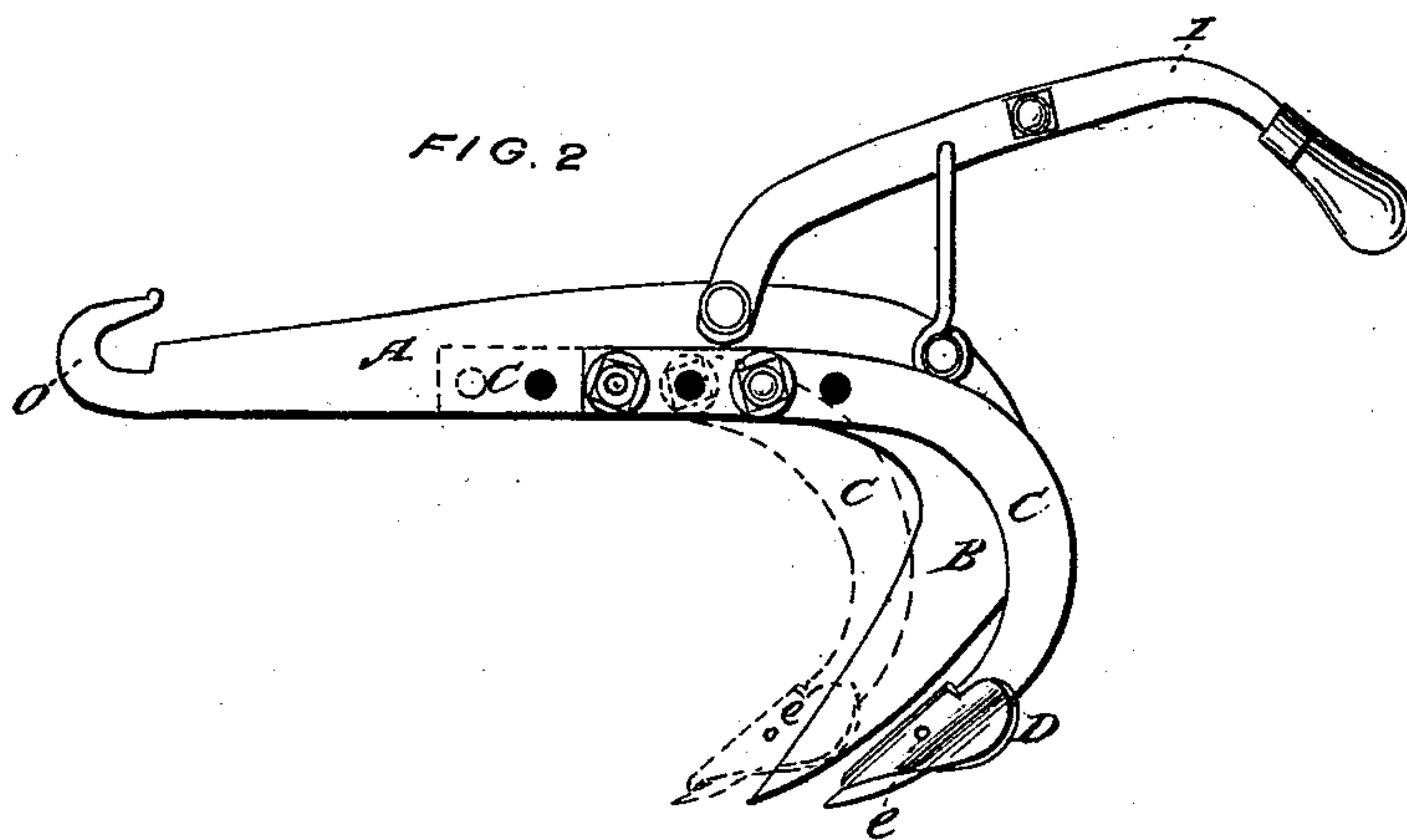
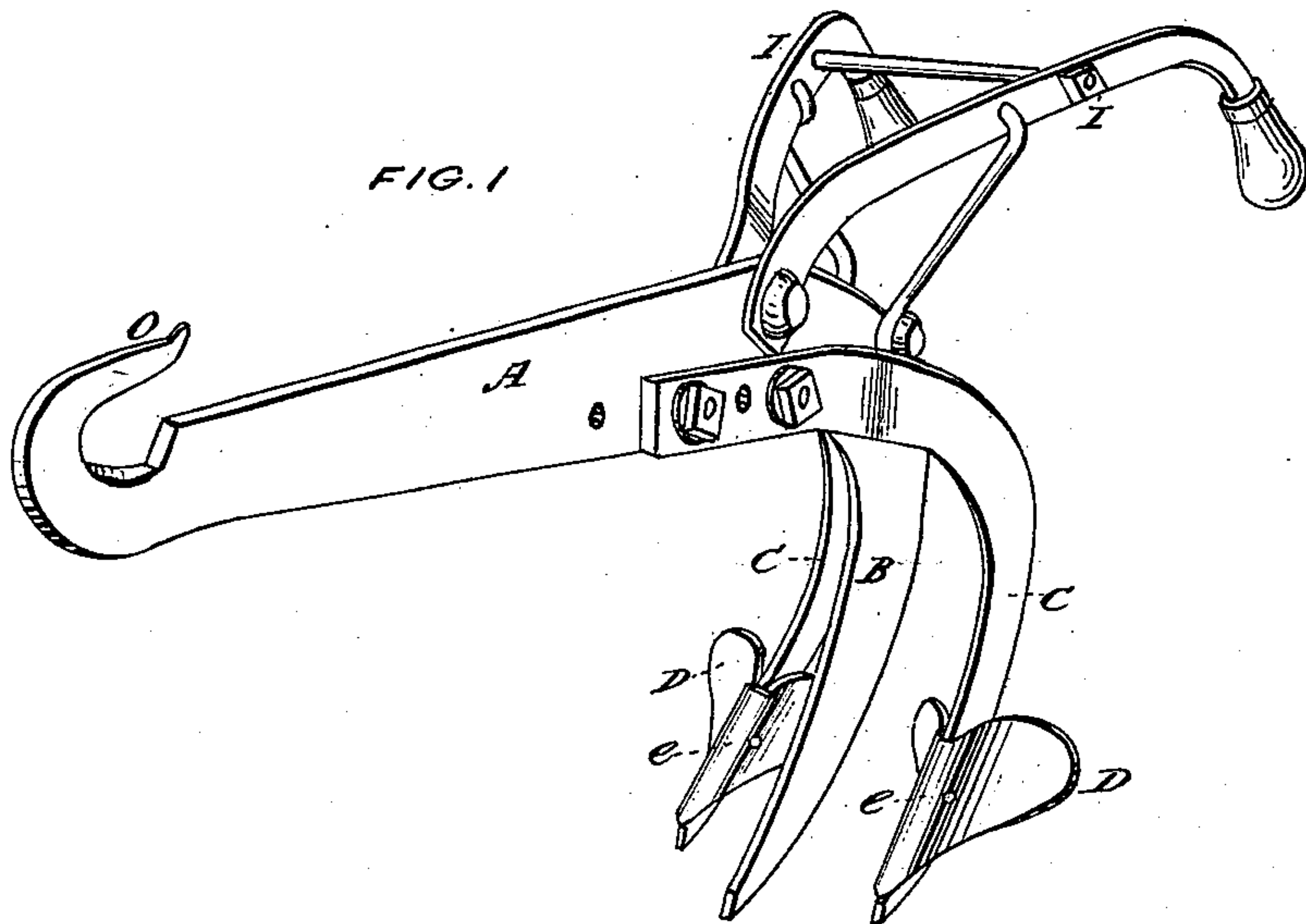


