(No Model.)

G. P. DOWLING.

COTTON SCRAPER.

No. 603,426. Patented May 3, 1898.

Fig. 1.

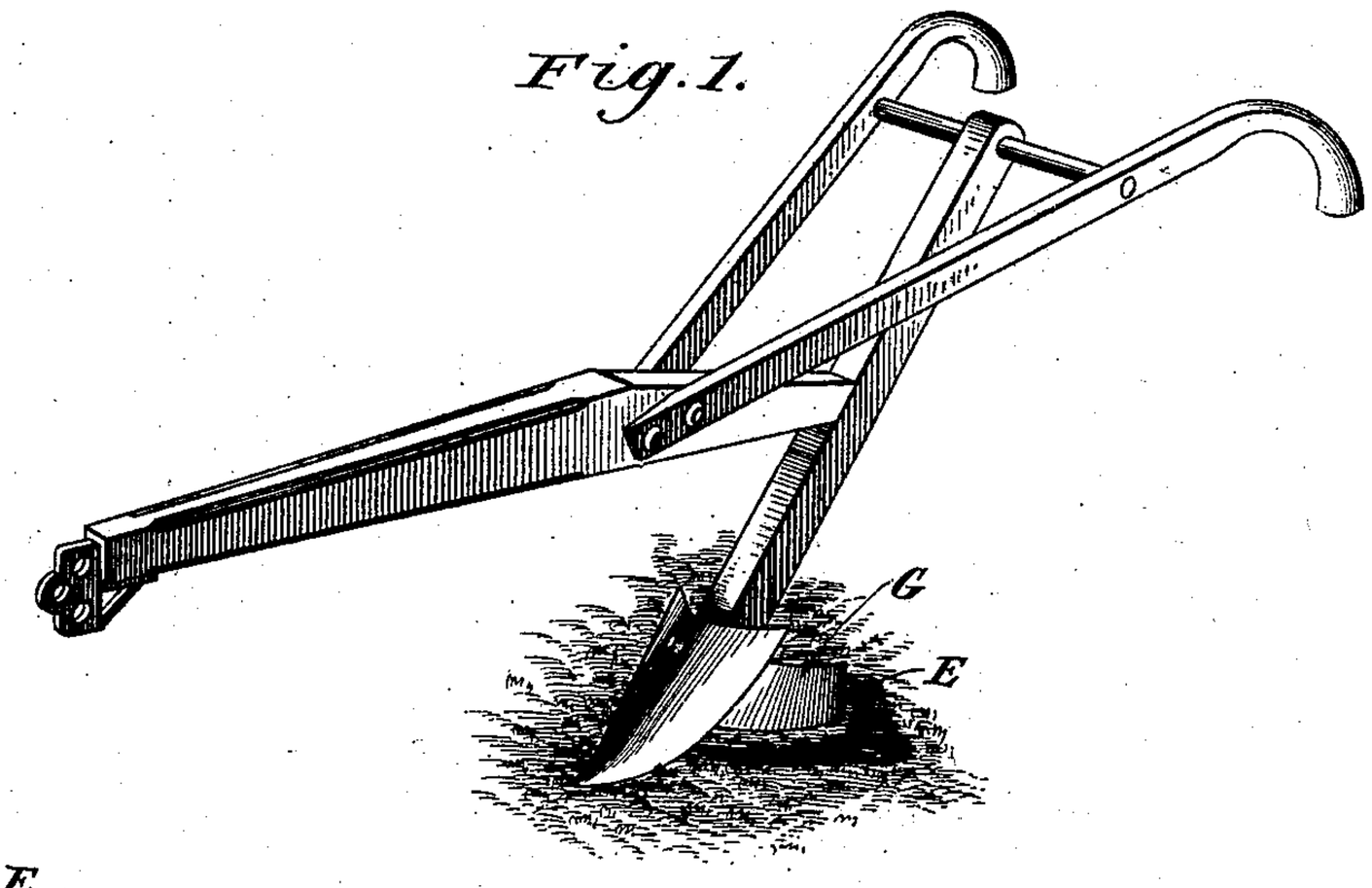


Fig. 2.

