

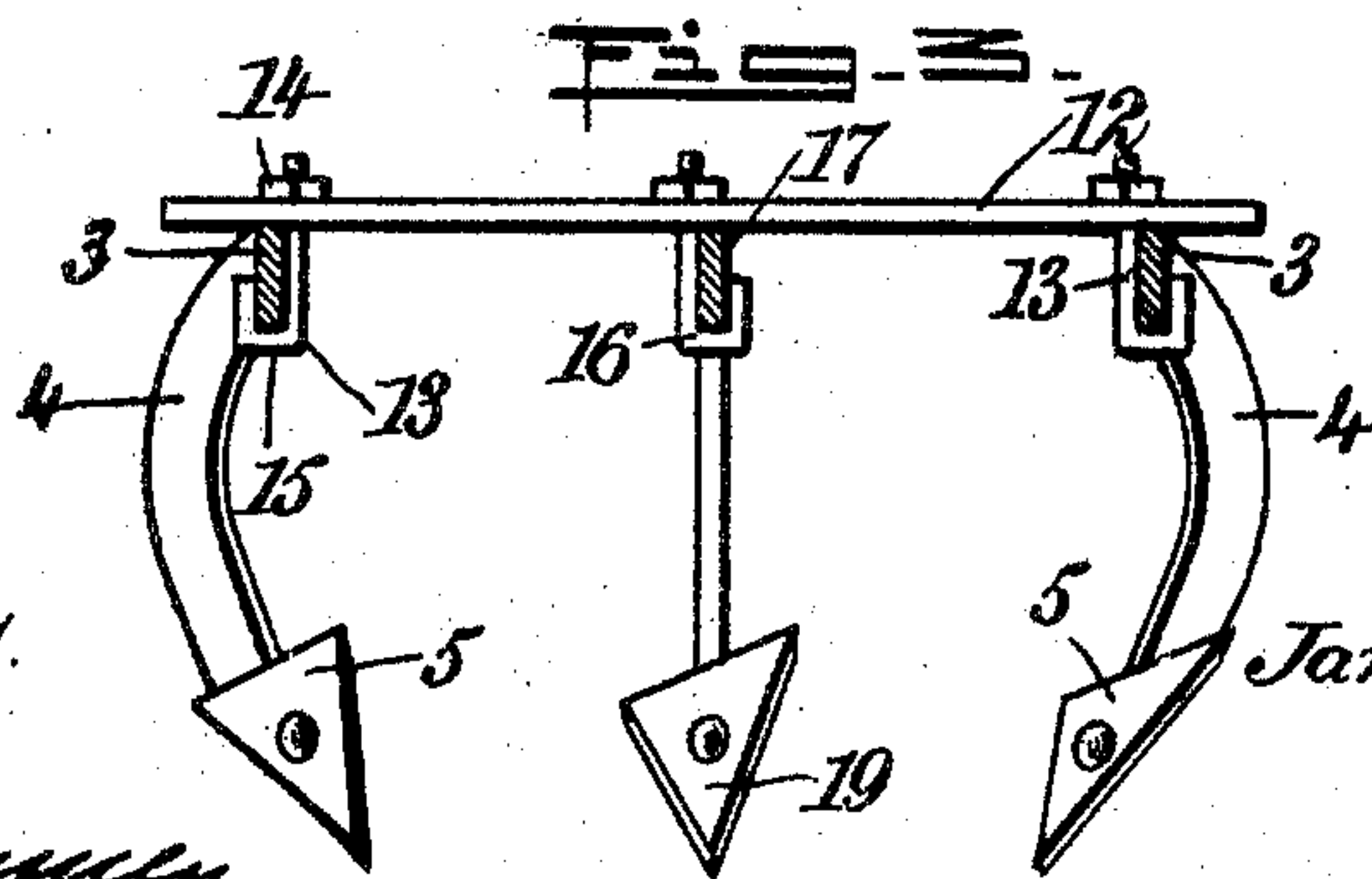
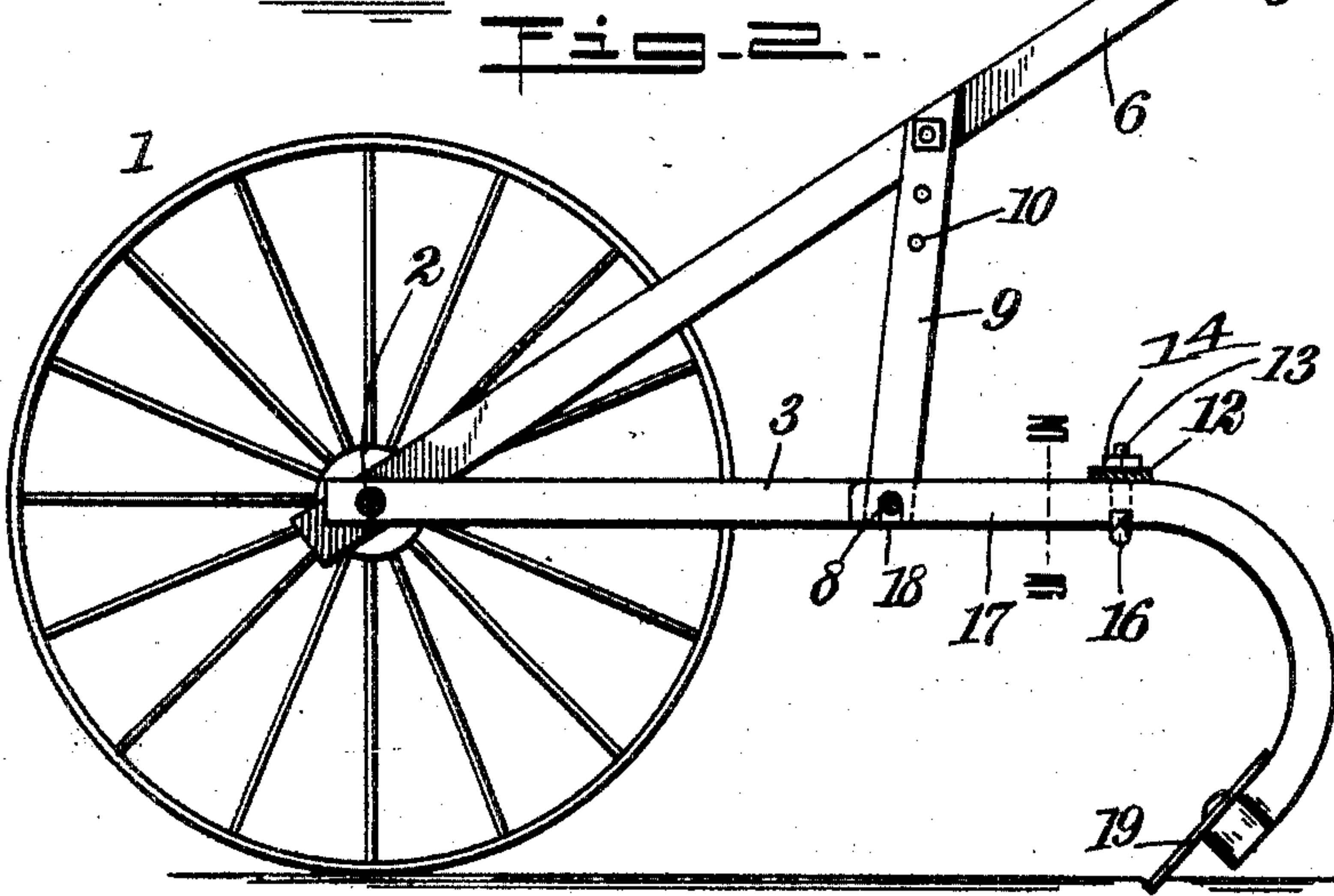
