Nov. 18, 1924.

S. D. REDWINE

1,515,699

BOLL WEEVIL DESTROYER

Filed March 23, 1922

3 Sheets-Sheet 1

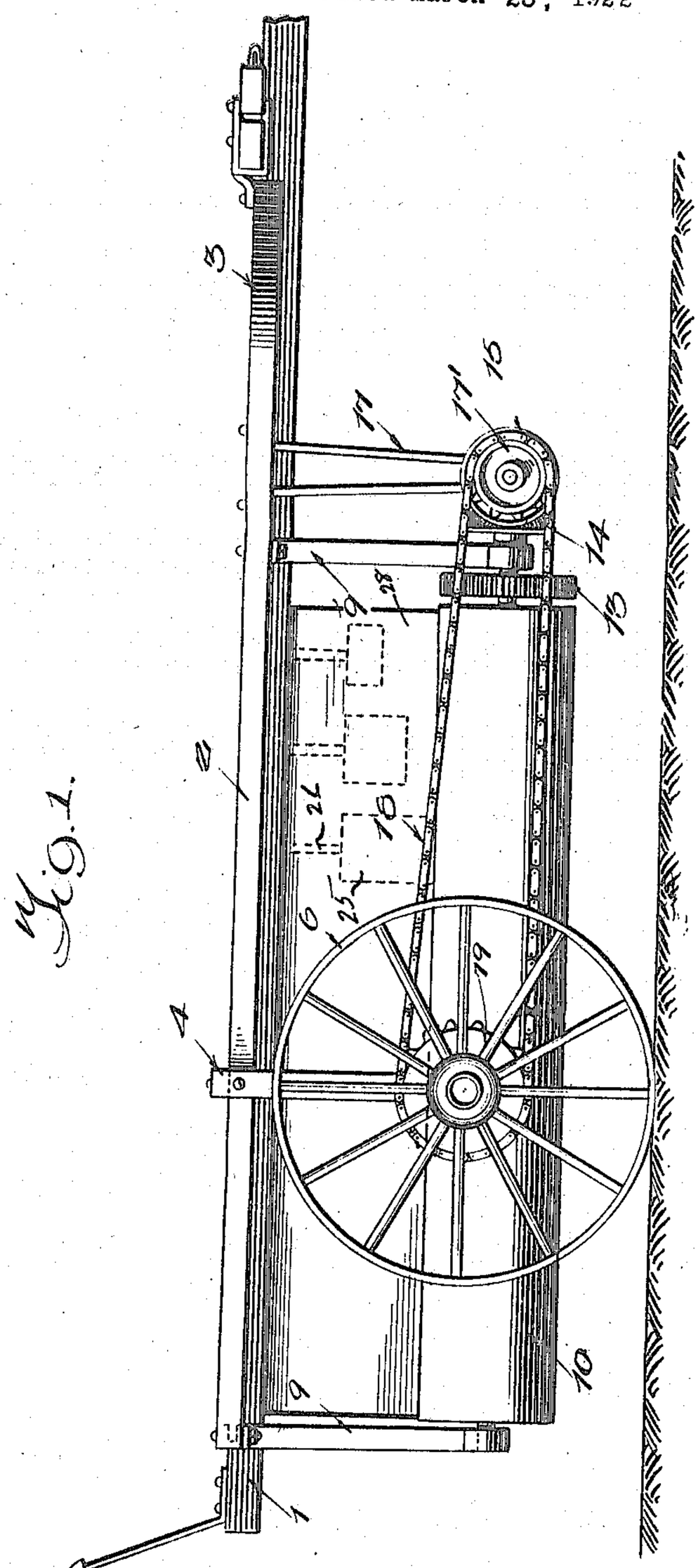

Fig. 1.

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Nov. 18, 1924.

