

No. 632,639.

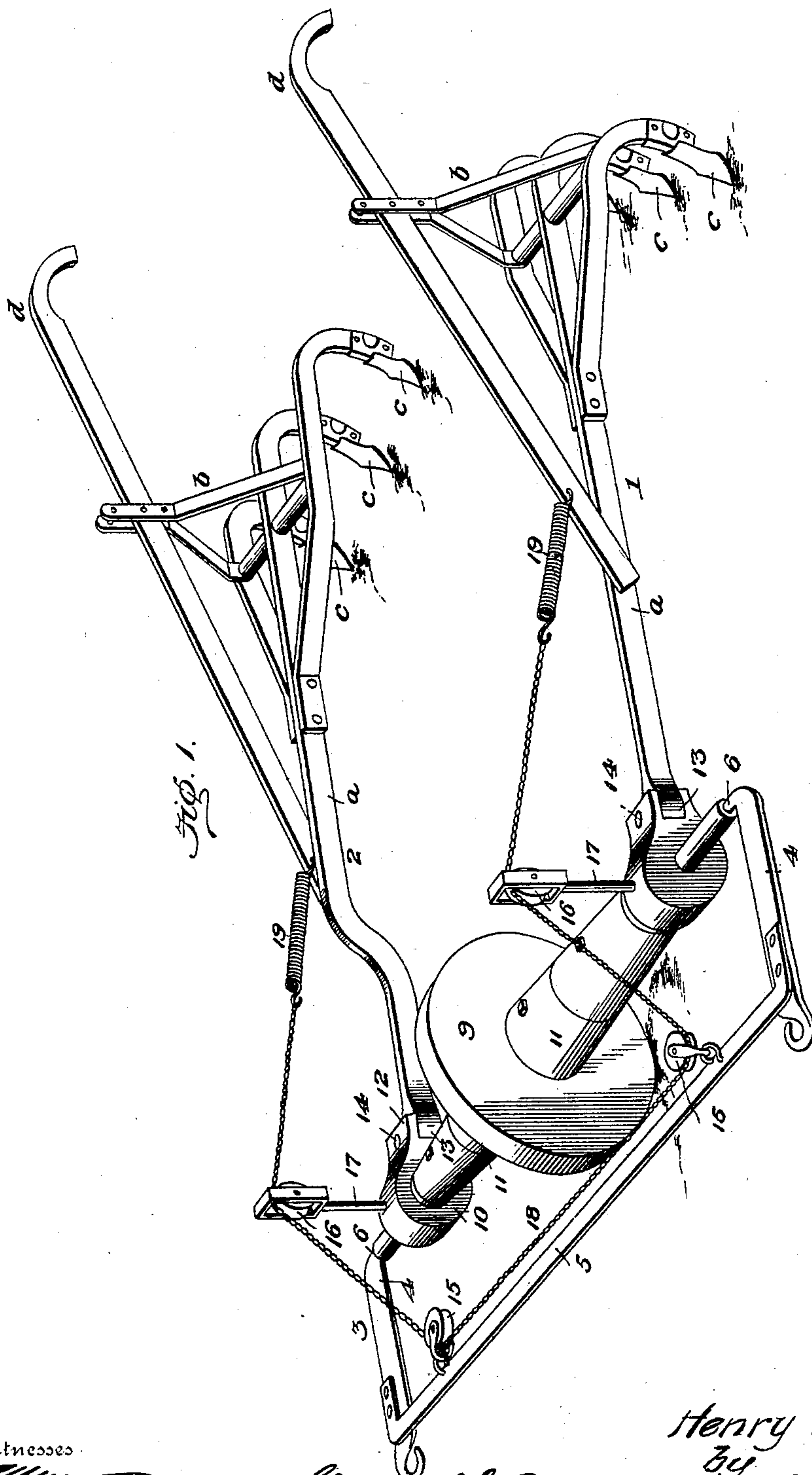
Patented Sept. 5, 1899.

H. BROWN.  
CULTIVATOR.

(Application filed May 13, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses