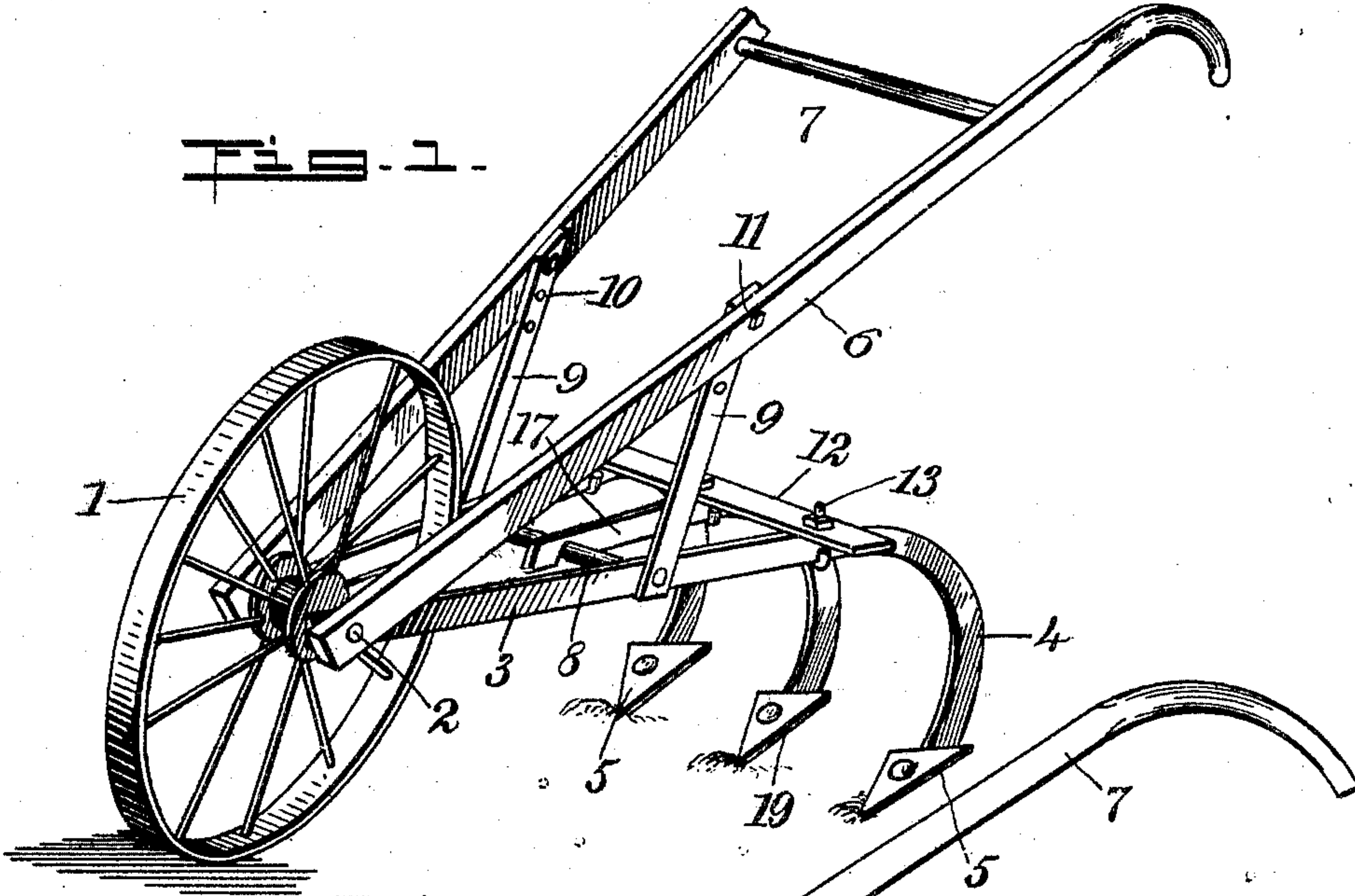
No. 776,367.