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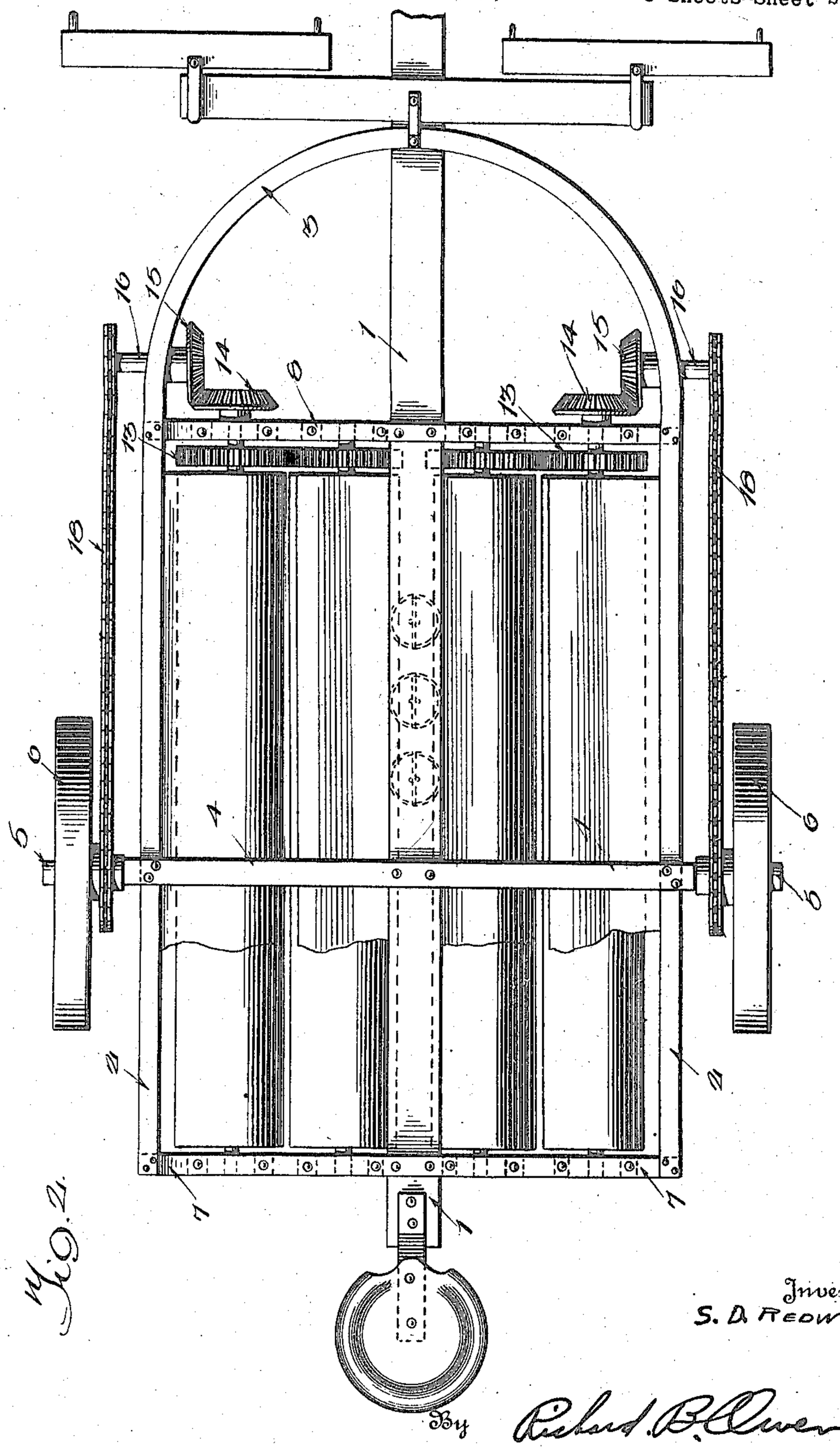

Fig. 2.

