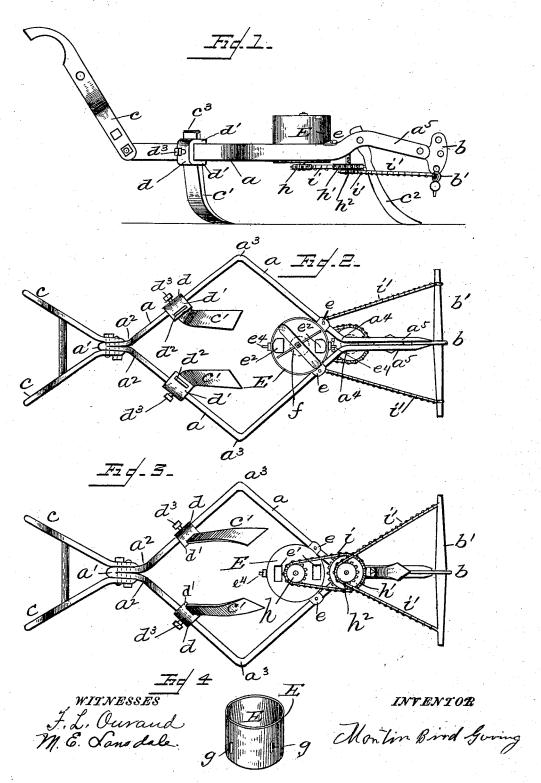
M. B. GOOING. CULTIVATOR.

No. 490,765.

Patented Jan. 31, 1893.



UNITED STATES PATENT OFFICE.

MARTIN BIRD GOOING, OF BASTROP, ASSIGNOR OF ONE-HALF TO S. H. PUCKETT, OF LOCHARBOR, LOUISIANA.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 490,765, dated January 31, 1893.

Application filed September 2, 1892. Serial No. 444,923. (No model.)

To all whom it may concern:

Be it known that I, MARTIN BIRD GOOING, a citizen of the United States, residing at Bastrop, in the parish of Morehouse and State of Louisiana, have invented certain new and useful Improvements in Cultivators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which 10 it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention is a combined cultivator and 15 planter, and consists in the novel construction

and arrangement of its parts.

In the accompanying drawings: Figure 1, is an elevation of my invention. Fig. 2, is a top plan view. Fig. 3, is a bottom plan view of 20 the same, and Fig. 4, is an elevation of the

The frame of the invention consists of an iron beam, a, bent back upon itself at a', and at right angles at the points, a^2 , a^3 , a^4 , and 25 terminating in a tongue, a^5 , holding between its two parts the drawhead, b, provided with three perforations one above the other so that the single tree, b', may be hung high or low and thus to some extent regulate the pitch of 30 the planter. The planter is provided with the usual handles, c, and feet or plow points, c' and c^2 . The plow points, c', are secured to the frame by a clasp d. Said clasp is constructed of a bar of metal its two ends, d', be-35 ing bent at right angles to its body and provided with perforations or slots, d2, to receive the upper and tenon end, c^3 , of the plow point, c'. Through the body of the clasp is a screw bolt, d^3 , adapted to be operated by a wrench. The clasp, d, is put on to the frame, the tenon, c^3 , passes up through the slots, d^2 , and then the bolt, d^3 , is turned until the plow point is securely clamped against the frame. It is evident that with this clamp many plows may 45 be put on and in as many different positions as desired. In the front part of the frame is a seed hopper, E, which is secured to the said frame by extensions and bolts, e, or other suitable means. In the bottom of the said hop-50 per are two dropping orifices, e', one immedi-to the lower end of the shaft of said stirrer; 100

ately in front of the other (see Fig. 3). These dropping orifices are covered by false bottoms, e^2 , which are secured inside of the hopper by means of bolts and nuts, e4. These false bottoms are some little distance above the main 55 bottom of the hopper so that the arms of the stirrer, f, may pass under them and thus keep the seed constantly dropping through the openings as the cultivator moves along. These openings, g, (see Fig. 4) of the hopper through 60 which the bolts, e^4 , pass have vertical slots so that the false bottoms, e^2 , may be raised or lowered to regulate the flow of the seeds. The said stirrer is secured in the center of the hopper on a vertical shaft. On the lower end of 65 said vertical shaft is a sprocket wheel, h. In front of said sprocket wheel and between the two parts of the tongue extends downwardly a rod on which is journaled a larger sprocket wheel, h', and immediately under said sprocket 70 wheel and secured to the same is a small sprocket wheel, h^2 . The sprocket wheels, hand h', are connected by a sprocket chain, i, and from the small sprocket wheel, h^2 , runs another sprocket chain, i', the ends of which 75 are secured to each end of the single tree, b'. The horse being attached to said single tree by proper harness it is evident that as he walks the ends of the single tree will play backward and forward, and thus the small 80 sprocket wheel will be partly rotated and, by means of the gearing just described, the stirrer will be rotated back and forth and thus the seeds made to drop through the openings e'.

Having described my invention what I 85 claim as new and desire to secure by Letters Patent, is:-

The combination of the beam a, bent in proper shape to form the frame of the cultivator and adapted to carry suitable handles, 90 plow points and drawhead; hopper E, provided with the vertical slots g, and dropping orifices e'; false bottoms e^2 , secured over the said orifices by means of bolts e^4 , passing through said slots g, and secured by proper 95 nuts; stirrer f, pivoted vertically in the center of said hopper with its arms adapted to play under said false bottoms and over said

sprocket wheels h' and h^2 , secured to a rod extending from the tongue of the frame; drawhead b, secured in the front end of the tongue; single tree b', pivoted to said drawhead; sprocket chain i, passing around the sprocket wheels h and h'; sprocket chain i', passing around the sprocket wheel h^2 , and having its ends secured to each end of said single tree,

substantially as shown and described and for the purposes set forth. In testimony whereof I affix my signature in

presence of two witnesses.

MARTIN BIRD GOOING.

Witnesses:

G. W. NAFF, J. P. MADISON.