J. W. GOODALL.

Shovel Plow.

No. 98,159.

Patented Dec, 21, 1869.



WITNESSES:  
Phil. T. Dodge  
E. J. Sommer.

INVENTOR:  
J. W. Goodall,  
by Dodge & Munroe  
his attys.

# UNITED STATES PATENT OFFICE.

JOHN W. GOODALL, OF ELDRED, PENNSYLVANIA.

## IMPROVEMENT IN GRUB-HOOKS.

Specification forming part of Letters Patent No. 98,159, dated December 21, 1869.

*To all whom it may concern:*

Be it known that I, J. W. GOODALL, of Eldred, in the county of Wayne and State of Pennsylvania, have invented certain new and useful Improvements in Grubbers or Hooks for Use on Farms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention consists in a novel construction of an implement for use on farms, for removing stones, grubs, and similar obstructions, and which is also adapted to other uses, as hereinafter explained.

Figure 1 is a perspective view; and Fig. 2 a side view, of my improved implement.

In constructing my implement, I take a strong bar of iron, and from it construct the beam A with a hook, O, at its front end, and with its rear portion formed into a strong prong or curved standard, B, as represented in the drawings, these parts being made sufficiently heavy and strong to withstand the force of two yoke of cattle. To the beam A, I firmly secure two handles, I, by means of bolts and braces, as represented. I then provide two additional side beams, C, which are provided with a series of holes corresponding with similar holes in the beam A, for the reception of bolts, by which the beams C are secured to the beam A, there being several holes in the latter for the purpose of adjusting the side beams back or forward, as may be desired. These side beams, C, are bent or curved laterally, so as to make them stand off a short distance from the central prong, B. I also provide a double share, D, for each of these prongs or side beams, C, and secure them thereto by means of a taper pin, e, which passes through from side to side, and which can be easily removed when it is desired to detach the shares D.

This instrument, thus constructed, is susceptible of many uses on the farm. To use it for the removal of stones, grubs, roots, stumps,

and similar obstructions, the side beams are detached and the central prong, B, used without the others. The team being hitched to the front end of the beam A, the prong B is caught under the stone, and if the obstruction be so firmly fixed that it cannot be pulled up in the ordinary manner, the team can be backed up and attached to the beam in such a manner as to bring the hook O much nearer the yoke, which will elevate the front end of the beam, so that when the team pulls again, it will tend to lift vertically at the same time that it pulls horizontally, thus greatly assisting to lift the stone or grub out of its bed. In a similar manner it is also used for removing stumps, the prong B being engaged under the spreading roots singly or one at a time until all are loosened; and then by fastening upon one of the longest and strongest of the lateral roots and causing the team to travel laterally or partially in a circle the stump can be wrenched or twisted from its position.

The implement is also well adapted to the breaking up of stiff or hard subsoils, the prong B being used alone, or with one or both of the side prongs, C, according to circumstances.

By adding the shares D the implement may also be used with good effect as a cultivator or scarifier in working hard soils, either on summer fallows or between rows of growing crops; and without the shares D it answers admirably for pulling up all sorts of briars and brush by the roots, as also noxious weeds of various kinds. In this way I provide an implement that is adapted to a variety of uses, and thus well suited to the wants of farmers in various sections of the country.

Having thus described my invention, what I claim is—

1. The herein-described implement, consisting of a short, strong, iron beam, A, provided with the curved prong B, and the handles I rigidly attached, substantially as described.

2. In combination with the above, the adjustable side prongs, C, and detachable shares D, all constructed and arranged to operate substantially as described.

J. W. GOODALL.

Witnesses:

PHIL. T. DODGE,  
W. C. DODGE.