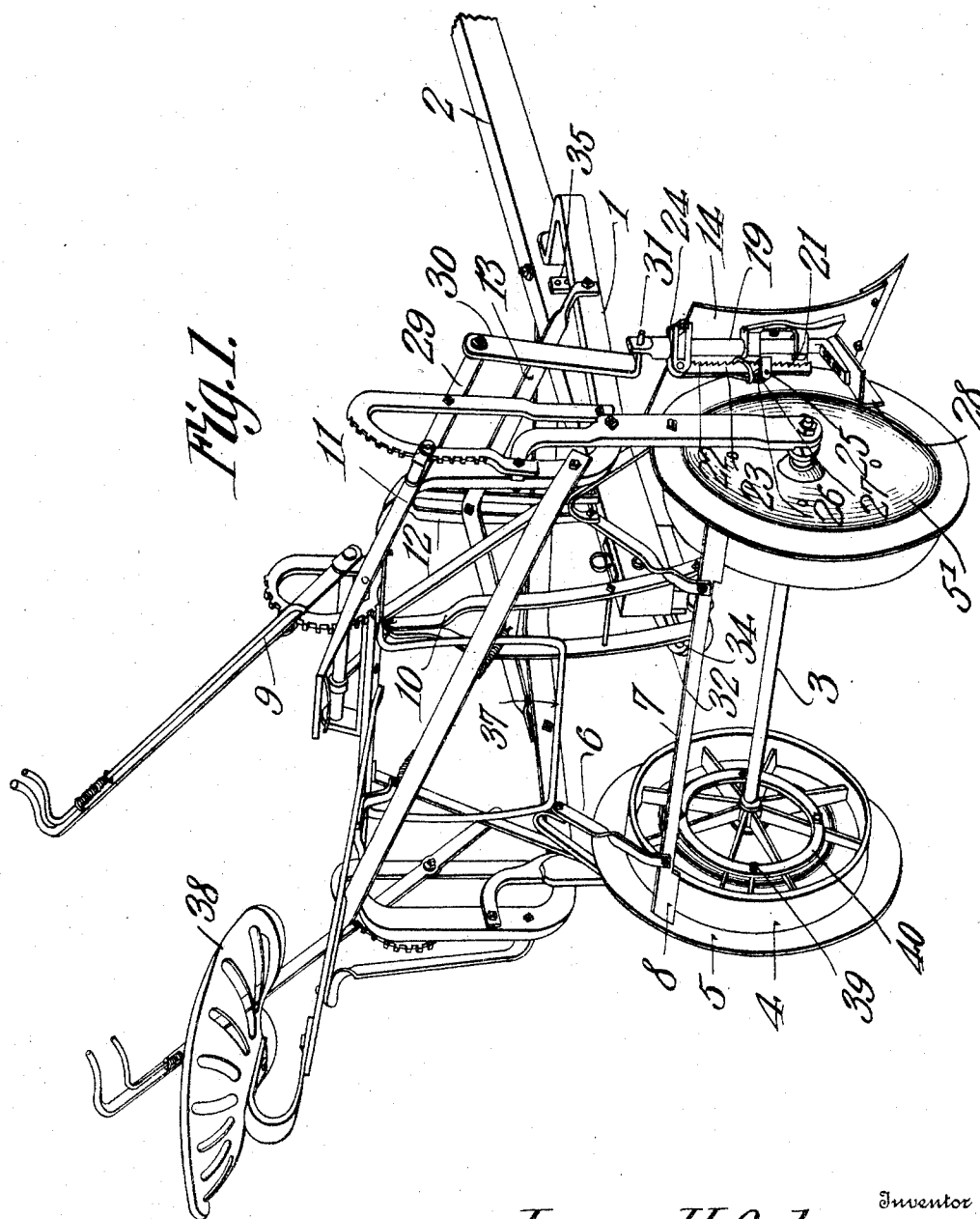


J. H. OSTEN.
ROAD SCRAPER.
APPLICATION FILED JUNE 9, 1908.

929,699.

