(No Model.)

H. D. TERRELL.

HEEL SWEEP FOR PLOWS.

No. 504,375. Patented Sept. 5, 1893.

Fig. 1.

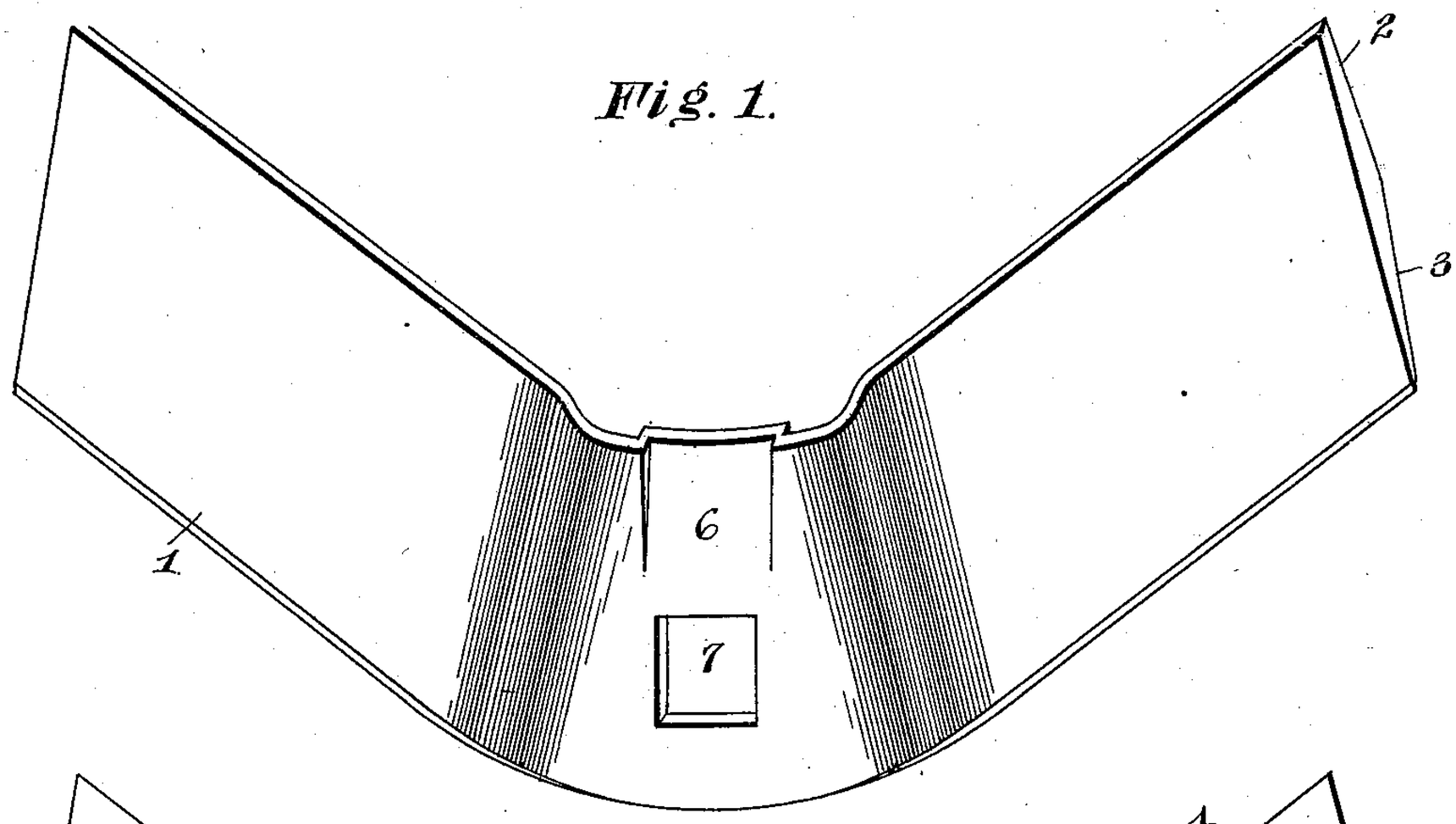


Fig. 2.

