No. 861,048. PATENTED JULY 23, 1907.

J. M. PEERSON.

CULTIVATOR.

APPLICATION FILED AUG. 27, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

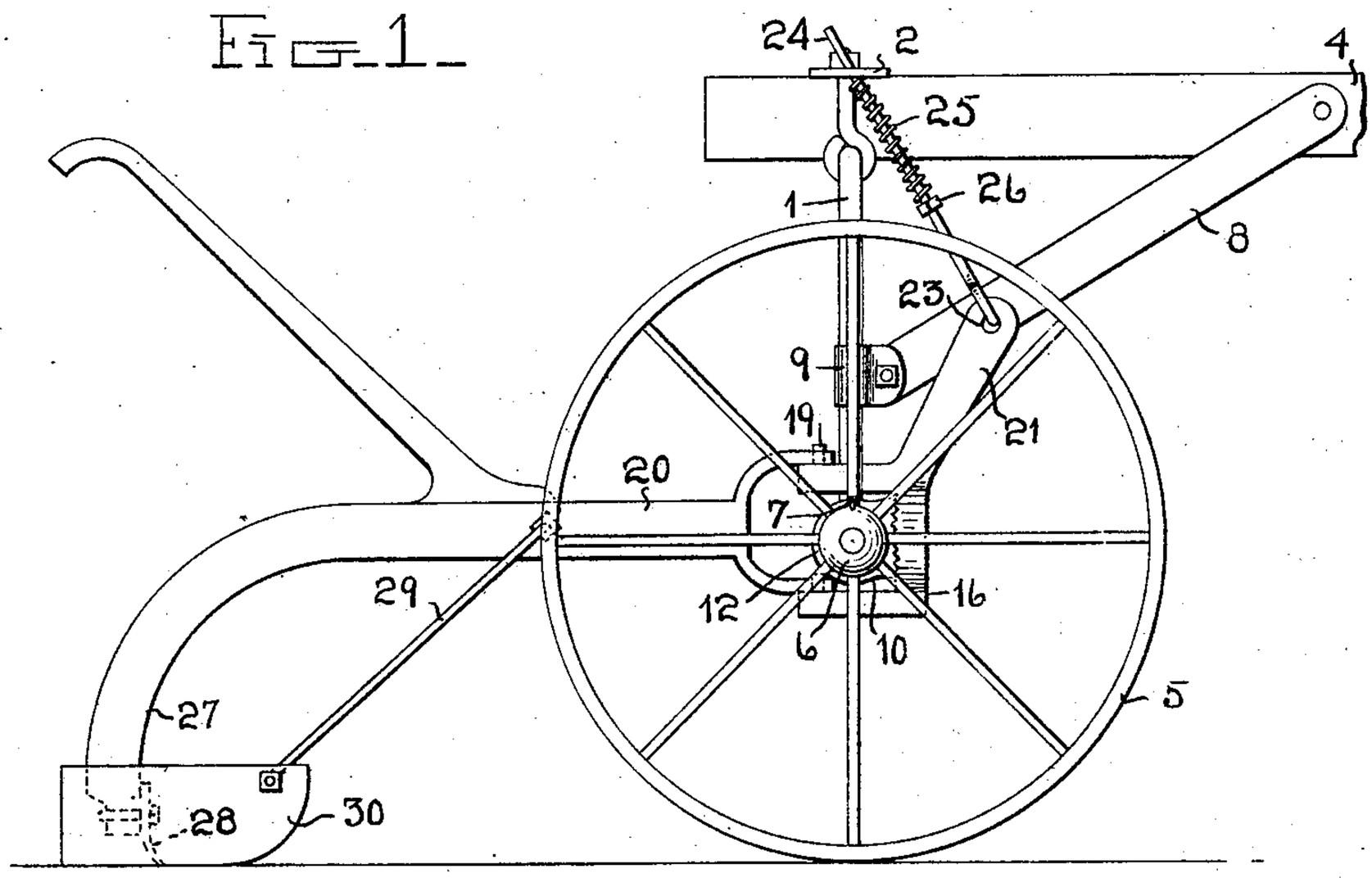
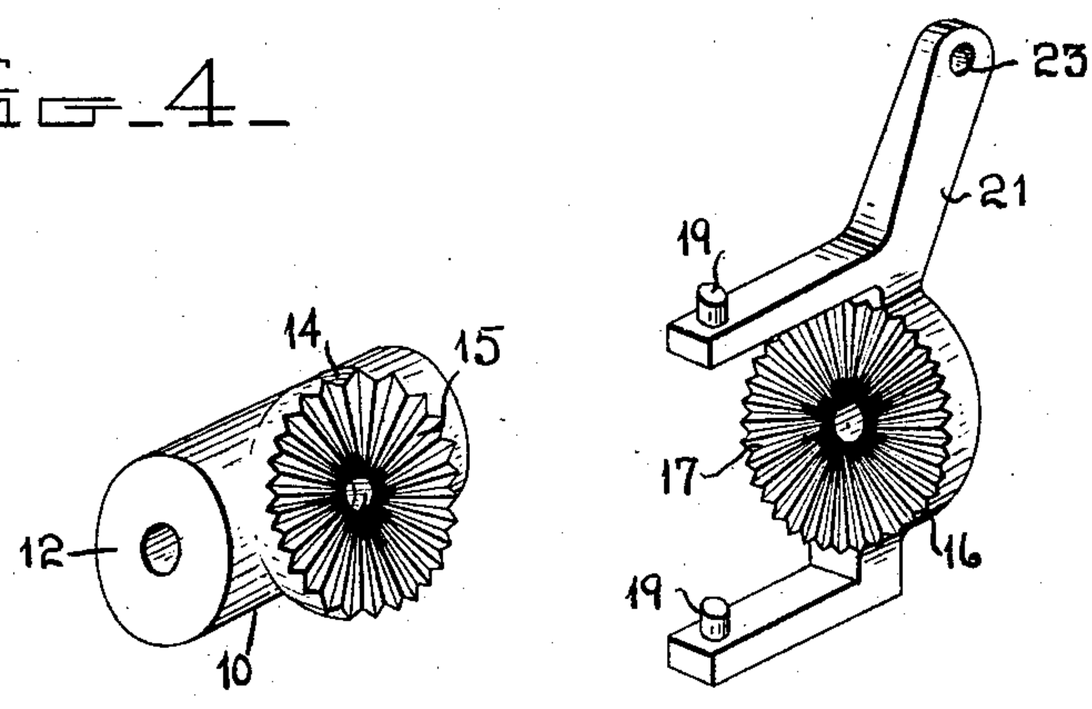