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3 Sheets-Sheet 3

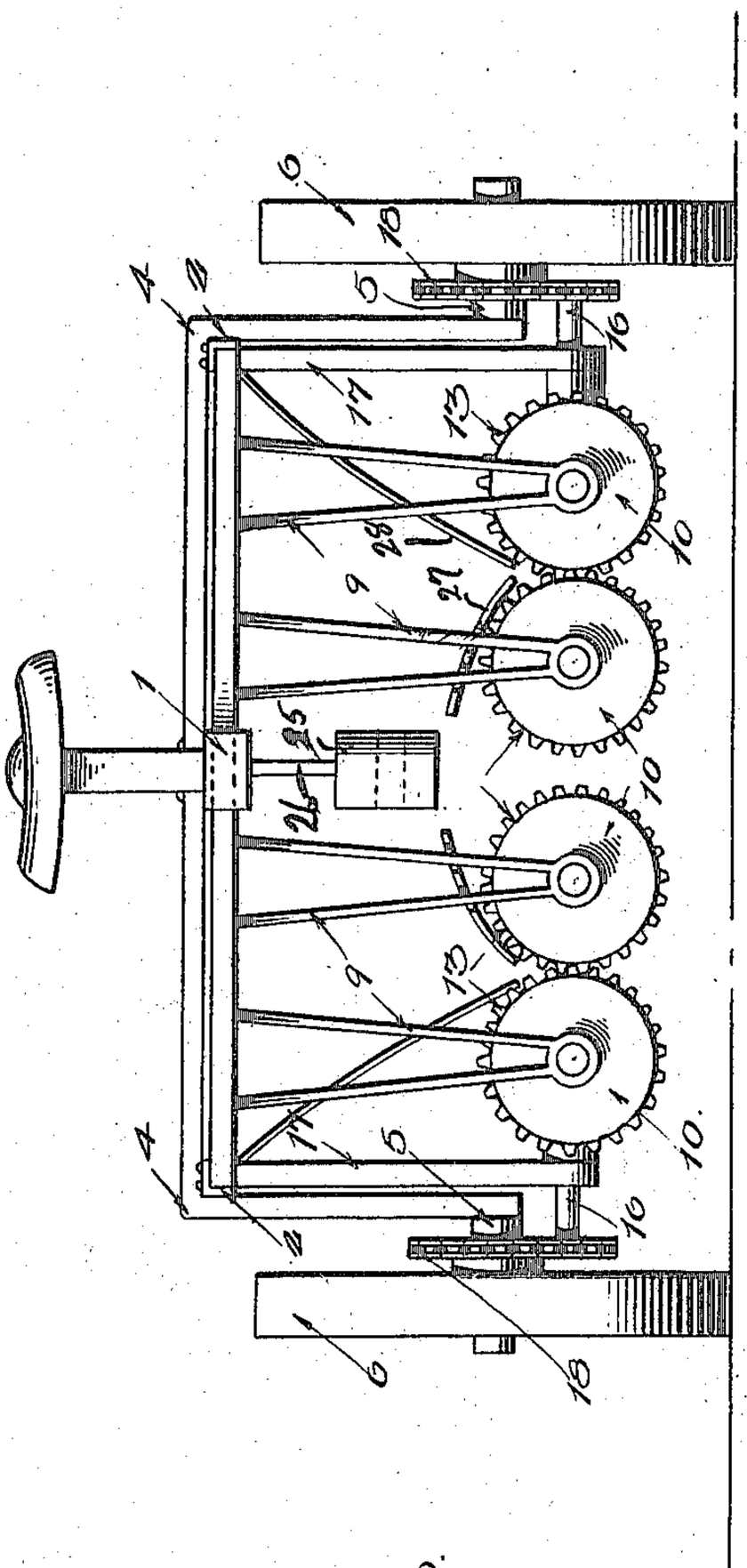

Fig. 3.

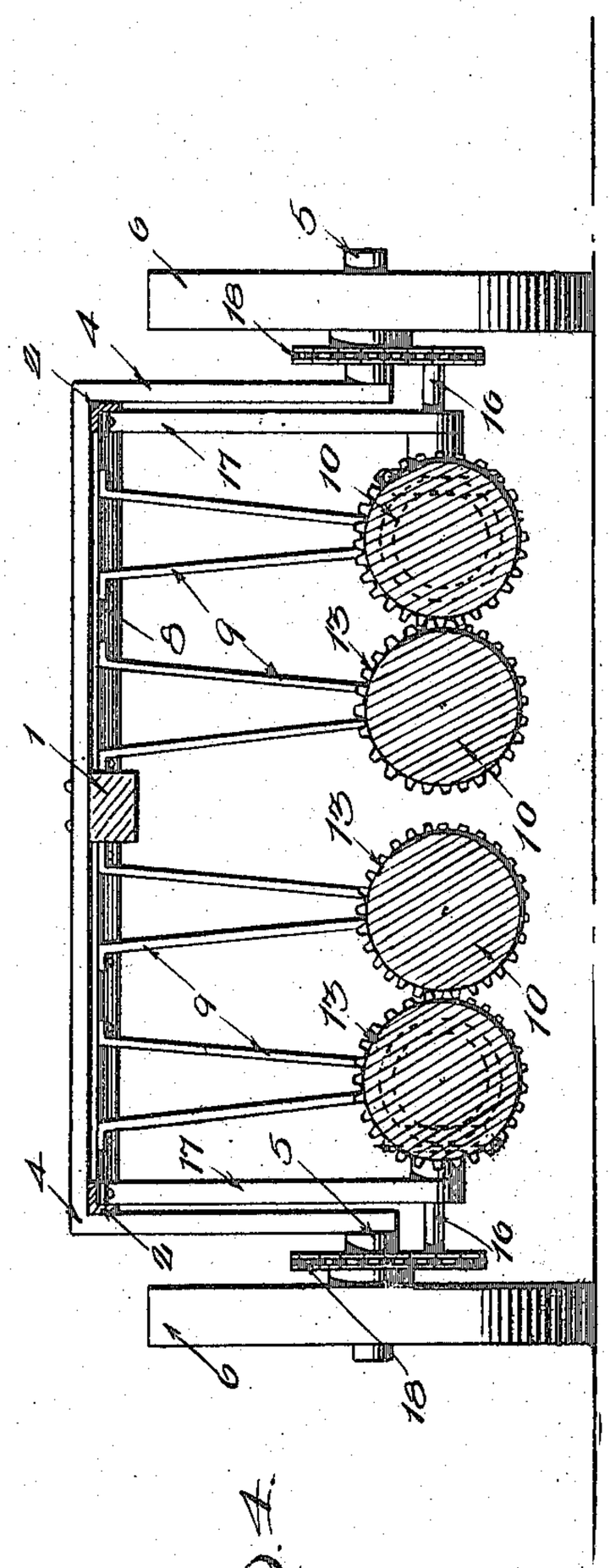

Fig. 4.

