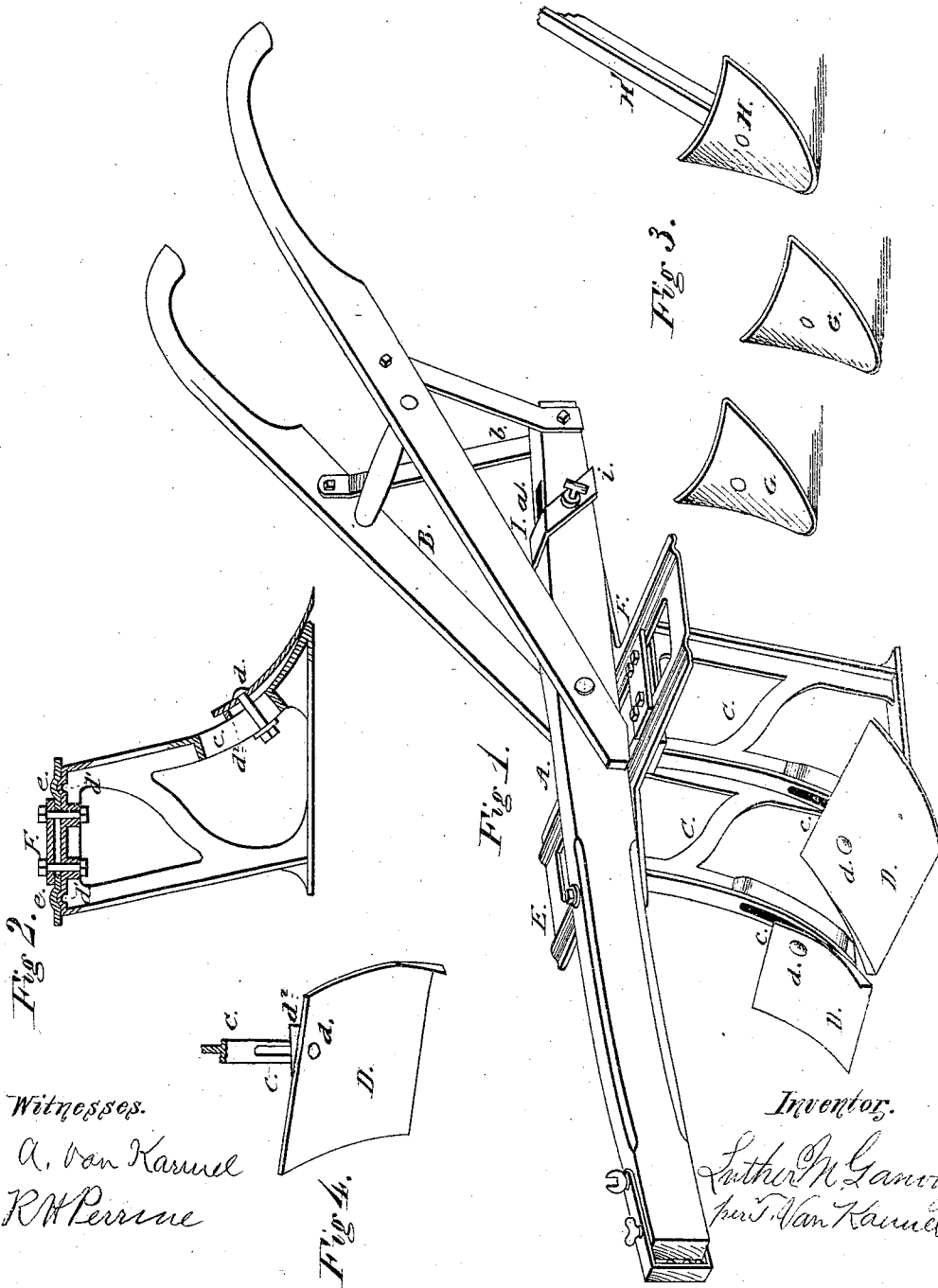


L. M. GANONG.

Cultivators.

No. 136,500.

Patented March 4, 1873.



UNITED STATES PATENT OFFICE.

LUTHER M. GANONG, OF FRIAR'S POINT, MISSISSIPPI.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 136,500, dated March 4, 1873.

To all whom it may concern:

Be it known that I, LUTHER M. GANONG, of Friar's Point, in the county of Coahoma and State of Mississippi, have invented a new and Improved Cultivator; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification.

Figure 1 is a perspective view of the implement. Fig. 2 is a sectional side elevation of one of the scraper-frames, and Fig. 3 is a view showing the bar with the three shovel-plows in position as used when substituted for the scrapers.

Similar letters of reference indicate like parts.

The nature of my invention relates to a cultivator to be used principally for the cultivation of cotton, but may be used for any crops that grow in rows or hills, such as corn, tobacco, castor-beans, &c. The object of my invention is to provide an implement with which the ridge of cotton-plants may be scraped on both sides at one operation, after which the scrapers are removed and two shovels substituted, whereby the soil is thrown back against the plants in a tilled state. When it is found necessary to break the middles a third shovel attached to a suitable bar is added, inserting the bar in a slot near the rear end of the beam, which effectually breaks the middle and leaves the furrow clear of weeds. It consists mainly of a beam and handles, not unlike the ordinary plow, having bolted directly across the beam a plate, suitably arranged to hold in any desired position two frames, to which the scrapers or shovels may be attached, and on which the scrapers may be adjusted, both vertically and horizontally.

In construction my invention is as follows: A is the beam; B, the handles, held rigidly in place by means of the braces *b b*. At C C are scraper-frames, to which the scrapers D D are held by the bolts *d d*. The plate E is bolted to the beam A, and is provided with two grooves, *e e*, running parallel with each other and longitudinally with the plate E. The

frames C C are provided at their top with beads *d' d'*, which fit into grooves *e e* of plate E, and are held in place by two or more bolts passing through the plate E, frames C C, and bridge F. The beads *d' d'*, connecting with the grooves *e e*, prevent the frames C C and the scrapers attached thereto from getting out of line when being moved to or from the beam. A small incline, *d''*, is cast or otherwise attached to the scrapers D D, which holds the same at a given inclination, and slots *c c* in frames C C allow a vertical adjustment of the scrapers or shovels. After the scrapers have been used and it becomes necessary to use the shovels, the bolt *d* is removed and placed in the plows or shovels G G, thus making use of the same bolts. When it is necessary to use the middle shovel H, which is attached to the bar H', the latter is inserted into the slot *a* of the beam, and is held in any desired depth by the screw *i*, which is threaded to fit into the band I.

It will be observed that the frames C and C may be adjusted laterally, and the scrapers or shovels vertically, on the frames C C by means of the slots *c c*. The ease with which my cultivator can be changed from a double scraper to a double or triple shovel-plow, and the small additional expense incurred in obtaining this result, are the principal advantage of my invention, while the large degree to which each part can be adjusted to suit the ever-varying requirements of the farmer makes it useful for a very large range of work not heretofore attained by any other implement of equal simplicity.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the plate E provided with grooves *e e* and the frames C C provided with beads *d' d'*, as and for the purpose described.

LUTHER M. GANONG.

Witnesses:

T. VAN KANNEL,
I. HOFMANN.