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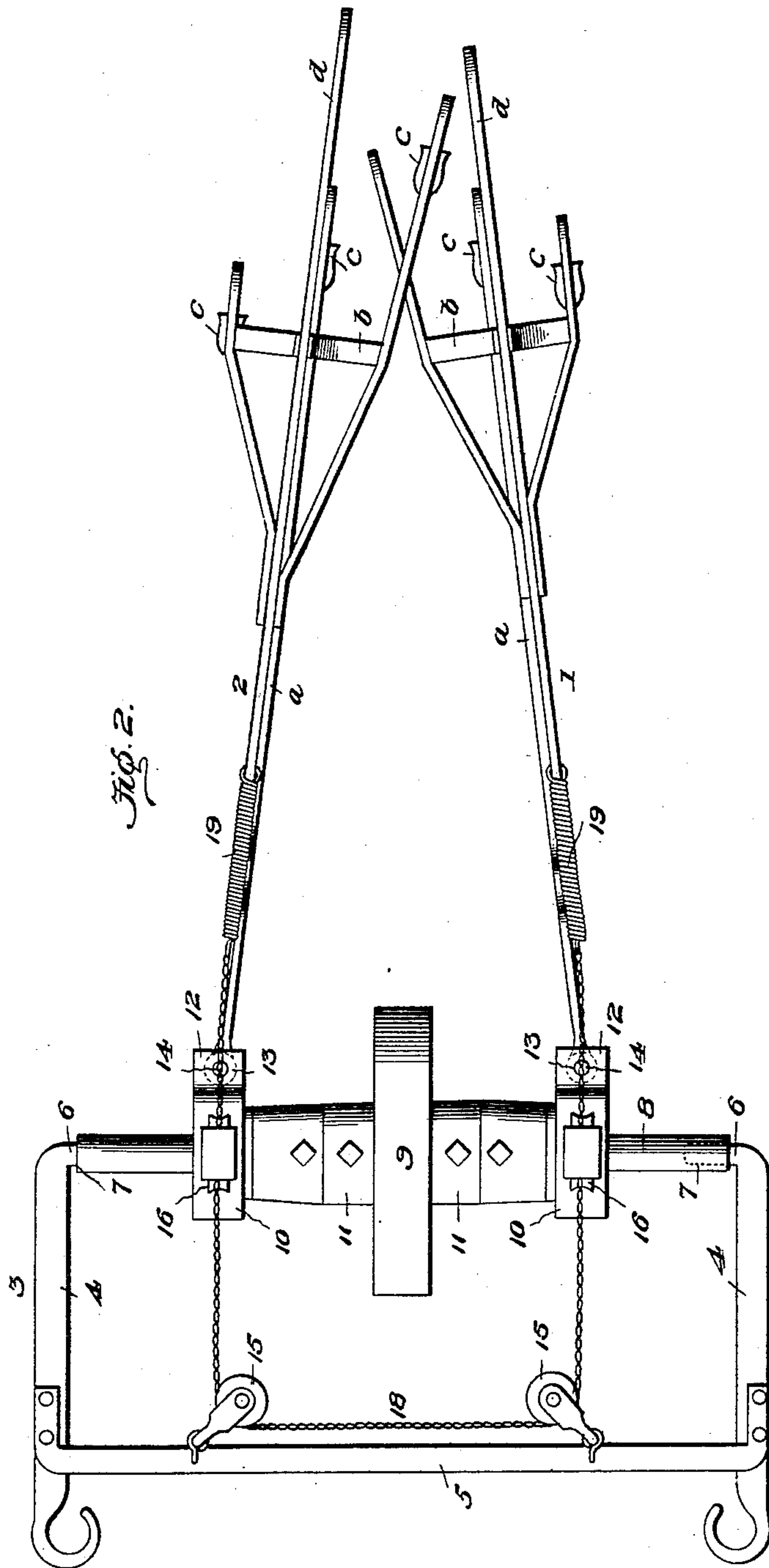
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# UNITED STATES PATENT OFFICE.

HENRY BROWN, OF SWARTZ, OHIO.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 632,639, dated September 5, 1899.

Application filed May 13, 1899. Serial No. 716,615. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY BROWN, a citizen of the United States, residing at Swartz, in the county of Hocking and State of Ohio, have invented certain new and useful Improvements in Cultivators; and I do 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 appertains to make and use the same.

The invention has relation to cultivators.

The object of the invention is to provide a simple, durable, and inexpensive machine which may be easily manipulated to accommodate itself to rows of varying widths and which may also be adjusted to cultivate different depths.

With this object in view the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a plan view showing one of the cultivator-beams moved laterally toward the other cultivator-beam.

Like characters of reference denote like parts in both views.

1 and 2 denote the cultivating-sections, each of which consists of the beam *a*, standards *b*, shovels *c*, and handles *d*. The section 1 is shorter than the section 2 to enable it to be swung under the section 2 when narrow places between the rows are reached, so as to permit the sections to pass between the rows without injuring the plants. The shovels of each section may be arranged in any suitable manner, but that shown in which they extend obliquely to the length of the beam is preferred.

3 denotes the wheel-supporting frame, which consists of longitudinal bars 4 and a cross-bar 5, the former being provided with hooks or other hitching devices. The rear ends of these longitudinal bars are formed with stud-bearings 6, which engage the sockets 7, formed in the shaft 8. This shaft has journaled upon it intermediate its length a supporting-wheel 9, which is held in position and spaced from

blocks 10 by washers 11. The blocks 10 are provided with parallel ears 12, between which project the apertured ends 13 of the beams. Pivot-bolts 14 extend through these ears and the apertures 13 of the beams and permit of the beams being swung with respect to the wheel-supporting frame or the wheel-supporting frame swung with respect to the beams.

15 denotes pulleys hung to the cross-piece of the wheel-supporting frame, and 16 denotes housed pulleys supported on posts 17, secured to the blocks 10.

18 denotes a chain or cable engaging the housed pulleys above referred to and having its ends connected to coil-springs 19, which in turn are connected to the cultivating-sections.

When it is desired to change the depth of cultivation, the same may be accomplished by shortening or lengthening the chain or cable. In the drawings I have shown a chain and have shown it connected to the springs by forming the springs with hooks which are adapted to engage the links. This is a simple and inexpensive way in which the chain may be shortened to vary the depth of cultivation.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

The combination with the wheel-supporting frame, a wheel journaled in said frame, blocks secured to said frame, cultivator-sections pivoted to said blocks to swing laterally, pulleys carried by the cultivator-frame, pulleys supported by said blocks above the first-named pulleys, springs having one end secured to the cultivator-sections, and a chain having its ends secured to the opposite ends of the springs and passed around the two sets of pulleys aforesaid, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY BROWN.

Witnesses:

ALBERT P. HEFT,  
FRANK GRIM.