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Patented Nov. 18, 1924. 1,515,699

UNITED STATES PATENT OFFICE.

STERLIN D. REDWINE, OF CRAB ORCHARD, TENNESSEE.

BOLL-WEEVIL DESTROYER.

Application filed March 23, 1922. Serial No. 546,084.

To all whom it may concern:

Be it known that I, STERLIN D. REDWINE, a citizen of the United States, residing at Crab Orchard, in the county of Cumberland and State of Tennessee, have invented certain new and useful Improvements in a Boll-Weevil Destroyer, of which the following is a specification.

The present invention relates to a boll-weevil destroyer and has for its principal object to provide a machine of this nature which will be compact in structure, durable and capable of withstanding rough usages.

Another important object of the invention is to provide a machine of this nature which is constructed of a minimum number of simple parts whereby the same may be economically manufactured and placed upon the market at a reasonably low cost.

With the above and numerous other objects in view, as will appear as the description progresses, the invention resides in certain novel features of construction and the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawings:—

Figure 1 is a side elevation of the machine,

Figure 2 is a top plan thereof,

Figure 3 is a rear elevation thereof, and

Figure 4 is a vertical section taken therethrough.

Referring to the drawings in detail it will be seen that the machine consists of a frame formed by the central longitudinally extending beam 1 and a pair of longitudinally extending spaced side members 2 which are connected or formed integral with the front arcuate shaped member 3 to which suitable draft appliance may be attached. An axle beam 4 extends transversely of the beam 1 and the side members 2 intermediate their ends. The ends of the beam 4 beyond the side members 2 depend downwardly and terminate in stub-axles 5 upon which are suitably journalled the wheels 6. A cross bar 7 connects the rear ends of the side members 2 and a similar cross bar 8 connects their forward ends adjacent the arcuate member 3. A plurality of depending brackets 9 extend from the bars 7 and 8. In the present illustration there are four of these brackets 9 extending from each bar and they are arranged in pairs as is shown to advantage in Figures 3 and 4. A plurality of rollers 10 are journalled in the brackets 9 so as to extend longitudinally of the frame and these rollers are arranged in pairs and are provided adjacent their forward ends with gears 13 which mesh with each other on adjacent rollers so that the rollers of each pair will move in unison with each other and in opposite directions. The end rollers 10 have their axle shanks extending forwardly of the forward bar 8 and have keyed thereto beveled gears 14 which are in mesh with beveled gears 15 keyed to shafts 16 journalled in depending brackets 17 extending from the arcuate member 3 adjacent its terminal. The outer ends of the shaft 16 are provided with a sprocket 17′ over which are trained chains 18 which are also trained over sprockets 19 that operate in unison with the wheels 6.

A plurality of cylindrical members 25 are hung from the main beam 1 by means of flexible members 26. These cylindrical members 25 are of different lengths as is indicated to advantage in Figure 1, the forward cylindrical member being shorter than the others. These cylindrical members are adapted to engage the cotton plant for knocking the boll-weevils therefrom onto the shields 27 and 28 which are extended longitudinally of the machine and supported by the brackets 9. The shield or guide 27 is smaller in width than the shield 28 and their adjacent edges are slightly spaced being disposed immediately above the space between the rollers 10 so as to guide the boll-weevils therebetween and destroy them.

It is thought that the advantages and operation of the device will now be understood without a more thorough explanation thereof, but it is to be understood that numerous changes in form, and in the combination and arrangement of parts as may be resorted to without departing from the spirit of the invention as hereinafter claimed.

Having thus described my invention what I claim as new is:—

In combination, a frame, an axle beam of inverted U-shaped formation mounted on the frame so that its plane is disposed at right angles to the plane of the frame, subaxles projecting outwardly from the terminals of the axle beam, wheels journaled on the subaxles, brackets depending from

the frame, rollers journaled in the brackets, guide plates carried by the frame in association with the rollers, and a series of cylindrical agitating members disposed longitudinally of the frame above the rollers, and means for operating the rollers by the wheels.

In testimony whereof I affix my signature in presence of two witnesses.

STERLIN D. REDWINE.

Witnesses:
W. J. BROOKS,
G. M. GREEN.