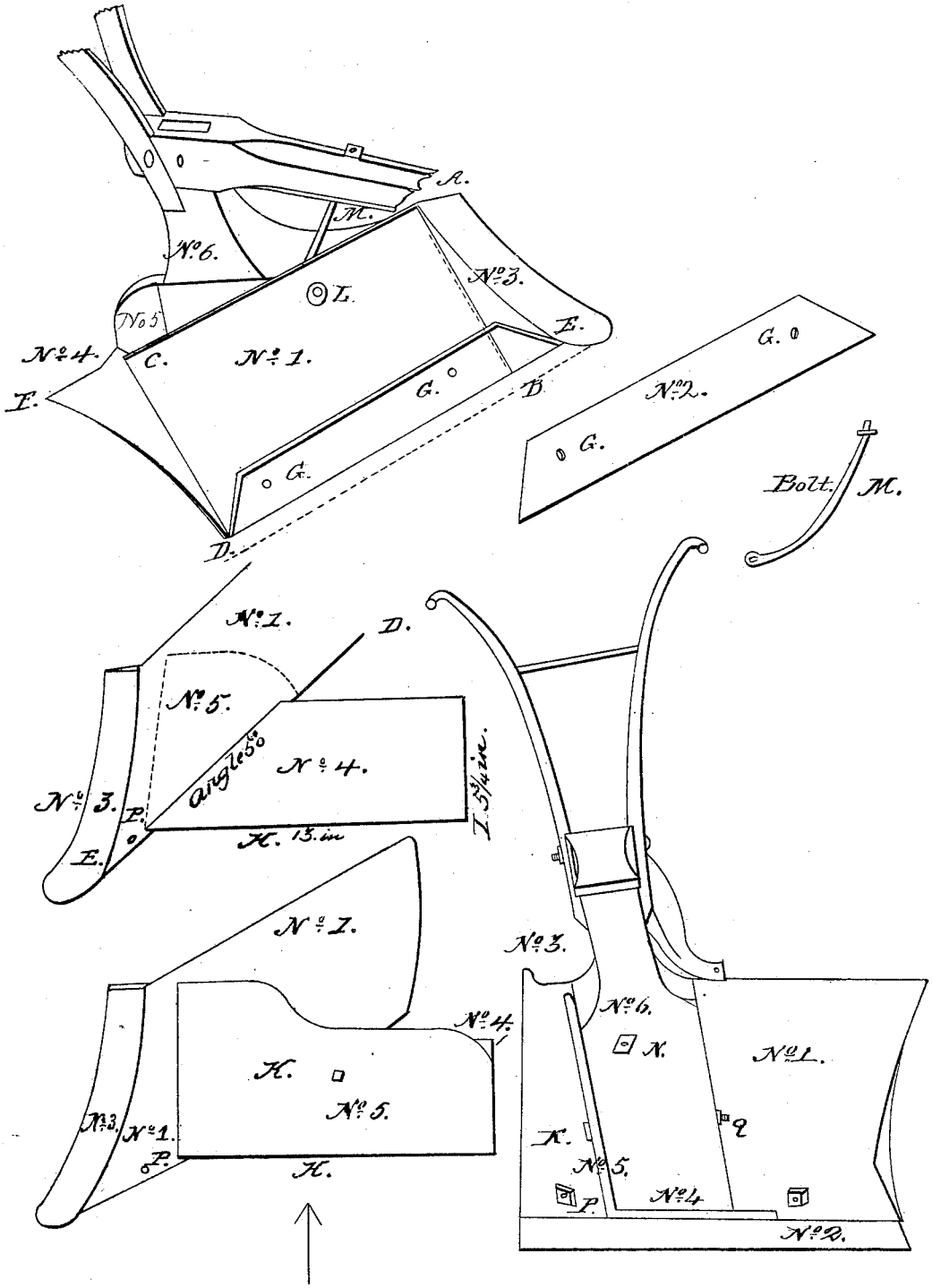
W. C. FINNEY.

Shovel-Plow.

No. 6,379. Patented Apr. 24, 1849.



UNITED STATES PATENT OFFICE.

WILLIAM C. FINNEY, OF FAYETTE COUNTY, TENNESSEE.

IMPROVEMENT IN COTTON-SCRAPERS.

Specification forming part of Letters Patent No. **6,379**, dated April 24, 1849.