Fig. 4.



Witnesses

C. A. Griesbauer.

Inventor

J. M. Peerson

by A. Bellamy & Co

Attorneys

No. 861,048. PATENTED JULY 23, 1907.

J. M. PEERSON.

CULTIVATOR.

APPLICATION FILED AUG. 27, 1906.

2 SHEETS—SHEET 2.

Fig. 2.

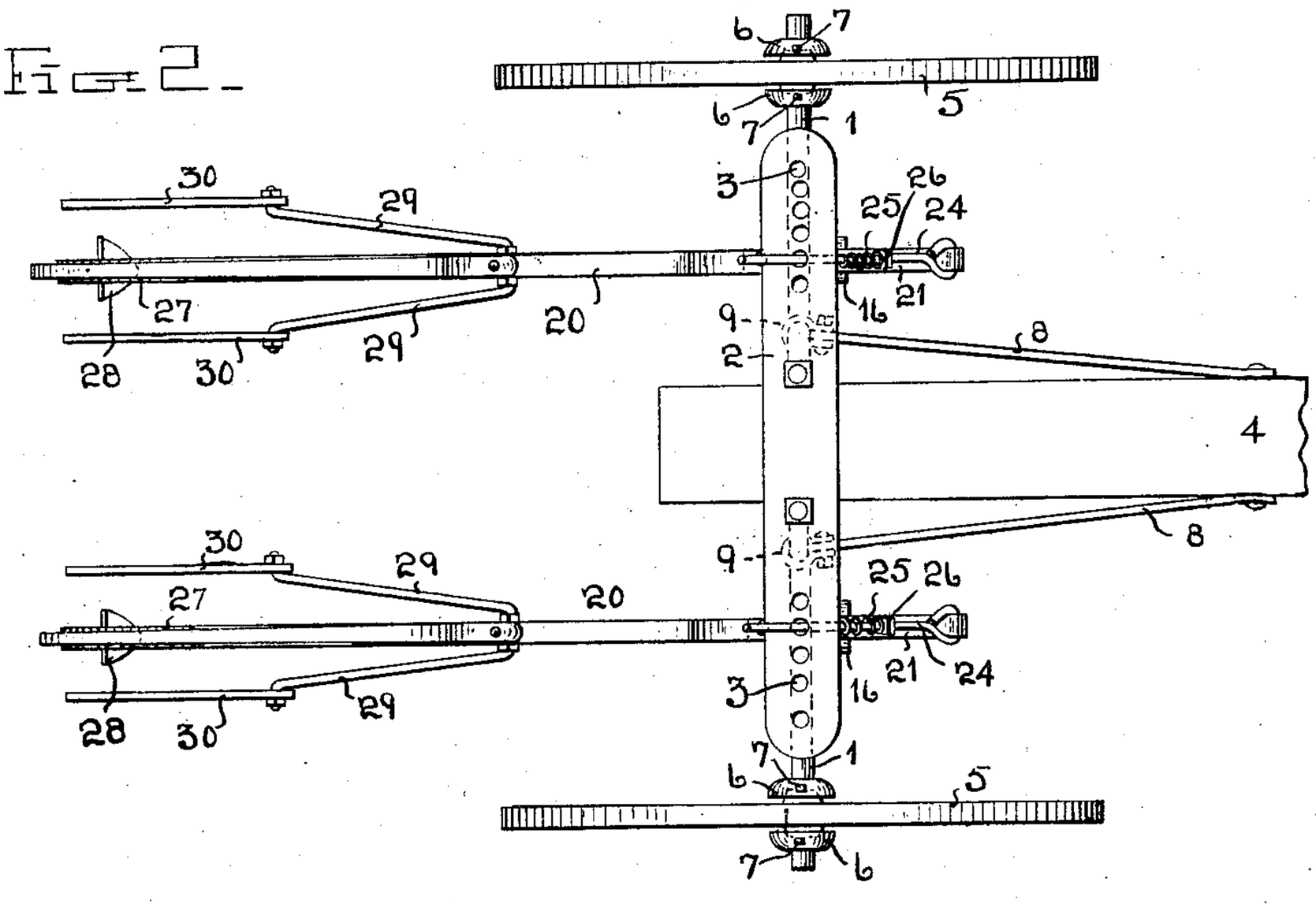
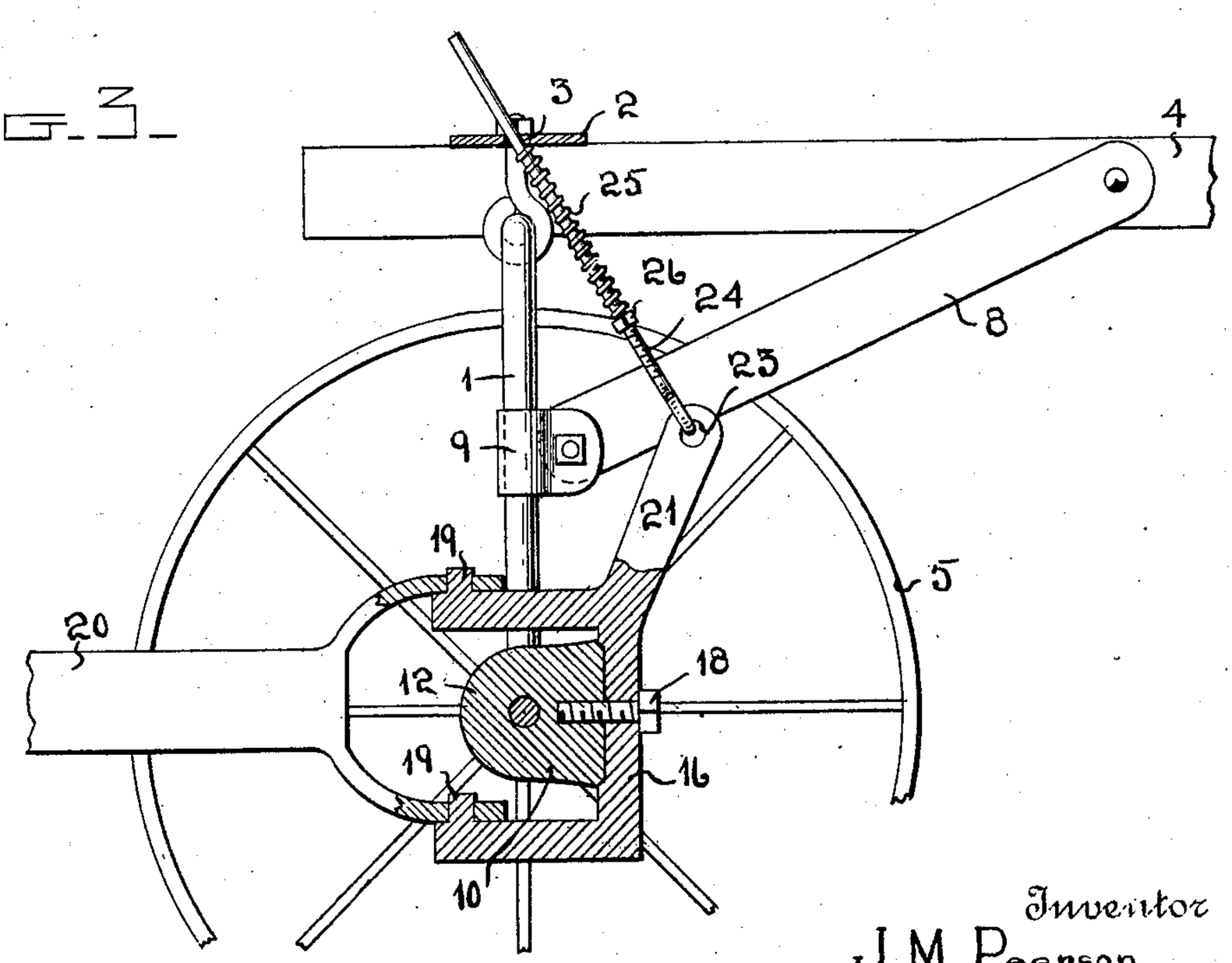


