To all whom it may concern:

Be it known that I, JAMES HARMAN, of Rocky Well, in the county of Lexington and State of South Carolina, have invented certain new and useful Improvements in Cultivators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in cultivators; and it consists in the combination of the cultivator-frame, which is journaled or pivoted upon the axle, with the tongue, which is also pivoted in the front end of the frame, a connecting-rod and lever, which is pivoted in the frame in the rear of the tongue, and a ratchet-bar, as will be more fully described hereinafter.

The object of my invention is to provide a means by which the cultivator-frame can be raised upward and held in an elevated position, both in turning around at the ends of the furrows and while being transported from one place to another.

Figure 1 presents a side elevation of a cultivator embodying my invention. Fig. 2 is a plan view of the same.

A represents a suitable number of parallel beams, to which the cultivators are secured, and which beams are pivoted upon the axle B at their front ends, and secured together at their rear ends by the cross-rod D. The axle B is supported upon the wheels C, and has the tongue E journaled upon it, the rear end of the tongue being made to extend a suitable distance to the rear of the axle, as shown. Pivoted a suitable distance in the rear of the tongue is the operating-lever G, by means of which the frame is raised and lowered. The lower end of this lever is connected to the rear end of the tongue by means of the connecting-

rod H. Upon the top of one of the beams, between which the lever is pivoted, is secured the curved ratchet-bar I; and the operating-lever is provided with a suitable catch, J, for the purpose of engaging with this bar and holding the lever in any position in which it may be adjusted.

When the cultivator is to be moved from place to place, or is to be turned around when the end of the furrow is reached, the operator, from his seat, which is mounted on the rear end of the tongue or any other suitable part of the machine, catches hold of the operating-lever, and by pulling its upper end toward the tongue the frame is tilted upward at any desired angle, as shown by dotted lines, and the catch J, by engaging with the ratchet-bar, holds the frame in this raised position. The tongue being held down by the horses, which are fastened to its front end, has no movement, and hence the frame can be raised upward in the manner shown. When the cultivators are to be brought into use, the operator has to but release the catch J from the ratchet-bar, when the frame will sink backward from its own weight, and thus bring the cultivators into use.

Having thus described my invention, I claim—

The combination of the axle-wheels and the tongue which is pivoted upon the axle, with the beams A, pivoted upon the axle at their front ends, the operating-lever pivoted upon the beams, and provided with a catch, the eogs or teeth, and the connecting-rod between the end of the tongue and the lever, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES HARMAN.

Witnesses:
C. B. HARMAN,
A. S. LAIRD.