

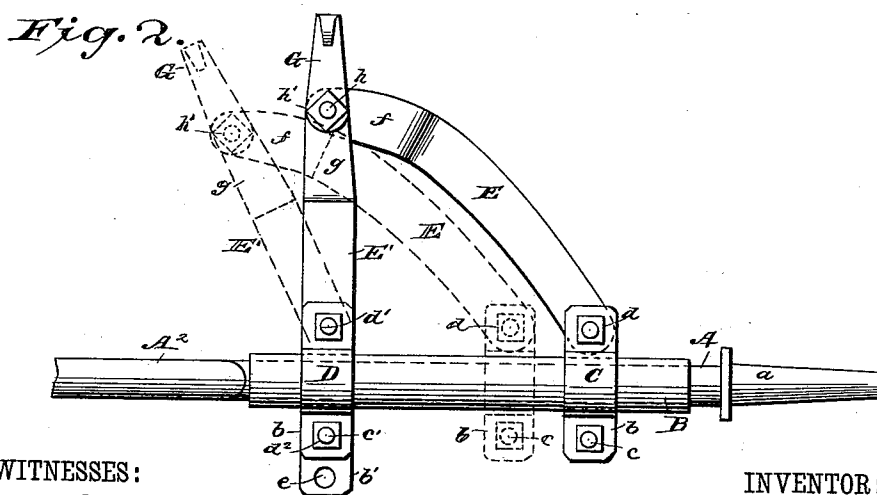
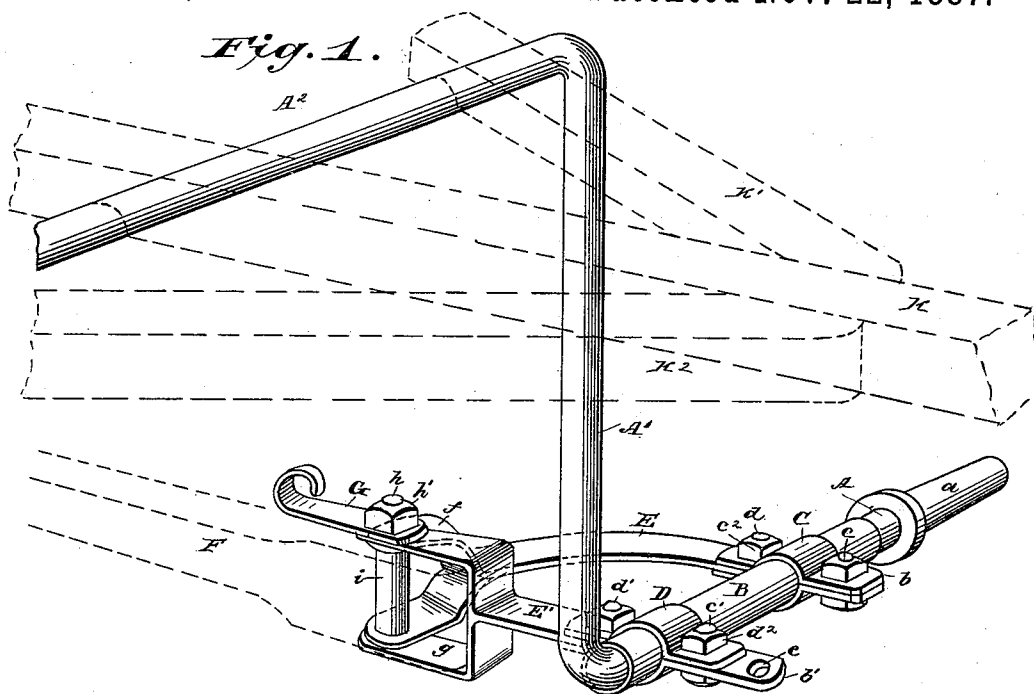
(No Model.)

P. RADER.

## COUPLING FOR CULTIVATORS.

No. 373,604.

Patented Nov. 22, 1887.



WITNESSES:

George Pinkenburg  
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# UNITED STATES PATENT OFFICE.

PETER RADER, OF KIRKLIN, INDIANA.

## COUPLING FOR CULTIVATORS.

SPECIFICATION forming part of Letters Patent No. 373,604, dated November 22, 1887.

Application filed March 25, 1887. Serial No. 232,386. (No model.)