PATENTED NOV. 29, 1904.

J. E. SPRAGGINS.  
CULTIVATOR.

APPLICATION FILED AUG. 17, 1904.

NO MODEL.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

JAMES EDWARD SPRAGGINS, OF BEARCREEK, ALABAMA.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 776,367, dated November 29, 1904.

Application filed August 17, 1904. Serial No. 221,030. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES EDWARD SPRAGGINS, a citizen of the United States, and a resident of Bearcreek, in the county of Marion and State of Alabama, have invented a new and Improved Cultivator, of which the following is a full, clear, and exact description.

This invention relates to cultivators such as used in gardening.

The object of the invention is to produce a cultivator of simple construction the hoes or blades whereof may be adjusted in a simple manner.

The invention is especially applicable in a construction of cultivator involving the use of three hoes; and a further object of the invention is to provide an improved arrangement for attaching a centrally-disposed hoe.

The invention consists in the construction and combination of parts to be more fully described hereinafter and definitely set forth in the claims.

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

Figure 1 is a perspective view of a cultivator constructed according to my invention, one of the handles being broken away. Fig. 2 is substantially a vertical central section of the implement, and Fig. 3 is a section taken substantially on the line 3-3 of Fig. 2.

Referring more particularly to the parts, 1 represents a wheel, preferably having a broad flat rim, as shown, and adapted to roll upon the ground. This wheel is mounted upon an axle 2, which projects at the sides thereof, as shown. To the projecting portions of the axle 2 a pair of oppositely-disposed reaches or hoe-bars 3 are loosely attached, and these diverge rearwardly, as shown, at which point they are formed with downwardly-curved shanks 4, to which hoes or blades 5 attach, as indicated. This axle 2 projects also beyond these hoe-bars 3, and to its projecting extremities attach loosely side bars 6 of a handle 7, which incline upwardly and diverge rearwardly, as shown.

At an intermediate point a cross-bar 8 connects the hoe-bars 3, and the extremities of

this cross-bar project beyond the hoe-bars, as shown, and attach to upwardly-projecting handle-braces 9. These braces consist of flat bars which are provided near their upper extremities with a plurality of openings 10, through which bolts 11 pass in order to attach the same to the side bars 6, as will be readily understood.

