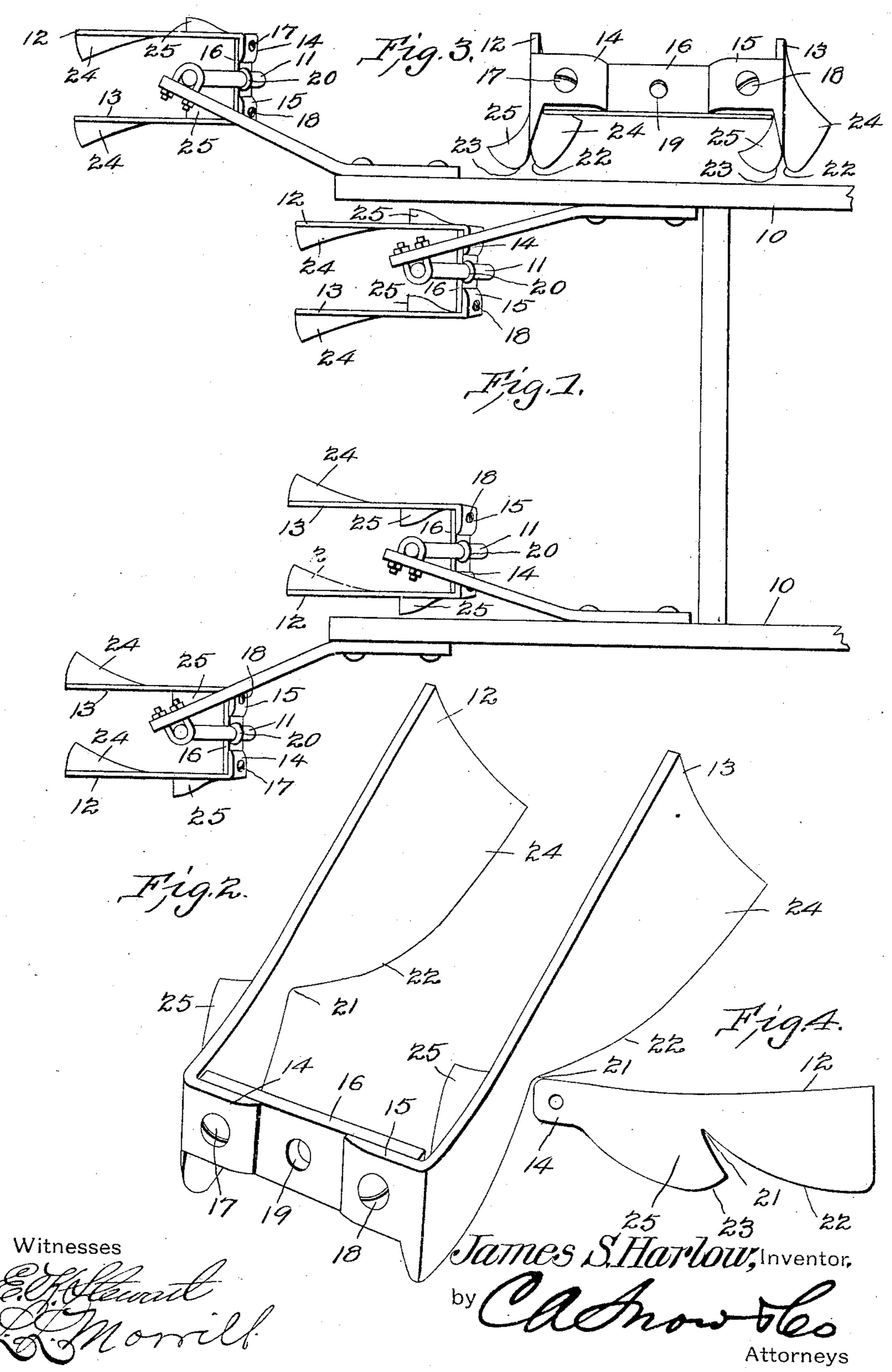
## J. S. HARLOW.

## CULTIVATOR BLADE.

APPLICATION FILED AUG. 7, 1905.



## UNITED STATES PATENT OFFICE.

JAMES S. HARLOW, OF MAY, TEXAS.

## CULTIVATOR-BLADE.

No. 803,899.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed August 7, 1905. Serial No. 273,103.

To all whom it may concern:

Be it known that I, James S. Harlow, a citizen of the United States, residing at May, in the county of Brown and State of Texas, have invented a new and useful Cultivator-Blade, of which the following is a specification.

This invention relates to cultivators, and has for its object to provide blades connected in pairs and embodying new and improved features of cheapness, durability, and efficiency

ciency.

A further object of the invention is to provide a blade for cultivators which will cultivate the soil with the minimum expenditure

15 of motive force.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made without departing from the spirit or sacrificing any of the advantages of this invention.

In the drawings, Figure 1 is a top plan view of the improved cultivator-blade, showing it applied in gangs to a cultivator. Fig. 2 is a perspective view of one pair of connected blades. Fig. 3 is a view of the improved blade in front end elevation. Fig. 4 is a view in side elevation of the blank from which the

blades are formed.

Like characters of reference indicate corre-35 sponding parts in all of the figures of the

drawings.

The improved cultivator-blade forming the subject-matter of this application is adapted to be used and applied in a variety of ways, one of which is shown in Fig. 1, wherein 10 represents opposite cultivator-beams having the usual downwardly-extending standards 11. In its preferred embodiment the improved blades are mounted in pairs, as 12 and 13, formed of plates of metal, having lips 14 and 15 turned at right angles to the general plane of the plate and secured to opposite ends of the strip 16, as by the bolts 17 and 18. The strip 16 is provided with an intermediate opening 19, through which any approved fastening device is inserted, as the eyebolt 20.

Each of the blades 12 and 13 comprises a similar blank, (shown at Fig. 4,) being wider at one end than at the other, with the lip 14 at the narrower end. Intermediate the ends 55 a V-shaped notch 21 is formed in the lower edge, with the rearward side 22 of the notch rounded, as shown, and a similar rounding formed at 23, rearwardly of the lip 14. The lower edge of the section 24 to the rear 60 of the notch is then curved laterally to one side, while the lower edge of the section 25, forward of the notch, is similarly curved to the opposite side. The sections 24 and 25 of each pair of blades are respectively curved 65 and project to the same side. The lower edges 22 and 23 are reduced to cutting edges and the several pairs of blades mounted to constitute gangs, with similar curves extending to the same side for the entire gang, with the blades 70 of the opposing gang oppositely curved.

From the foregoing description it is believed the use and operation of the improved cultivator-blade will be fully and clearly un-

derstood.

Having thus described the invention, what

is claimed is—

1. A cultivator-blade formed of a blank sheet of metal wider at the rear end than at the forward end and with a V-shaped notch 80 cut transversely in the lower edge, the metal being curved laterally at its lower edge and oppositely on opposite sides of the notch and having its lower edges reduced to a cutting edge.

2. In a cultivator, gangs of blades arranged in pairs and each formed of a blank sheet of metal wider at the rear end than at the forward end and with a V-shaped notch cut transversely in the lower edge, the metal being 90 curved laterally at its lower edge and oppositely on opposite sides of the notch and having its lower edges reduced to a cutting edge, the said gangs being arranged to throw soil in opposite directions.

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

JAMES S. HARLOW.

Witnesses:

OWEN H. GIBBS, JAMES M. COKER.