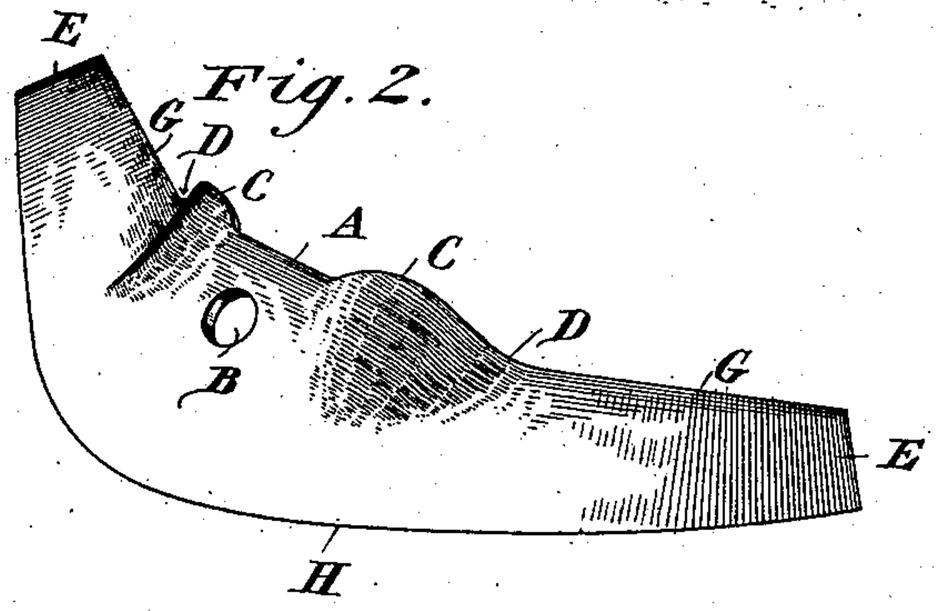


Fig. 3.

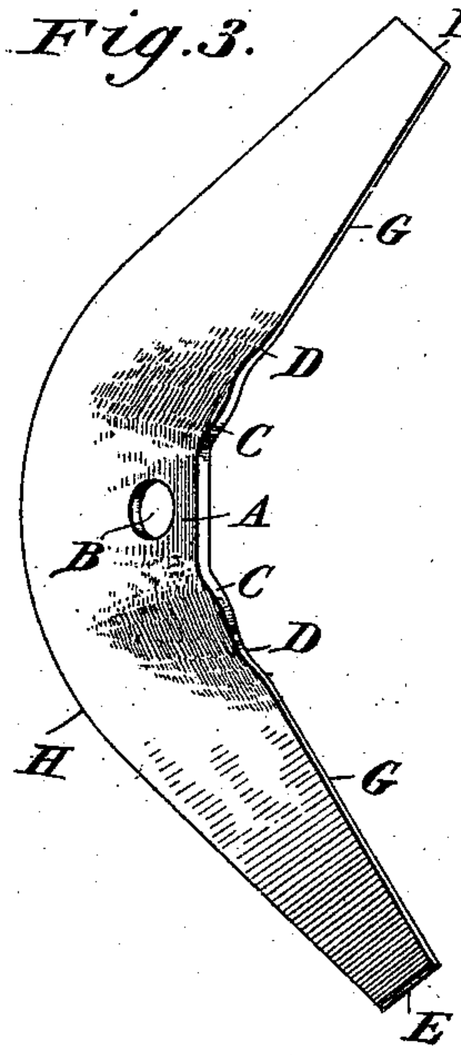


Fig. 4.

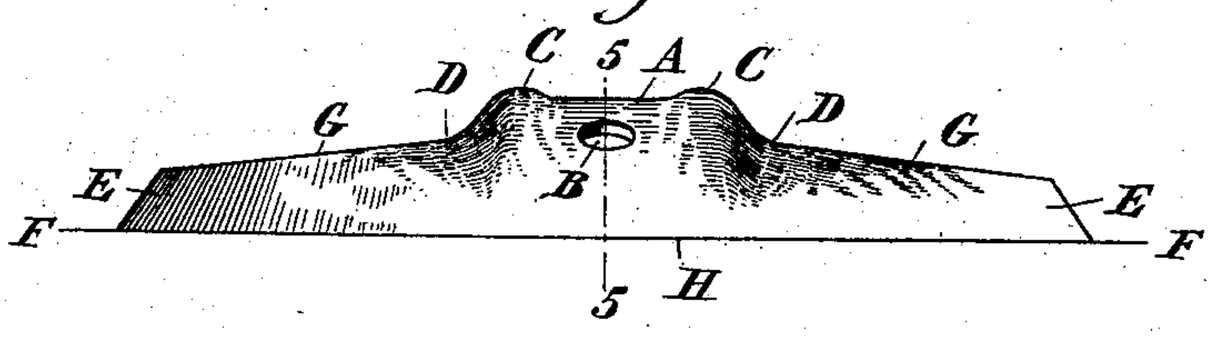
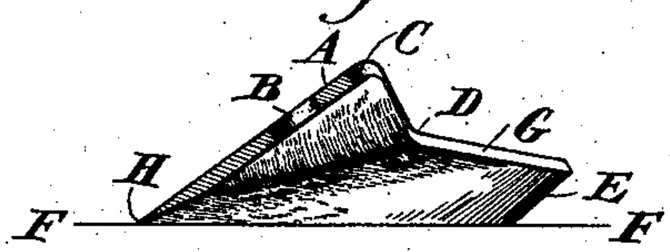


Fig. 5



Witnesses

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UNITED STATES PATENT OFFICE.