To all whom it may concern:

Be it known that I, WILLIAM C. FINNEY, of the county of Fayette and State of Tennessee, have invented a new and useful improvement on the agricultural implement commonly called a "Cotton-Scraper;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

No. 1 is the mold-board, a rhomboidal section of a hollow cylinder whose anterior chord, A B, is eight inches, and its posterior, C D, eight and a half inches, its upper edge sixteen and one-half inches long, its lower edge fifteen and one-half inches long, and the greatest height of their arcs from the chords about one inch, the anterior lower angle extending beyond the perpendicular line A B two inches to E, its posterior upper angle beyond the perpendicular C D three inches to F. At the bottom or lower part of this board is cut a rabbet two inches wide at the anterior part and one and three-fourths inch at the other, beginning at the lower extremes of the boards and extending upward and toward the center, thus lessening its length above, at an equal angle at each end, with two bolt-holes, G G, at an equal distance from their respective ends, so as to admit at pleasure of a change of ends and surface in the blade, hereinafter mentioned. This rabbet is about three-eighths inch deep.

No. 2 is a steel blade three inches wide, to fit accurately in the rabbet, with holes corresponding with those in the latter, to be confined in its place by iron screw-bolts with nuts beneath. This is intended to act as a self-sharpening edge by the change of its ends and surfaces with respect to the mold-board at pleasure.

No. 3 is a guard projecting from the anterior upright edge of the mold-board, forming an angle of about one hundred and thirty degrees with its front face, being about one and three-quarters inch wide, and extending below the lower edge of the mold-board as far as the edge of the blade, with its front edge shorter than its back, so as to give its point a tendency upward.

No. 4. From the point P on the back of the mold-board, three inches from the inner edge of the guard at E and half an inch above the lower edge of the mold-board, suppose a line drawn parallel to the lower edge of the mold-board toward D. From this line the lower surface of a flat iron plane, called the "slide," three eighths inch thick, extends back in such manner as to make an angle of fifty degrees contained between its line on the plow-boy's left, H, and the line on the mold-board from which it springs, the left side, H, being thirteen inches in length, and forming a right angle with the back line, I, in which the slide terminates. This slide is five and three-fourths inches wide. The angle formed between this slide and a line drawn from the lower to the upper side of the mold-board, as the chord A B, will be about sixty-eight or seventy degrees, giving the mold-board sufficient lean backward to clear itself well of the earth cut by the blade. When the material is cast-iron this slide, the mold-board, and the landside hereinafter mentioned (No. 5) must be cast together in one solid piece, so as to make but one, and be inseparable. When the material is wrought-iron the slide, mold-board, and landside must be welded together. The end of the slide is to connect the landside and mold-board, so as to prevent earth, &c., from forcing its way between them and the foot, (No. 6,) and to lessen the friction in the passsage of the plow.

No. 5 is a landside rising from the left line of the slide H, forming an interior angle with it of about sixty degrees, connected with the mold-board in front and terminated by it, nearly corresponding with the mold-board in height in front, but lower behind, and having in its center a hole, K, to receive a screw-bolt, which passes through the helve or foot, and is confined by a nut on the opposite side of the foot Q. There is also a similar hole in the mold-board at L, through which a screw-bolt passes through the helve and through a rod, M, running down from and through the beam, having an aperture or hole in the end inserted in the helve or foot, which bolt is also secured by a nut behind the helve N. This landside, as before mentioned, must be made of one piece with the mold-board and slide, either of wrought or cast iron.

No. 6 is a helve or foot, of larger dimensions than usual, to fill a considerable part of the

space or cavity formed by the junction of the mold-board, landside, and slide, to add to the weight and steadiness, tapered off above to receive the beam on a tenon, with handles of the usual form. The left face of the helve must be true with the left face of the landside, which will give the whole fabric, when standing on level ground, a considerable inclination to the plowman's left, but an upright position on the side of the cotton-ridge.

What I claim as my invention is—

The peculiar connection and arrangement of the slide H, landside K, and mold-board No. 1, as described, securing the proper position of the scraper, regulating the position of the stock, and preventing the alteration of its set by the wear from friction to which the unprotected helve is subject.

WM. C. FINNEY.

Witnesses:

JAS. H. BALLORD,

D. W. THOMAS.