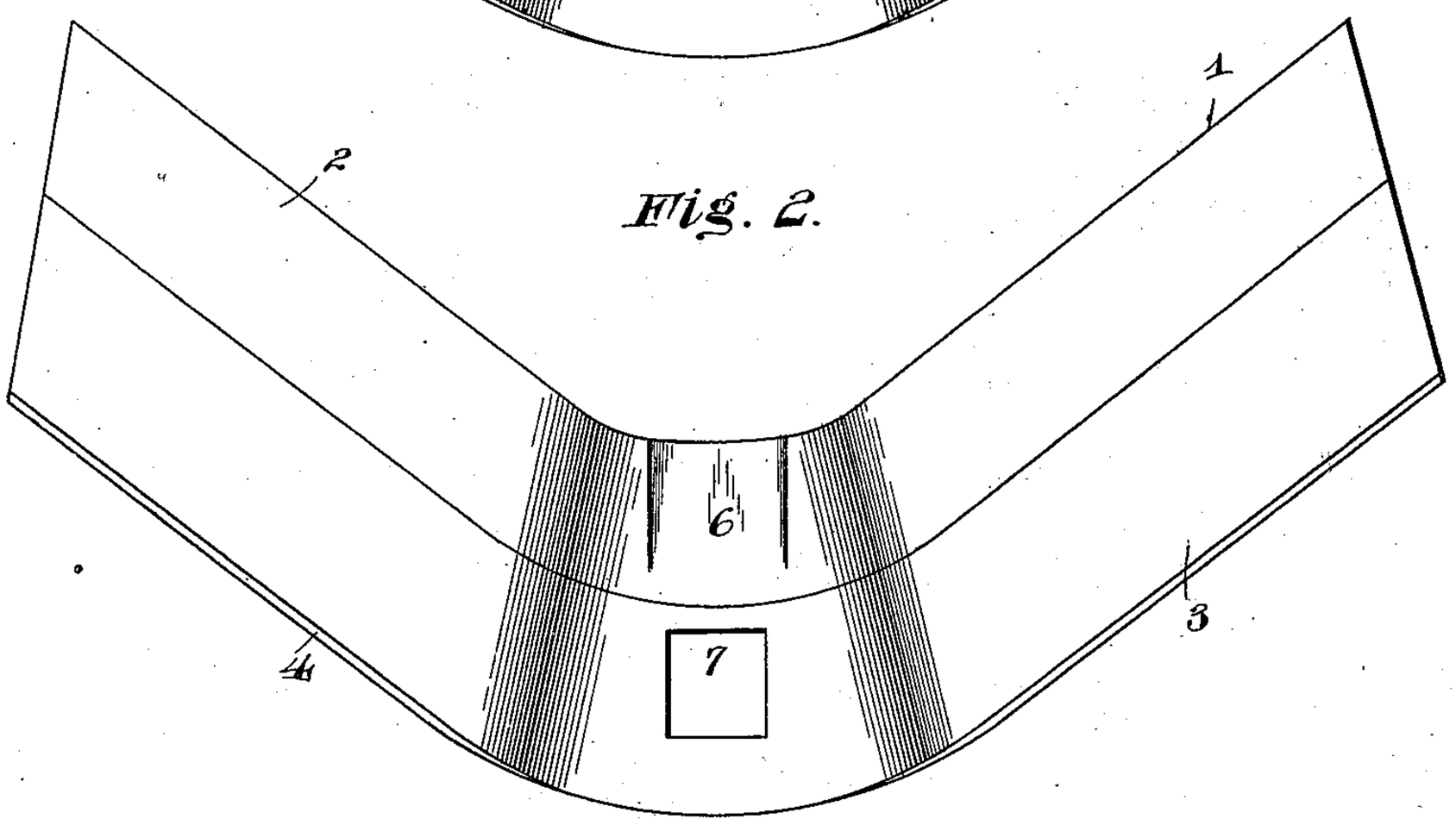


Fig. 3.