GABREL P. DOWLING, OF OZARK, ALABAMA.

COTTON-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 603,426, dated May 3, 1898.

Application filed July 7, 1897. Serial No. 643,723. (No model.)

To all whom it may concern:

Be it known that I, GABREL P. DOWLING, residing at Ozark, in the county of Dale and State of Alabama, have invented a new and useful Cotton-Scraper, of which the following is a specification.

My invention relates to the form of plows known as "cotton-scrapers," and is used in cultivating the balk between cotton rows and in corn cultivation.

The object of my invention is to furnish a scraper for such sweep-plows which will be simple in construction, cheap, reliable, strong, and very effective in operation.

With this object in view my invention consists in a cotton-scraper so shaped as to permit of its being readily attached to the back of the foot of any ordinary sweep-plow or cultivator, and at the same time, notwithstanding the inclination of the foot and scraper, the scraper will present a smooth uninterrupted upper surface for about one-half its height, and a cutting edge extending in a curved line from end to end, with the whole edge in the same horizontal plane.

My invention further consists in certain details of construction which will be hereinafter fully described and afterward specifically pointed out in the claim.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, having reference to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a plow having my improved scraper secured thereto in position for practical operation. Fig. 2 is a perspective view of my improved scraper detached from the plow. Fig. 3 is a top plan view thereof. Fig. 4 is a front elevation thereof. Fig. 5 is a transverse sectional view taken on the broken line 5 5 of Fig. 4.

Like letters of reference mark the same parts wherever they occur in the different figures of the drawings.

My improved scraper may be manufactured by casting it or by stamping it out of plate-steel, the mode of manufacturing being varied to suit the exigency of the case, although the preferred manner will probably be that of stamping it in dies from a piece of plate-steel.

The central portion A of my improved scraper, when the scraper is completed, will remain substantially unaltered from the plate and will be provided with a bolt-hole B, by which it will be attached to the foot of the plow. The front of the portion A resting against the rear side of the plow-stock is secured thereto by the same bolt that holds the plow on the front side thereof. It may also be connected with a corn-shovel, a straight-turned shovel, or any ordinary cultivator used in working cotton, corn, and the like. On either side, immediately adjacent to the central portion A, is a raised portion C, which is curved in outline at its rear upper edge, but disappears at about the middle of the scraper into the plate of the scraper itself. These projections C C assist in holding the scraper rigid in position upon the plow-stock and in preventing its revolving upon the fastening-bolt. They also serve to lend additional stiffness to the scraper itself and to take up a portion of the metal of the rear edge thereof in order to shorten said edge and thus curve the front edge of the scraper. From the points the edges D, near the outer edges of the projection C, disappear in the side blades of the scraper and the two ends of the scraper are carried backward, being made narrower at their rear ends E.

The central portion A of the scraper, extending from the top of the beam thereof, is arranged at about an angle of forty-five degrees to the horizontal base-line F F, as shown in Figs. 4 and 5, while the side blades G G of the scraper, extending from the points D D to the ends E E, are laid at a much more acute angle to said horizontal base-line. The object of this change in the angles is to give the proper inclination to the central portion A to fit the plow-stock and at the same time permit the whole of the front cutting edge H to be arranged in a true horizontal line, with a more acute angle throughout the greater part of its length in front of the wings G G to increase its effectiveness as a cutter and pulverizer.

The general form of the cutting edge of the front of this scraper is that of a crescent,

which prevents any trash or turf from hanging about the edge, which is very annoying to any practical farmer. This scraper will cut evenly from point to point, which without the setting up in the center and the drop in the wings would be impossible.

The arrangement of the forward edge in a perfect horizontal line causes the scraper to run evenly under the soil and cut and pulverize evenly the whole width of the soil through which it passes and cut all grasses, weeds, and similar undergrowth which may be in its path.

While I have illustrated and described the best means now known to me for carrying out my invention, I desire it to be understood that I do not restrict myself to the exact details of construction shown and described, but hold that any slight change in such details of construction as might suggest itself to the ordinary mechanic would properly fall within the limit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

The cotton-scraper herein described, consisting of a central portion A provided with a hole for attachment to the plow-stock and properly inclined to fit the same, a curved upward and outward projection C on each side of said central portion extending only partially across the scraper, and the rings G beginning at and extended rearwardly in curved lines from said projection, the cutting edge H being arranged in a horizontal plane and formed in crescent shape, the lower half of the scraper between its central longitudinal line and its edge being curved from end to end and presenting a smooth uninterrupted upper surface, substantially as described.

GABREL P. DOWLING.

Witnesses:
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