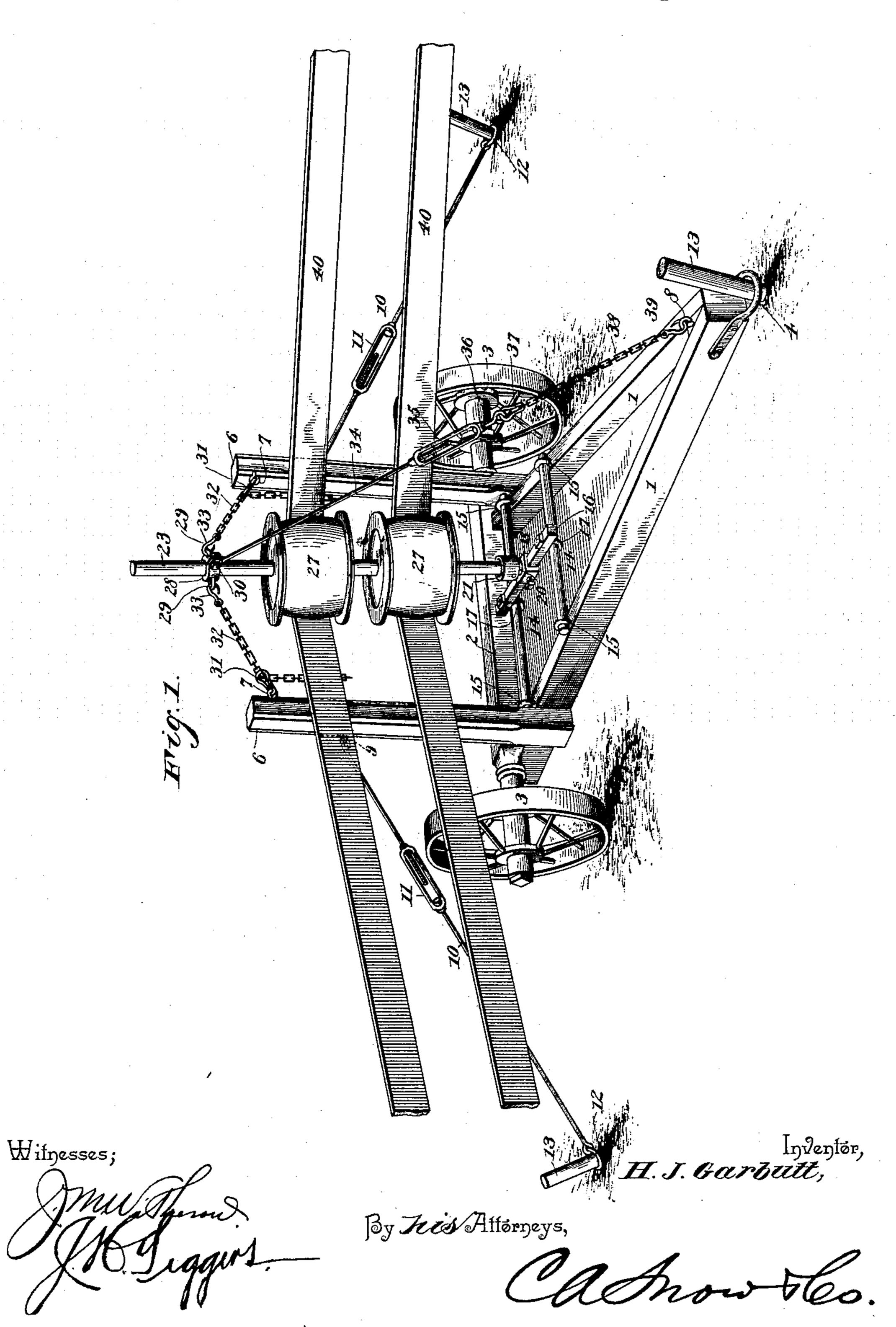
H. J. GARBUTT. COUNTER SHAFT SUPPORTING JACK.

No. 481,486. Patented Aug. 23, 1892.