*To all whom it may concern:*

Be it known that I, PETER RADER, of Kirkl  
lin, in the county of Clinton and State of In  
diana, have invented a new and useful Im  
5 improvement in Couplings for Cultivators, of  
which the following is a full, clear, and exact  
description.

My invention relates to corn cultivators, and  
is a device for coupling the shovel-beams to  
10 the arch of two-horse cultivators. Its objects  
are to provide light, strong, and inexpensive  
couplings adapted to be adjusted horizontally  
on said arch, which, when the shovel-beams  
are attached to them, will keep said beams  
15 parallel with the tongue of the cultivator, so  
that its shovels or plows will run near to and  
parallel with the corn, and prevent said beams  
from being drawn inward and from spreading  
their plows or shovels away from the corn.

20 The invention consists in certain novel fea  
tures of construction and combinations of parts  
of the coupler, all as hereinafter described  
and claimed.

Reference is to be had to the accompanying  
25 drawings, forming a part of this specification,  
in which similar letters of reference indicate  
corresponding parts in both figures.

Figure 1 is a perspective view of my im  
proved coupler applied to a cultivator, the  
30 left-hand half only of the axle and arch of the  
cultivator being shown in full lines, the shovel  
beam and frame-beams being indicated by  
broken lines; and Fig. 2 is a plan view of the  
same, the beams being omitted.

35 The arch A and axle a are of the construc  
tion common to horse-cultivators. Sleeves B  
loosely encircle the bases of said arch between  
the parts A' and the axle, and clamps C D, also  
of the common construction, are fitted upon  
40 said sleeves and connected, preferably, by bolts  
and nuts. The lower forward flanges of the  
clamps D are slightly longer than the others,  
and are provided with proper apertures, e, for  
the attachment of whiffletree-connections.

45 Curved arms E and straight arms E', each  
constructed with forked or branching outer  
extremities, are respectively pivoted to the  
clamps C D, in the same plane therewith, by  
the bolts d d'. The shovel-beams F are of  
50 the usual construction and are provided with

shovels on plows of any suitable form. Said  
beams are connected to the combined forked  
extremities f g of the arms E E' by bolts h,  
which are encircled by sleeves i, permitting  
said beams to be swung toward or from the 55  
center of the cultivator. Loops G are secured  
to the upper extremities of the arms E' by  
the same bolts which connect said arms and  
shovel-beams, and are adapted to be engaged  
with chains or hooks depending from the 60  
frame of the cultivator, said frame and the  
tongue of the cultivator k k' k<sup>2</sup> being con  
structed and arranged in the ordinary man  
ner.

The clamps C and D may be set and fixed 65  
at any desired places on the sleeves B by  
means of their connecting-bolts, and the  
shovel-beams having been placed at any de  
sired distance from the plants to be cultivated,  
by swinging said beams upon their pivot- 70  
bolts the tightening of the bolts d, d', and h  
will establish a rigid bond of union between  
the bases of the arch and said beams. Draft  
being applied to the cultivator, said beams  
will be maintained parallel with each other 75  
and the tongue of the cultivator and at a uni  
form distance from the plants under cultiva  
tion. The sleeves B, being loosely fitted upon  
the bases of the arch and tightly grasped by  
the clamps, permit the shovel-beams to move 80  
freely up and down and accommodate their  
plows or shovels to inequalities of the ground,  
as well as permit said beams to be connected  
by the loops G to suspension devices attached  
to the frame of the cultivator when the ma- 85  
chine is to be transported to another location.

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

1. In a cultivator, the combination, with 90  
the arch provided with a loose sleeve upon  
each of its bases and adjustable clamps fitted  
upon said sleeves, of arms pivoted to said  
clamps and extending rearward therefrom in  
the same plane, one of said arms, when in nor- 95  
mal position, being approximately parallel with  
the cutter of the cultivator and the other curv  
ing inward toward the same, the extremities  
of said arms being adapted to coincide and  
embrace the forward end of the shovel-beams, 100

whereby said beams may be swung toward or from the center of the cultivator without detaching them from said clamps, as set forth.

2. In a cultivator, the combination, with  
5 the shovel-beams and the arch provided with a loose sleeve on each of its bases and adjustable clamps fitted upon said sleeves, of the arms E and E', constructed as herein shown

and described and pivotally connected, respectively, to said shovel-beams and said clamps, as and for the purposes set forth.

PETER RADER.

Witnesses:

WILLIAM D. FALL,  
BYRON McPHERSON.