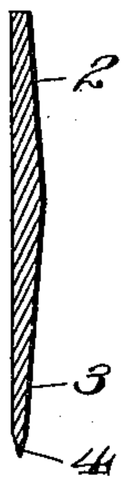
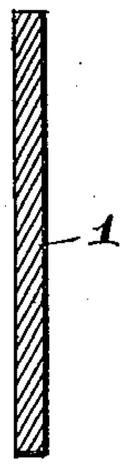


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY DENTON TERRELL, OF COVINGTON, GEORGIA.

HEEL-SWEEP FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 504,375, dated September 5, 1893.

Application filed February 6, 1893. Serial No. 461,191. (No model.)

To all whom it may concern:

Be it known that I, HENRY DENTON TERRELL, a citizen of the United States, residing at Covington, in the county of Newton and State of Georgia, have invented a new and useful Heel-Sweep for Plows, of which the following is a specification.

My invention relates to improvements in heel-sweep attachments for plows.

Heretofore considerable difficulty has been experienced by reason of the fact that the edge of the sweep would wear dull in a short time and the effectiveness of the sweep be greatly impaired, thus requiring a removal of the same from the plow-stock and a resetting or grinding of its edge; furthermore, the sweep was produced at considerable cost, was unnecessarily heavy, &c.

The objects of my invention are to overcome the above objections and produce a sweep-attachment, the edge of which will wear longer than the ordinary beveled edge given the sweep, thus saving the time and expense otherwise consumed in resharpening; and, furthermore, to produce a sweep that will be extremely light, and yet at the same time more rigid than the ordinary sweep and consequently more durable and effective, and which while cold may be set by the farmer to throw more or less dirt, as desired, toward the plants.

With these objects in view, the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claim.

Referring to the drawings:—Figure 1 is a perspective view of a heel-sweep attachment constructed in accordance with my invention. Fig. 2 is a rear elevation of the same. Fig. 3 is a transverse section. Fig. 4 is a similar section of the blank from which the sweep is formed.

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

In practicing my invention I employ a steel, oblong blank 1, of the usual size and of a desired thickness; and preferably beginning from a point slightly above the longitudinal center of the blank, reduce the same by rolling or otherwise toward its opposite edges, thus producing upper and lower beveled portions 2 and 3, respectively. The beveled lower portion 3, is slightly beveled or ground at its outer edge forming an efficient cutting-edge 4, while the upper thinned beveled portion 2 is left intact. It will thus be seen that the longitudinal line at which the rolling begins is the thickest, and such should be the case, as such is the point subjected to the greatest strain. The attachment is now otherwise shaped or bent, as at 6, to take over the plow-foot, and is provided with the usual heel-bolt opening 7, which in order not to weaken the sweep is formed slightly below the thickened longitudinal portion in the lower beveled portion 3. By the formation of such a cutting edge it will be seen that as the same wears it will be in a manner self-sharpening, that is, the lower beveled edge being constantly in contact with the ground will become worn in a uniform manner, and instead of becoming dulled, will maintain its efficiency, it wearing at a greater bevel than that with which the lower portion of the sweep is provided. It will furthermore be seen that the attachment may be of much lighter stock than heretofore, as the point at which most of the strain comes is thick enough to withstand it and at the same time its rigidity will be materially increased.

It will be noted that I say that I "preferably" begin beveling in each direction at a point slightly above the longitudinal center of the blank. I do this as I thereby gain a better result, in that, if the bevels were equal the upper edge would be so thin that it could not be successfully bent back to give the sweep the proper contour desired without puckering or crumpling. To avoid this then I roll from a point above the longitudinal center, and while I reduce the lower edge to a cutting-edge, the upper edge is reduced to about one-eighth of an inch. By such reduction the farmer is enabled to turn or bend the ends so as to deflect more or less of the soil toward the plants, and this bending may be accomplished while the sweep is cold or unheated.

Having described my invention, what I claim is—

The herein described heel-sweep attach-

ment for plows, the same consisting of the steel strip bent to form the sweep, said sweep having its rear face beveled from a common or center line to its upper and lower edges, and its lower beveled edge provided with a heel-bolt opening, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY DENTON TERRELL.

Witnesses:
R. L. LOYD,
L. O. WRIGHT.