Fig. 3.



Witnesses

L. B. James

C. H. Griesbauer

Inventor

J. M. Peerson

by A. B. Williamson & Co

Attorneys

UNITED STATES PATENT OFFICE.

JAMES M. PEERSON, OF FLORENCE, ALABAMA.

CULTIVATOR.

No. 861,048. Specification of Letters Patent. Patented July 23, 1907.

Application filed August 27, 1906. Serial No. 332,163.

To all whom it may concern:

Be it known that I, JAMES M. PEERSON, a citizen of the United States, residing at Florence, in the county of Lauderdale and State of Alabama, 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.

This invention relates to improvements in cultivators.

The object of the invention is to provide a cultivator having means whereby the axle may be held at any desired angle with respect to the tongue of the machine, thereby providing for the proper adjustment of the cultivator beams and shovels, means being also provided to yieldingly hold said shovels in engagement with the ground, and means for pivotally connecting the beams with the axle to permit the same to be swung laterally thereon.

A further object is to provide means for adjusting the angle of the beams and shovels to adapt the machine for use on side hills or hollow places.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination, and arrangement of parts, as hereinafter described and claimed.

In the accompanying drawings,—Figure 1 is a side view of a cultivator constructed in accordance with the invention; Fig. 2 is a top plan view of the same; Fig. 3 is a vertical cross-sectional view through one end of the axle and the adjustable connection of the cultivator beams; and Fig. 4 is a view in perspective of a coupling used in connection with the apparatus.

Referring more particularly to the drawings, 1 denotes an arched axle of the machine, in the upper end of the arched portion of which is connected a horizontal, transversely-disposed supporting guide bar or plate 2, in each end of which is formed a series of apertures 3. Also connected with the arched axle 1 is the draft tongue 4 of the machine.

On the ends of the axle 1 are adjustably mounted supporting wheels 5, said wheels being held in any desired position on the axle by means of collars 6, which are adjustably secured to the axle on each side of the wheel hub by means of set-screws 7, thereby providing for the holding of the wheels at any desired distance apart. The collars 6 are preferably concave or hollowed out on their inner sides to fit over the opposite ends of the wheel hubs to form sand bands or guards to prevent the entrance of dirt between the hubs and axle.

The vertical portions of the arched axle are connected to the tongue 4, by means of inclined brace bars 8, the lower ends of said bars being pivotally and adjustably connected to said vertical portions of the axle by means of clamping bands or collars 9. By thus connecting the brace bars 8 with the axle, the same may be raised and lowered, thereby holding the axle at various angles with respect to the tongue, which when the draft animals are connected thereto, will cause the cultivator shovels connected to the axles to be forced more or less deeply into the ground.

