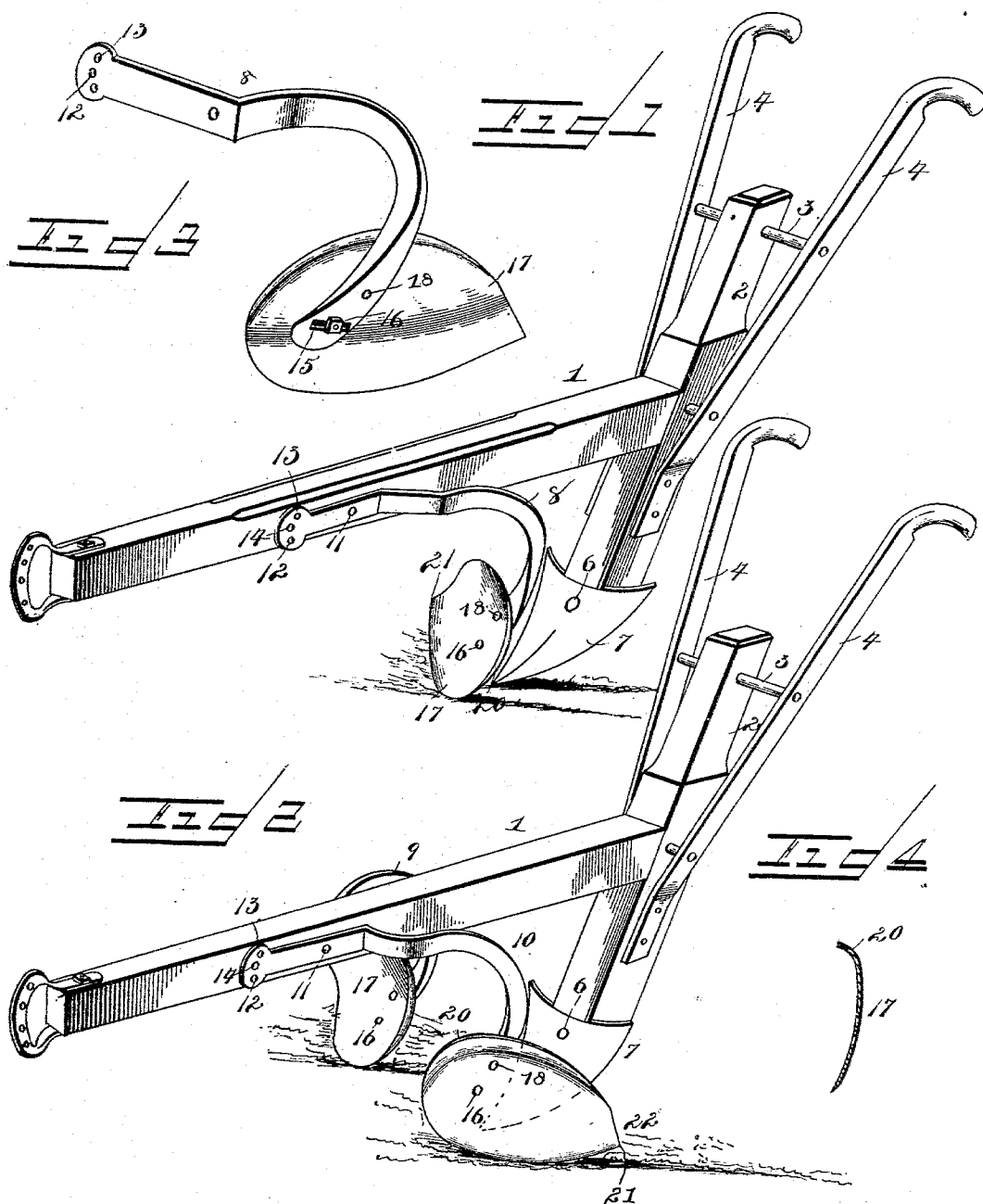


(No Model.)

G. W. SMITH & J. S. HENDON.
COMBINED SCRAPER AND CULTIVATOR.

No. 510,940.

Patented Dec. 19, 1893.



Inventors

George W. Smith and
James S. Hendon.

Witnesses:

W. C. Schneider By their Attorneys.

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UNITED STATES PATENT OFFICE.

GEORGE W. SMITH AND JAMES S. HENDON, OF VAN VLEET, MISSISSIPPI.

COMBINED SCRAPER AND CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 510,940, dated December 19, 1893.

Application filed July 20, 1893. Serial No. 481,038. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. SMITH and JAMES S. HENDON, citizens of the United States, residing at Van Vleet, in the county of Chickasaw and State of Mississippi, have invented a new and useful Combined Cotton and Corn Scraper and Cultivator, of which the following is a specification.

