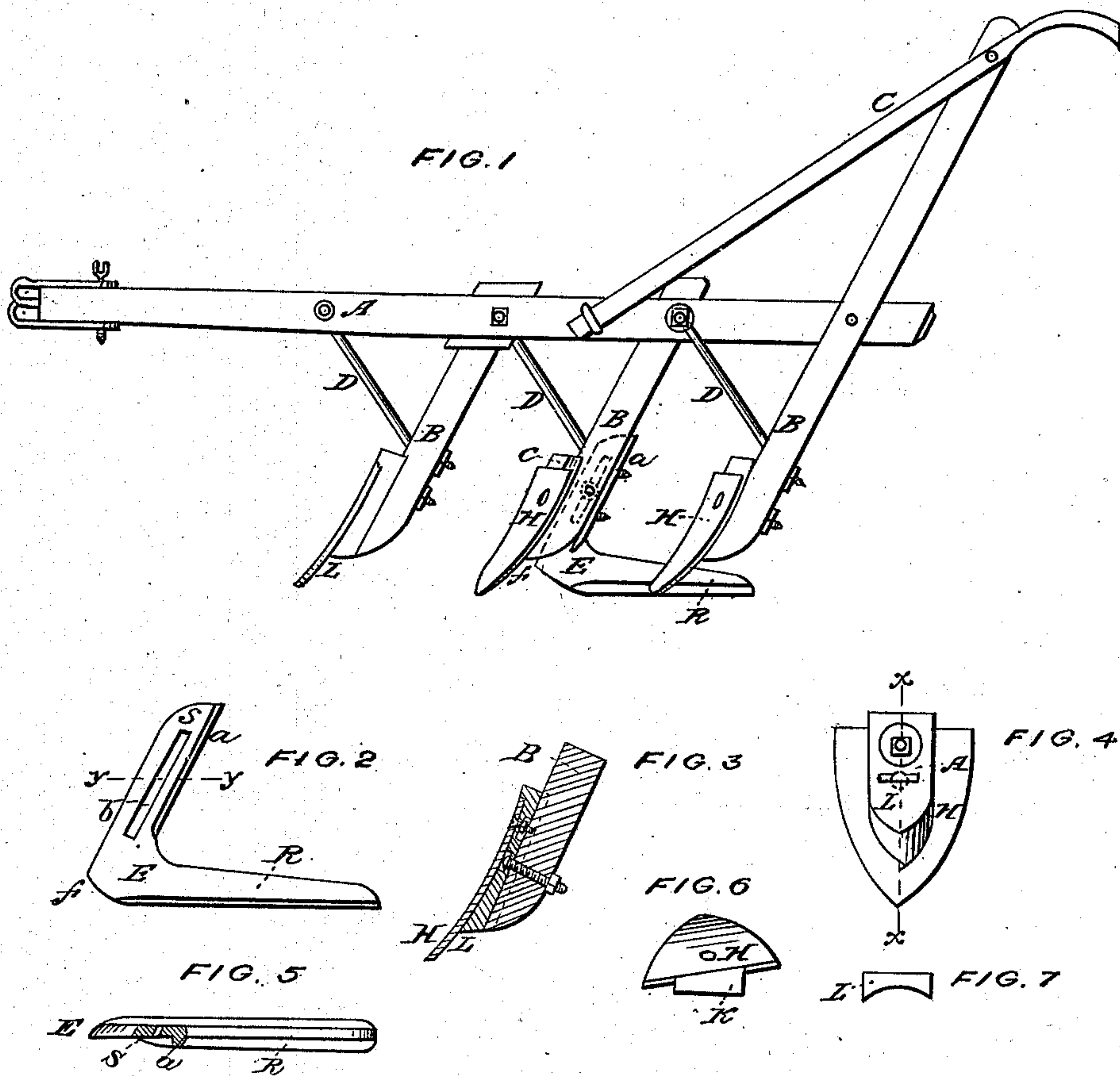


M. B. GOFF.
Cultivator.

No. 104,729.

Patented June 28, 1870.