Toward the rear an elongated tie-plate 12 is disposed transversely, resting upon the upper edges of the hoe-bars, as shown. Near the outer extremities of this tie-plate 12 bolts 13 attach, the same having threaded shanks projecting above the plate to receive nuts 14, as shown most clearly in Figs. 2 and 3. The lower extremities of the bolts 13 are bent backward to form hooks 15, which receive the lower edges of the hoe-bars 3, as will be readily understood. At an intermediate point, preferably at substantially its middle point, the tie-plate 12 is provided with a third hook-bolt 16, which is substantially similar to the bolts 13 just described. The hook of this bolt 16 engages the lower edge of a removable hoe-bar 17, the forward extremity of which terminates just forwardly of the cross-bar 8 aforesaid. At a suitable point the under edge of this hoe-bar 17 is provided with a notch or recess 18, which is received upon the cross-bar, as indicated most clearly in Figs. 1 and 2. The rear extremity of the hoe-bar 17 is formed similar to the hoe-bars 3 and carries a hoe or blade 19, which is substantially centrally disposed between the hoes 5 already described.

From the construction described it should appear that the tie-plate 12, in connection with its hook-bolts 13 and 16, affords means for rigidly securing the hoe-bars in position. When it is desired to use only the two hoes 5, the central hoe may be readily removed by loosening its hook-bolt 16.

By adjusting the tie-plate 12 forwardly or rearwardly evidently the angular adjustments or divergences of the outer hoe-bars 3 may be changed.

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

1. In a cultivator in combination, a wheel having an axle projecting therefrom, a pair of oppositely-disposed hoe-bars loosely



mounted upon said axle adjacent to said wheel, said hoe-bars diverging rearwardly, handles attaching to said axle, a cross-bar connecting said hoe-bars at a point intermediate of the  
 5 length thereof, a third hoe-bar disposed between said first hoe-bars and having a recess in the under side thereof engaging said cross-bar, a tie-plate transversely disposed above  
 10 passing upwardly through said tie-plate, said bolts having hooked extremities engaging the lower edges of said hoe-bars.

2. In a cultivator in combination, a wheel having a laterally-projecting axle, a pair of  
 15 oppositely-disposed hoe-bars loosely mounted upon said axle adjacent to said wheel, said hoe-bars diverging rearwardly, a pair of handles attaching to said axle beyond said hoe-bars and diverging upwardly and rearwardly,  
 20 adjustable braces connecting said handles with said hoe-bars, a cross-bar connecting said hoe-bars, a third hoe-bar disposed centrally between said first hoe-bars and having a notch in the lower edge thereof receiving said cross-  
 25 bar, a transversely-disposed tie-plate resting upon the upper edges of said hoe-bars near the rear thereof, and bolts attaching to said tie-plate and having hooks engaging the lower edges of said hoe-bars.

30 3. In a cultivator in combination, a wheel having an axle projecting laterally therefrom, a pair of oppositely-disposed hoe-bars attaching loosely to said axle adjacent to said wheel, the said hoe-bars diverging rearwardly, a pair  
 35 of handles attaching to said axle beyond said

hoe-bars and diverging upwardly and rearwardly therefrom, a cross-bar connecting said hoe-bars and projecting beyond the same, handle-braces attaching to the projecting extremities of said cross-bar and having a plurality  
 40 of openings at the upper extremities thereof, bolts connecting said handle-braces with said handles, a centrally-disposed hoe-bar lying in the space between said first hoe-bars and having a recess in the edge thereof engaging  
 45 said cross-bar, a tie-plate disposed transversely and resting against the edges of said hoe-bars, and bolts attaching to said tie-plate and having hooked lower extremities engaging the edges of said hoe-bars. 50

4. In a cultivator, in combination, a wheel, handles projecting upwardly and rearwardly therefrom, a pair of hoe-bars attached at the sides of said wheel and diverging rearwardly  
 55 therefrom, a cross-bar connecting said hoe-bars, a tie-plate disposed rearwardly of said cross-bar, means for attaching said tie-plate to said hoe-bars, a third hoe-bar disposed between said first hoe-bars and having a notch  
 60 in the lower edge thereof receiving said cross-bar, and a bolt attached to said tie-plate and having a hook adapted to clamp said third hoe-bar.

In testimony whereof I have signed my name to this specification in the presence of two sub-  
 65 scribing witnesses.

JAMES EDWARD SPRAGGINS.

Witnesses:

W. E. GODDARD,

JOHN R. SHERMAN.