Our invention relates to improvements in agricultural implements, and has special reference to that class thereof employed in the scraping and cultivation of corn and cotton; the objects in view being to provide a cheap and simple machine adapted to operate either as a scraper or a cultivator, and when in the former capacity to be so constructed as to obviate baking of the earth and the subsequent plowing for this purpose, but to the contrary to carry on the operation of scraping and plowing simultaneously and with one machine, thereby reducing the number of operators, and also labor and attendants.

Other objects and advantages of the invention will appear in the following description and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a perspective view of a machine embodying our invention, the same being designed for scraping cotton rows. Fig. 2 is a similar view of the machine, the same being designed for cultivating. Fig. 3 is a detail in perspective, the view being taken from the rear of one of the standards and cultivator or scraper blades. Fig. 4 is a sectional view through one of the blades.

Like numerals of reference indicate like parts in all the figures of the drawings.

The beam 1 is of the ordinary construction, and has its rear end tenoned and let into a mortise in an inclined standard 2, or if desired, any other form of standard may be employed. The standard 2 in this instance extends above the beam and is transversely perforated to receive a rung 3, which extends through the perforation and also secures opposite handles 4 together, the lower ends of the handles being bolted to the opposite sides of the standard 2. The lower end of the standard 2 has secured thereto by an ordinary heel-bolt 6 a sweep-plow 7 of the ordinary construction.

The plow thus constructed is preferably provided with or accompanied by three standards, which I will designate as 8, 9 and 10. The standard 8 is of goose-neck form or pattern, and is at its center offset from its front end, which latter immediately in front of the offset is pivotally bolted, as at 11, to one side of the plow-stock or beam, and at its front end is provided with a flared head 12 having a series of perforations or bolt-holes 13 concentric with the pivot point 11. A bolt 14 may be passed through any one of the perforations 13 and thus maintain the standard at a proper inclination. The rear or lower end of the standard is flattened and flared as shown and is provided with a transverse slot 15 in which is located a bolt 16. A scraper-blade 17 is applied to the front face of the flattened portion of the standard 8, and a pivoting bolt 18 is passed through the standard above the slot and through the blade 17. The bolt likewise passes through the blade 17, so that as will be apparent by loosening the nut on the bolt 16 the blade may be given any proper or desired angle with relation to the standard and the soil upon which it is operating. The scraper 17 is provided with a front rounded edge 20, and at its lower cutting edge depends rearward and upward, terminating in a point 21. When viewed in cross-section the blade 20 is spoon-shaped or of concavo-convex form.

The machine as thus constructed is adapted for scraping corn and cotton rows, and effectually accomplishes the same as will be obvious. The sweep-plow following immediately thereafter serves to loosen the thoroughly scraped surface, and throw the soil from the same up toward the plant. By this means the scraping and cultivation are carried on simultaneously and consequently a second operation is avoided. We thereby accomplish by a single operator and horse what would otherwise occupy the time and labor of two operators and two horses.

In Fig. 2 we have shown the invention for cultivating, and in this instance, we employ the two goose-neck standards 9 and 10, substituting them for the standard 8. These standards 9 and 10 are similarly constructed at their front ends to the standard 8 and hence require no specific description. To their rear ends are secured the two spoon-shaped shov-

els or blades 22, which are similar in construction and form to the one heretofore described. These are disposed in opposite directions, as shown, and are designed to throw the dirt scraped toward each of the rows so that a single row is completed at one operation. The sweep-plow following immediately in the wake of the blades serves to loosen the soil and prevent the baking thereof as would otherwise be the case.

We do not limit our invention to the precise details of construction herein shown and described, but hold that we may vary the same to any degree and extent within the knowledge of the skilled mechanic.

Having described our invention, what we claim is—

1. The combination with the plow-beam and standard, of the herein described scraper-blade, the same having a front rounded end and terminating at its rear end in a point, the said blade being in vertical and horizontal sections of concavo-convex form, substantially as specified.

2. The combination with the beam and rear standard, of the goose-neck standard offset intermediate its ends and pivoted in front of its offset to the beam and terminating at its front end in a perforated head having a bolt,

and a spoon-shaped scraper-blade secured to the rear end of the standard, upper and lower bolts passed through the blade into the standard, and a slot formed in the lower end of the standard for the reception of the lower bolt, and a sweep-plow arranged on the rear standard, substantially as specified.

3. The combination with a beam terminating at its rear end in a standard carrying a sweep, of the oppositely offset goose-neck standards bolted to the beam at opposite sides thereof, and the oppositely disposed spoon-shaped scraper blades having front rounded edges and rear points, said blades being spaced apart in advance of the sweep, substantially as specified.

4. The spoon-shaped blade herein described provided with a front rounded edge 20 and having its lower cutting edge curving upward and meeting the upper edge at the point 21, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

GEO. W. SMITH.
JAS. S. HENDON.

Witnesses:

C. A. MOFFAT,
P. W. SHELL.