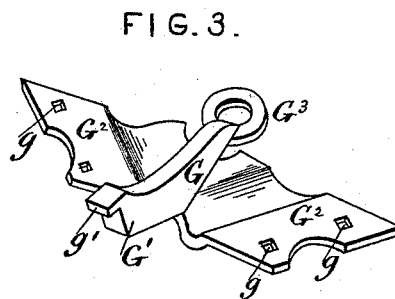
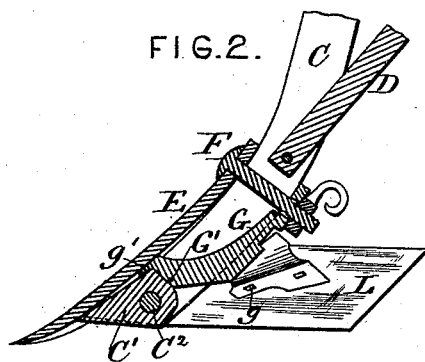
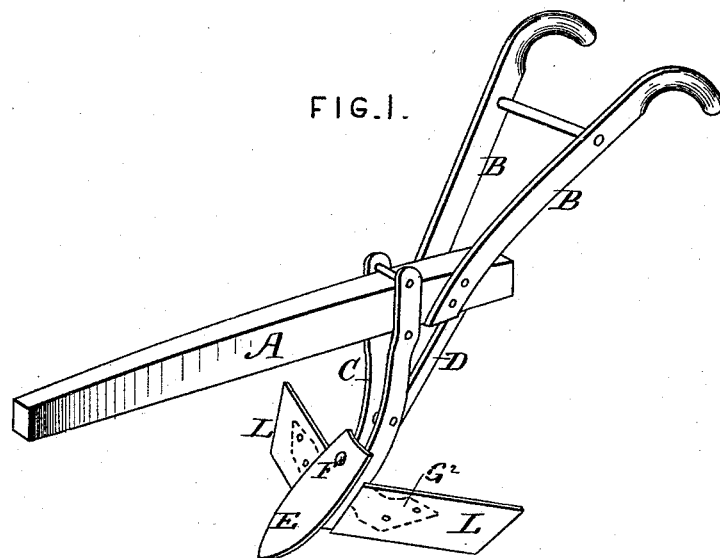


(No Model.)

T. W. BOYLE.  
COTTON AND CORN SCRAPER AND CULTIVATOR.

No. 418,268.

Patented Dec. 31, 1889.



ATTEST-

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atty.

# UNITED STATES PATENT OFFICE.

THADDEUS W. BOYLE, OF AUGUSTA, GEORGIA.

## COTTON AND CORN SCRAPER AND CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 418,268, dated December 31, 1889.

Application filed January 26, 1889. Serial No. 297,648. (No model.)

*To all whom it may concern:*

Be it known that I, THADDEUS W. BOYLE, a citizen of the United States of America, residing at Augusta, in the county of Richmond and State of Georgia, have invented certain new and useful Improvements in Cotton and Corn Scrapers and Cultivators, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in scrapers and cultivators which are used especially for the cultivation of cotton and corn, and is an improvement upon the device for which a patent was granted to me June 29, 1886, No. 344,716; and the object of my improvement is to provide the body of the blade-supporting wings with a head to enter between the branches of the standard, and thereby prevent independent lateral motion of said body, and also with a head at the lower end to prevent it from slipping too far down, and also with a lip to release the bolt from strain when the device is used as a scraper. I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a cotton-scraper constructed in accordance with my invention. Fig. 2 is a longitudinal section of the lower portion of the standard and its attachments. Fig. 3 is a perspective view of the blade-supporting wings and their connecting body and head.

In said drawings, A represents an ordinary plow-beam provided with handles B, and a standard C, constructed, preferably, of two wrought-iron bars united together at their lower end by a connection preferably in the form of a triangular iron block or shoe C', and a bolt C<sup>2</sup> passing therethrough, said standard being secured at its upper end to the beam by bolts passing, as usual, through said standard. The standard is braced to the beam by a bar D, having its lower end secured to the standard and its upper end to the under side of the beam. To the front of the standard is secured an ordinary "bull-tongue" or "scooter" cultivator-point E by means of the bolt F and a nut thereon. Se-

cured to the rear of the standard C by the same bolt is a body G and head G' of such width as to be readily received between the two bars of the standard and be thereby steadied and protected against lateral swaying. Said body has cast integral therewith two wings G<sup>2</sup>, set at an obtuse angle thereto, and having their ends cut diagonally and provided with perforations g to receive small bolts to secure thereto the blades L, having their upper and lower edges straight and parallel and the ends cut off diagonally. Their lower edge is sufficiently sharp to cut any grass and weeds which may be growing between the rows of plants. The bolt F passes through the concaved rear end of the body G, or through a ring G<sup>3</sup>, located under the rear end of the body G, and formed, preferably, integral therewith, and retains said body secured at that point to the standard; but as said body and its wings might be liable to slide down said standard lower than their proper position, and thus have the points of the wing project below the foot of the standard, and thus catch in obstructions when the plow is inserted into the ground at the beginning of a furrow, the head G', projecting in front of the body, extends so as to abut against the block or shoe C' of the standard. To prevent the front of the body or head G' from being pulled back by the engagement of the blades with the ground, the front of the head G' is provided with a lip g', that bears upon the top of the shoe of the standard.

Having now fully described my invention, I claim—

1. In a cotton-scraper, the combination of the standard consisting of two parallel bars connected at the lower end, a body entered and projecting between said bars and having a head abutting against said lower connection of the bars of the standard, said body having wings, substantially as and for the purpose described.

2. The combination of a cultivator-standard having two parallel bars and a transverse connection at the lower end, a body entered and projecting between said bars and having a head abutting against said connection, and a lip resting thereon, said body having wings,

substantially as and for the purpose described.

3. A blade-carrying block having two wings  
G<sup>2</sup> and a body G, projecting above and forward of said wings, said body being adapted  
5 to be received between and connected to the parallel bars of a plow-standard, substantially as described.

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

THADDEUS W. BOYLE.

Witnesses;

JNO. J. EVANS,  
LANDIN A. THOMAS, Jr.