Patented Aug. 3, 1909.

2 SHEETS—SHEET 1.



Witnesses
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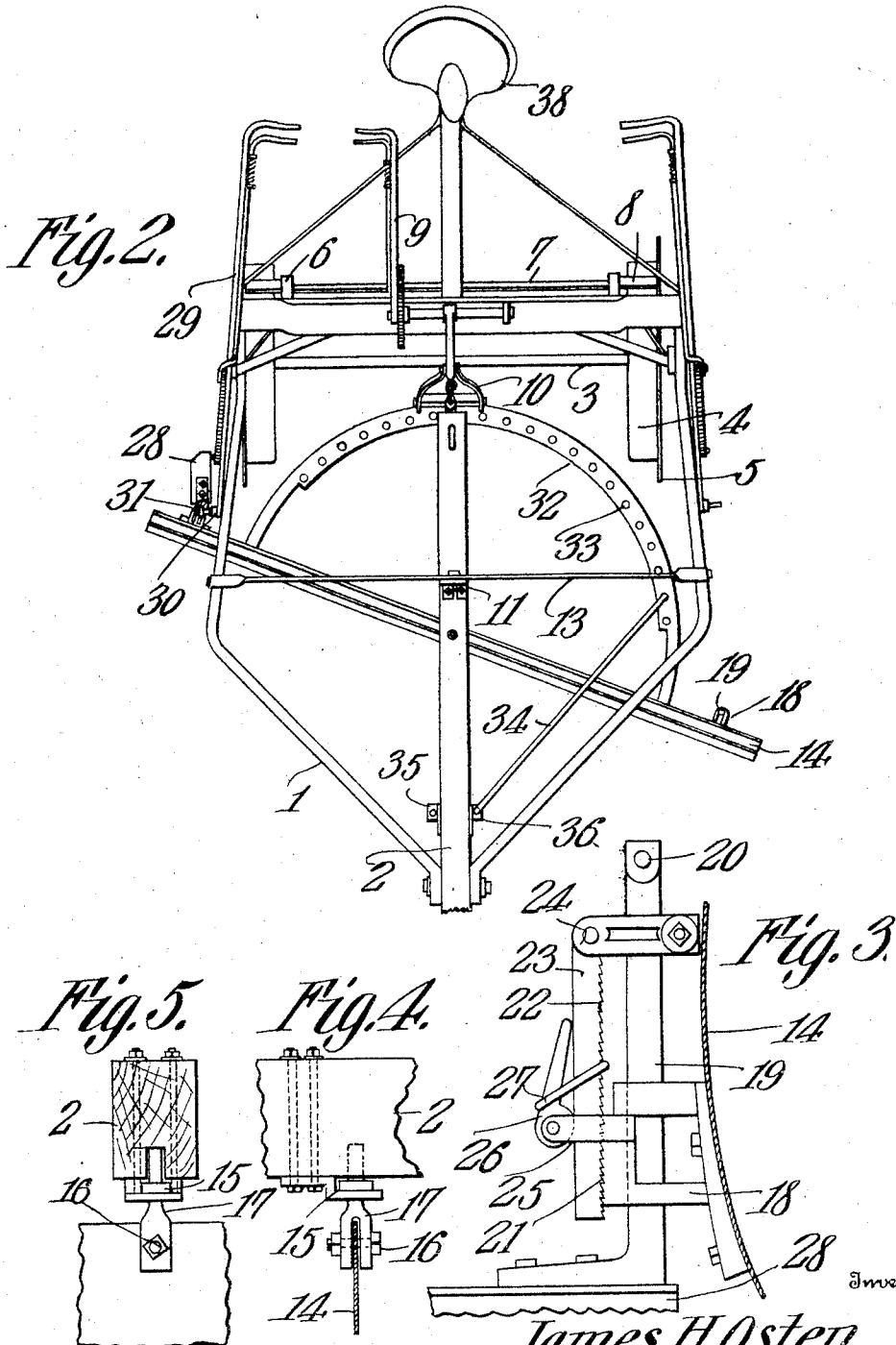
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Witnesses

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UNITED STATES PATENT OFFICE.

