J. GERBER.

Cultivator Teeth.

No. 108,471. Patented Oct. 18, 1870.

Fig. 1

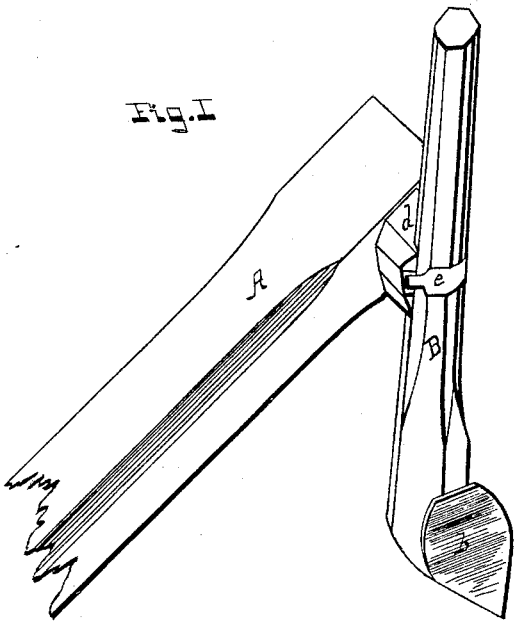

Fig. 2.

Witnesses:

S. J. Noyes

F. H. Pierson

Inventor

Julius Gerber by

H. W. Beadle atty

UNITED STATES PATENT OFFICE.

JULIUS GERBER, OF ROCKFORD, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **108,471**, dated October 18, 1870.

To all whom it may concern:

Be it known that I, JULIUS GERBER, of Rockford, in the county of Winnebago and State of Illinois, have invented new and useful Improvements in Cultivators; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to that class of devices for attaching cultivator-standards to their beams which employ a bolt passing through the beam, in connection with a ring and bearing-block; and it consists in so constructing the ring and connecting it to the bolt that it may be turned, when desired, for the purpose of adjusting the standard.

In the drawings, Figure 1 represents a perspective view of the beam and standard, and Fig. 2 a plan view of the bolt and ring.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and method of operation.

A represents the beam of a cultivator.

B represents a standard, provided with the usual shovel, *b*.

C represents a bolt which passes through the beam, as shown, and is provided at one end with the eye *c* and at the other with the nut *c'*.

d represents a bearing-block, which is provided with a smooth face upon the side next the beam, and with an indented face upon the opposite side, as shown.

e represents the ring, the circumference of which is formed of semicircular and semi-octagonal lines, the former half being next to the beam and the latter half upon the outside of the standard. The inner half of this ring is caught into the eye of the bolt, and is of such size and shape as to permit its free movement therein when desired.

It will be observed that the upper end of the standard B is octagonal or hexagonal in form, and that when it is in place it is held upon the outside by means of the outer half of the ring *e*, which corresponds in shape with it, and upon the inside by the indented face of the bearing-block *d*, which also corresponds in shape with it.

The operation is as follows: When it is desired to adjust the standard vertically, the nut *c'* is loosened, and it is moved up or down in the ring, as may be desired. When it is desired to turn the shovel to or from the crop being cultivated, the nut is again loosened, and the ring *e* is turned in the eye of the bolt, the standard being of course turned with it until the desired position is reached. From the form of the standard and the parts which hold it, it will be evident that these movements of the standard must be definite and regular—that is, the faces of the octagonal or hexagonal standard must of course rest in the corresponding faces of the holding parts, and every movement must be at least an eighth of the entire circumference. This specific construction possesses certain advantages. By means of the form of the holding parts a firm bearing is secured without the usual severe strain upon the bolt and nut necessary when the parts are round.

The parts are all simple in construction and easily applied to the beam.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

A ring for holding standards, when used in connection with a bolt and bearing-block, and so constructed as to be capable of a turning movement in the bolt, as described, for the purpose set forth.

This specification signed and witnessed this 22d day of March, 1870.

JULIUS GERBER.

Witnesses:

G. W. FORD,

CHARLIE S. FORD.