a sectional detail view taken on the line 5—5 in Fig. 4. Fig. 6 is a perspective detail view of one of the blocks carrying the springs whereby the disks are retained in position.

Corresponding parts in the several figures are denoted by like characters of reference.

The cultivator gang includes two parallel beams 1, 1 constructed preferably of tubular iron, each being provided adjacent to its front end with a sleeve 2 having a forwardly extending lug 3. A sleeve 4 mounted revolvably upon the axle or frame bar 5 is provided with rearwardly extending lugs 6 with which the lugs 3 are pivotally connected. Each of the beams is provided at its rear end with a sleeve 7 carrying a yoke 8.

A designates the frame composed of top

and bottom bars 9 and 10, each of which is bent so as to present forwardly extending ends 9', 10' and rearwardly extending ends 9'', 10''. The upper and lower frame bars are terminally connected by vertical side bars 11. The frame A is secured between the side members of the yokes 8, 8, said frame being thus maintained in a vertical position. The frame A is provided adjacent to the ends thereof with boxes or bearings 12 for the shanks 13 which are secured by set screws 12'. The lower ends of the shanks are bent to form disk carrying spindles 14. The disks 15 are provided with bearing members 16 which are in the nature of sockets, firmly bolted or otherwise secured upon the concave faces of the disks, and adapted to be mounted for rotation upon the spindles 14. The disks are retained upon the spindles or bearings by means of springs 17 which are secured upon sleeves 18 mounted upon the shanks 13 where said sleeves may be secured adjustably by means of set screws 25 or in any other convenient manner. Each of said sleeves is provided with a flat inclined face, best seen at 19 in Fig. 6, upon which the spring 17 is pivotally secured by a fastening member, such as a rivet or screw 26. Each of said sleeves is also provided adjacent to its forward edge with a flange 20 lying in the path of the spring 17 and serving to sustain said spring normally in an upright position and to prevent it from turning in a forward direction upon the rivet or pivot whereby it is secured in position. The lower ends of the springs constitute disk retaining scrapers which by engaging the concave faces of the disks serve to free the latter from adhering dirt, said springs being also made of sufficient strength to retain the disks securely upon the spindles when the device is in operation. When it shall be desired to remove the disks from the spindles, this may be readily accomplished by throwing or moving the lower ends of the springs rearwardly to the position indicated in dotted lines in Fig. 4, thus moving the engaging portions of the springs out of the path of the disks. The upper ends of the springs are preferably round, as shown at 27, to enable them to be conveniently moved in the manner indicated.

The frame A may be provided with bearings 21 having a shank 22 carrying an ordinary cultivator blade 23, said blade being

used intermediate the disks when desired. A handle 23' is suitably connected with the frame A, as shown.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily understood by those skilled in the art to which it appertains. It will be seen that by means of the handle 23' the cultivator gang may be moved laterally to the position indicated in dotted lines in Fig. 1 without varying the distance between the disks or earth engaging implements and without changing the angle at which the said earth engaging implements are presented, the frame A maintaining a parallel relation to the sleeve 4. The advantage of this will be obvious to tillers of the soil, because the efficiency of the earth engaging implements is unimpaired no matter what adjustment may be necessary with reference to the row of plants that is being operated upon. The construction is simple and inexpensive, and the disks may be readily adjusted at any desired pitch, and they may be conveniently adjusted so as to throw the dirt in the desired direction either toward or from the row of plants that is being operated upon. The disks may be very readily removed for sharpening or

other purposes without the use of tools and without the necessity of specially skilled labor, and the device is thoroughly efficient for the purposes for which it is provided.

Having thus described the invention, what is claimed as new, is:—

In a cultivator, an implement carrying frame having top and bottom members and vertically disposed end members connecting the same, said top and bottom members being bent forwardly at one end and rearwardly at the other end and provided with bearings adjacent to the ends thereof, vertically disposed implement carrying shanks mounted rotatably and vertically adjustable in said bearings, means for securing the shanks in adjusted position, parallel beams having vertically disposed yokes at their rear ends, the limbs of said yokes being pivotally connected, respectively, with the top and the bottom member of the implement carrying frame, and a draft member with which the front ends of the parallel beams are pivotally connected.

In testimony whereof I affix my signature in presence of two witnesses.

ADELBERT W. DANIELS.

Witnesses:

C. R. FELSMAN,
C. C. FULLER.