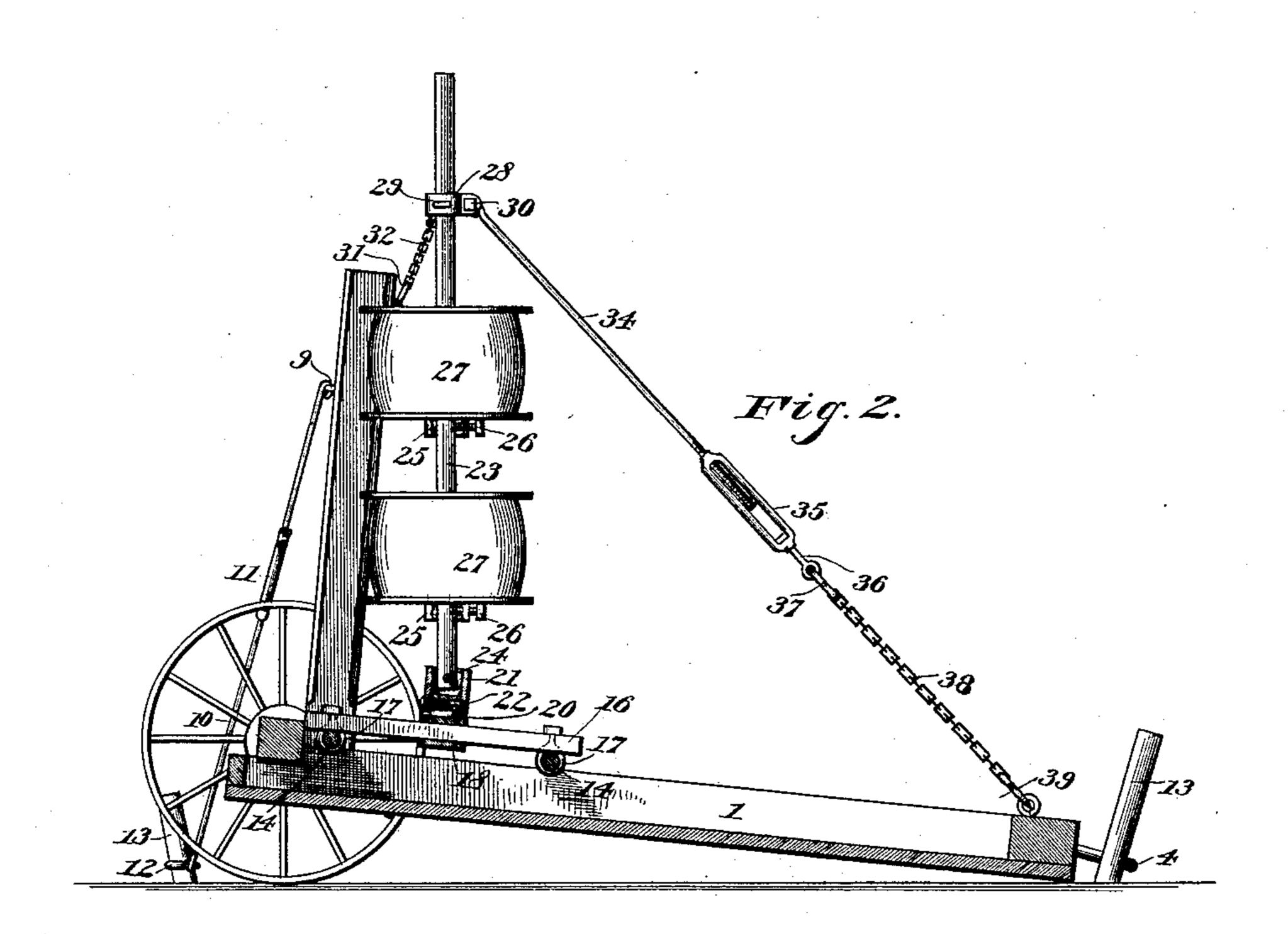


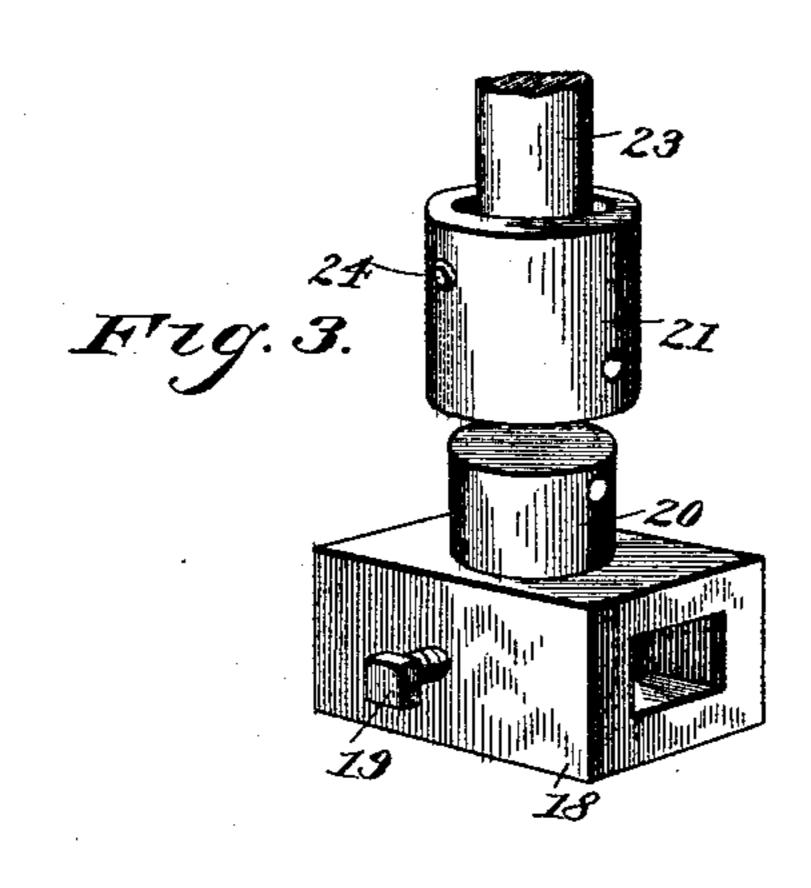
THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, O. C.

H. J. GARBUTT. COUNTER SHAFT SUPPORTING JACK.

No. 481,486.

Patented Aug. 23, 1892.





Witnesses;

Inventor H. J. Garbutt,

United States Patent Office.

HIRAM J. GARBUTT, OF LEXINGTON, MICHIGAN, ASSIGNOR OF ONE-HALF TO GEORGE SMITH, OF SAME PLACE.

COUNTER-SHAFT-SUPPORTING JACK.

SPECIFICATION forming part of Letters Patent No. 481,486, dated August 23, 1892.

Application filed March 4, 1892. Serial No. 423,771. (No model.)

To all whom it may concern:

Be it known that I, HIRAM J. GARBUTT, a citizen of the United States, residing at Lexington, in the county of Sanilac and State of Michigan, have invented a new and useful Counter-Shaft-Supporting Jack, of which the

following is a specification.

My invention relates to a counter-shaft or belt-guide for use in connection with farm machinery; and the objects in view are to provide a cheap and simple jack or countershaft, designed to accommodate itself to the belt between such machinery and the motive power, whereby the belt may be run at an angle and the machinery operated in cramped positions or contracted spaces, and whereby the engine for furnishing the power may be set to that side of a barn, outhouse, or other structure opposite from which the wind blows, whereby the sparks are not blown toward the same, and, furthermore, to so construct the device as to be readily transported.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particu-

larly pointed out in the claims.

In the drawings, Figure 1 is a perspective of a jack constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section. Fig. 3 is a detail in perspective of the joint between the counter-shaft and its step.

Like numerals of reference indicate like parts in all the figures of the drawings.

of converging side sills 1 and lay across the rear ends of the same and let therein a transverse axle 2. The axle terminates at its ends beyond the sills in bearings for the accommodation of ground-wheels 3. A clevis-loop 4 clamps the opposite sides of the sills 1 at their front meeting ends. A vertical post 6 rises from each of the sills immediately in front of the axle, said posts being opposite each other and each provided at its inner front corner with an eye 7, a corresponding eye 8 being located at the meeting ends of the sills 1.