WITNESSES:
Gilbert B. Lowles
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UNITED STATES PATENT OFFICE.

MARCELLUS B. GOFF, OF DELAVAN, WISCONSIN.

IMPROVEMENT IN CORN-PLOWS.

Specification forming part of Letters Patent No. 104,729, dated June 28, 1870.

To all whom it may concern:

Be it known that I, MARCELLUS B. GOFF, of Delavan, Walworth county, in the State of Wisconsin, have invented a new and useful Improvement in Corn-Plows; 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 accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation. Fig. 2 is a side elevation of guide-iron detached from standard. Fig. 3 is a sectional view, as indicated by line *x x* of Fig. 4. Fig. 4 is a back view of front shoe, detached from standard. Fig. 5 is a sectional view of guide-iron, as shown by line *y y* of Fig. 2. Fig. 6 is top view of back shoe with shovel attached. Fig. 7 is a top view of front shoe.

Like letters in the different figures of the drawings indicate like parts of the plow.

My invention consists of an improved guide-iron made with a flange on the back edge of the shank for additional strength and for supporting the iron upon the standard, and thus dispensing with one bolt, and having an elongated slot for regulating the depth of the plows, the forward part of the runner being curved like a sled-runner, which lessens friction and facilitates in its operation of regulating the depth of the plow.

Beam A, standards B B B, handles C, and braces D D D are all constructed and attached in a well-known manner by bolts without mortises.

E represents the guide-iron with base or runner R and shank S. The front part of the runner is curved up like a sled-runner, as shown at *f* in Figs. 1 and 2. The shank is made with a flange, *a*, on the back edge to project over and bear against the back edge of the standard, as seen in Figs. 1 and 5, and is provided with an elongated slot, *b*. (See Fig. 2.)

K K and L represent cast shoes, made with shoulders *c c c* at the top, against which the top of the molds bear, and are supported in proper position, as shown in Figs. 1 and 3. The back shoes are beveled to incline the molds to one side, as seen in Figs. 1 and 6, the thicker edge being about three-fourths of an inch and the other about half that thickness. The size and bevel may be varied to secure any desired inclination of the molds, and these shoes are fastened to the standards at the bottom by a screw and at the top by the same bolt which holds the molds. The front shoe, L, is made

concave at the back, as seen in Fig. 7, and with an elongated transverse slot, *d*, as seen in Fig. 4, and is fastened to the standard by a bolt, as shown in Fig. 3, the mold being fastened to the shoe by a bolt above the slot, as seen in Figs. 3 and 4.

H H H represent the molds or shovels, made straight at the top to fit against the shoulders *c c c*, the front of which shoulders are flush with the face of the molds.

The flange *a* on shank S serves to strengthen it and render it less liable to break, and also aids in holding it in position to the standard, so that only one bolt is required, instead of two, as heretofore, thus saving the use of one bolt in holding the iron to the standard. The front part of the base or runner S being curved, as described, enables it to run easier, especially in passing over any obstructions and unevenness of the ground, and renders it more easy of operation in regulating the depth of the plows when running. The position of the front mold may be varied, so as to incline it to the right or left, as may be desired, by loosening the bolt with which the shoe L is held to the standard and moving the shoe to the one side or the other, the slot *d* allowing it to be thus adjusted, and the concavity on the back fitting the rounded shape of the standard, it is thus held in any required position by again tightening the said bolt.

The depth of the plows is regulated by the position of the guide-iron E on the standard, the elongated slot *b* allowing it to be raised or lowered, as required.

The shoes serve not only the purposes of holding the molds and of regulating their position, as described, but also raising the molds out from the standards, and thus prevent the liability of clogging against the standards and enabling them to shed the dirt more readily.

I do not claim broadly a guide-iron; but What I do claim is—

The guide-iron E, having a standard provided with flange *a* and elongated slot *b*, and having a base or runner made with a rounded front, *f*, substantially as described.

In witness whereof I have hereunto subscribed my name, and have had the same attested by two witnesses.

MARCELLUS B. GOFF.

Witnesses:

A. D. THOMAS,
JOHN READER.