Mounted on the ends of the axles, between the supporting wheels thereon, and the vertical portions of the arch in the axle, are beam-supporting and connecting devices 10, said devices comprising a sleeve 12, which is slidably mounted on the axle. On the forward side of each sleeve 12 is formed a circular clutch face 14, having formed thereon a series of radially-disposed corrugations 15. Adapted to be engaged with the clutch face 14 is a yoke 16, said yoke being provided with a corrugated face 17 to engage the corrugations on the face 14. The yoke 16 is held in engagement with the sleeve 12 by means of a clamping screw 18, which is arranged thereon, as shown, and by means of which the yoke may be held at any desired angle, after the corrugated clutch faces of the same have been engaged, as will be understood. On the inwardly-projecting arms of the yoke are formed upwardly-projecting pivot studs 19, with which are adapted to be engaged the bifurcated or forked inner ends of the cultivator beams 20, thereby pivotally connecting said beams with the sleeves 12 to swing laterally thereon.

Connected to the forward upper side of the yoke 16 is an outwardly-projecting arm 21, constituting a continuation of the cultivator beam, in the upper end of which is formed an eye 23, to which is connected the pressure rod 24, the opposite end of which is slidably engaged with one of the apertures 24 of the supporting arm 2. On the rod 3 is arranged a coil spring 25, the upper end of which is adapted to engage the underside of the bar 2 and its lower end to engage with nut 26, adapted to be screwed up and down on the rod 24, to regulate the tension of the spring.

The rear ends of the beams 20, are provided with the usual standards 27, on the lower ends of which are secured cultivator blades or shovels 28. Also connected to the beams 20, by means of rods or arms 29, are guard or fender plates 30, which are disposed on one or both sides of the cultivator blades or shovels, one of said fender plates being arranged on each side of the cultivator shovels only when the machine is used for crossing out or chopping purposes, thereby preventing the young plants left standing from being covered with dirt. The beams 20 have connected to their rear ends upwardly and rearwardly-projecting handles 31, by means of which the same are held in the desired position by the operator.

By providing beam-connecting devices, such as are here shown and described, the beams may be held at any desired angle to accommodate the blades or shovels thereon to hill sides or hollows, thus providing for

the proper cultivation of the same, the angle of the blades being quickly changed by loosening the clamping screws 18 and adjusting the yoke 16 on the sleeve 12, after which the clamping screws are again tightened, thereby holding the yoke and beams connected thereto at any desired position within the range of its adjustment.

It will be obvious that the wheels and beam supporting sleeves may be arranged and adjusted on the axles so that the center of two rows may be worked at a time, also that by extending the axle and providing a plurality of arches that a number of beams may be supported and the working capacity of the machine increased.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined by the appended claims.

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

1. In a wheeled cultivator, the combination with an axle, of a guide bar connected thereto, shovel supporting beams, and means to connect the guide bar and beams whereby the latter may be laterally adjusted to various angles.

2. In a wheeled cultivator, the combination with an axle, of a guide bar, cultivator beam attaching devices arranged on the axle and comprising axle engaging sleeves having clutch faces, yokes having clutch faces to engage those of the sleeves, means for clamping the clutch faces together, cultivator beams having a pivotal connection with the yokes, and means for yieldingly connecting the yokes and the guide bar.

3. In a wheeled cultivator, the combination with an axle, of a guide bar secured thereto and provided with a plurality of orifices, cultivator beam attaching devices arranged on the axle, cultivator beams connected with the attachments, and yielding pressure rods connected with the devices and engaging the orifices in the guide bar.

4. In a wheeled cultivator, the combination with an axle, of a guide plate secured thereto and provided with a plurality of orifices, cultivator beam supports adjustably mounted upon the axle, cultivator beam engaging supports, and spring pressed rods connected with the supports and engaging the orifices in the guide bar.

5. In a wheeled cultivator, the combination with an axle, of an orificed guide bar secured thereto, adjustable cultivator beam supports carried by the axle, cultivator beams pivotally connected with the supports, rods connected at one end with the supports having their other ends projecting through the orifices in the guide bar, and adjustable pressure springs mounted upon the rods and engaging the under side of the bar.

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

JAMES M. PEERSON.

Witnesses:
ROBT. T. SIMPSON,
W. L. HURST.