Eyes 9 (best shown in Fig. 2) are located upon the outer sides of the posts, and loosely connected in them are guy-rods 10. These guy-rods 10 are formed in sections, preferably,

the adjacent ends of the sections being connected by turnbuckles 11, and at their outer ends the guy-rods are provided with rings 12. Stakes 13 are passed through the rings 12 and 55 the clevis-ring 4 and driven into the ground for the purpose of anchoring the structure.

A pair of transverse parallel rods 14 surmount the opposite edges of the sills 1. In this instance staples 15 encircle the rods and 60 pass through the said sills, whereby the rods are maintained in position. The shafts or rods 14 are preferably cylindrical and have mounted thereon a longitudinally-disposed bar 16, which is rectangular in cross-section 65 and clipped to the shaft by adjustable clips 17, which embrace the shafts or rods 14, pass up through the bar, and are nutted above the latter.

A sleeve, rectangular in cross-section and 70 designated as 18, is mounted for reciprocation on the bar 16, a set-screw 19, passing through the wall of the sleeve, bearing on the bar and serving to lock the sleeve at any point thereon. The upper side of the sleeve is provided with 75 a cylindrical lug or tenon 20, and the same loosely receives a cylindrical ring or collar 21, a pin 22 passing transversely through the sleeve and tenon and serving to connect the two. In the sleeve is stepped the lower end 80 of a counter-shaft 23, and a pin 24 passes through the sleeve and the shaft.

Mounted upon the counter-shaft is a pair of adjustable bearing-collars 25, through which binding-screws 26 pass and bear at their inner 85 ends upon the shaft. Above each collar there is mounted for loose rotation on the shaft and bearing on the collar a pulley 27.

A supporting-collar 28 is mounted on the upper end of the counter-shaft 23, and the 90 same is provided at opposite sides with eyes 29. The collar has its ends connected by a bolt 30. Links 31 are loosely connected in the eyes 7, and adjustably mounted in each link is a chain 32, terminating at its inner end in 95 a hook 33, adapted to engage with an eye 29. A rod 34 is connected to the bolt 30, and by a turnbuckle 35 with a swivel 36, in which a link 37 is loosely connected. A chain 38 is adjustably connected with the link 37 and 100 terminates at its lower end in a hook 39 for engaging the eye 8.

In operation the opposite sides of the belt 40 pass around the pulleys 27, and may be run at an angle, as apparent, and as shown in Fig. 1, thus enabling the engine and machine op-5 erated thereby to be arranged out of alignment with each other or in close proximity, and in either instance the same length of belt may be employed, requiring simply an adjustment of the jack with relation to the engine ro and machine. By adjusting the chains 32 and 38 the counter-shaft may be inclined to any angle for accommodating the relative discrepancies between the machine and engine. When it is desired to transport the machine from one 15 point to another, it is simply necessary to withdraw the anchoring-stakes, which are three in number, and connect the clevis 4 to the reach of an ordinary-farm wagon, so that the jack will follow after the wagon as the latter 20 is drawn along.

Having described my invention, what I claim is—

1. In a device of the class described, the combination, with the truck comprising the opposite sills, the transverse rods mounted on the sills, the longitudinal bar adjustably connected with the rods, and a bearing-sleeve adjustably mounted on the bar, of a counter-shaft

stepped in the bearing of the sleeve and adjustable connections between the truck or 30 frame and the upper end of the counter-shaft,

substantially as specified. 2. In a device of the class described, the combination, with the opposite side bars, the round rods mounted thereon and rigidly con- 35 nected thereto, the longitudinal bar rectangular in cross-section, staples embracing the rods and passed through the bar, nuts on the staples, a rectangular sleeve mounted for movement on the barand provided at one side with 40 a binding-screw and upon its upper side with a tenon, a collar mounted on the tenon, a pin passed through the collar and tenon, a counter-shaft mounted in the collar, a pin passed through the collar and the lower end of the 45 shaft, and pulleys mounted on the shaft, of means for supporting the shaft, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 50

the presence of two witnesses.

HIRAM J. GARBUTT.

Witnesses:

JOB GARBUTT,

PHILIP L. WIXSON.