JAMES HENRY OSTEN, OF WHITE CITY, KANSAS, ASSIGNOR OF ONE-THIRD TO ROBERT GUY OSTEN AND ONE-THIRD TO JOHN WALKER, BOTH OF WHITE CITY, KANSAS.

ROAD-SCRAPER.

No. 929,699.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed June 9, 1908. Serial No. 437,567.

To all whom it may concern:

Be it known that I, JAMES H. OSTEN, a citizen of the United States, residing at White City, in the county of Morris and State of Kansas, have invented a new and useful Road-Scraper, of which the following is a specification.

This invention has relation to road scrapers, and it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide a scraper comprising a wheel-mounted frame having a draft tongue attached thereto and means for pivotally adjusting the tongue upon the frame. A scraper blade is pivotally connected with the tongue, and lever mechanisms are mounted upon the frame and are adapted to be connected with the end portions of the scraper blade for the purpose of raising or lowering the same. The scraper blade may swing horizontally as well as vertically with relation to the tongue, and means for bracing the scraper blade with relation to the tongue is provided.

Vertically adjustable colters of special construction are mounted at the ends of the scraper-blade and form means whereby the lever mechanisms above referred to are connected with the scraper blade. Said colters are adapted to retain the scraper blade against side draft with relation to the frame of the implement. The wheels upon which the frame is mounted are also provided with annular flanges located at their outer edges, which are adapted to prevent the tendency of side draft.

In the accompanying drawings,—Figure 1 is a perspective view of the scraper. Fig. 2 is a top plan view of the same. Fig. 3 is a side elevation of one of the colter mechanisms. Fig. 4 is a side elevation of an intermediate portion of the tongue showing the scraper blade attached thereto, and Fig. 5 is a transverse sectional view of the tongue showing the scraper blade attached thereto.

The implement consists of the frame 1 to which is pivotally attached the tongue 2. The frame 1 is mounted upon the axle 3, which in turn is supported by the wheels 4 having at the outer edges of their peripheries the annular flanges 5. The arms 6 are pivotally connected with the frame 1 and the cross bar 7 is attached to the rear ends of said arms. The bar 7 is provided with the

end portions 8 which lie upon the peripheries of the wheels 4 and serve as scrapers. A lever mechanism 9 is mounted upon the frame 1 and is connected with the tongue 2 by means of a link 10. Through the instrumentality of the said lever 9 and link 10, the tongue 2 may be swung vertically upon its pivotal connection with the frame 1 and secured in such adjusted position by means of the clamp bolt 11, which operates in an elongated slot provided in the upright 12 mounted upon the tongue 2 and in a perforation provided in the cross-bar 13.

The scraper blade 14 is pivotally connected, as at 15, with the tongue 2 and may swing vertically with relation to the same by means of the pivot pin 16, which passes transversely through the said blade 14 and the clevis 17 which is pivoted to the said tongue. Thus, it will be seen that the scraper blade 14 will swing both horizontally and vertically. The guides 18 are mounted upon the rear sides of the blade 14 in the vicinity of the ends thereof. The colter shanks 19 pass through the guides 18 and are provided at their upper ends with perforations 20. The upper ends of the said shanks 19 project above the upper edge of the blade 14. The teeth 21 are arranged upon the rear sides of the lugs 18 and are adapted to mesh with similar teeth 22 provided upon the bar 23, which is pivotally connected at its upper end with the clamp members 24 mounted upon the shanks 19. The guides 18 are provided with rearwardly-disposed ears 25, between each pair of which is pivoted a cam lever 26, and a ring 27 surrounds each bar 23 and is adapted to be slipped over the free end of the cam lever 26 for the purpose of holding the teeth 22 in mesh with the teeth 21, as illustrated in Fig. 3. The angular colter blades 28 are attached to the lower ends of the shanks 19 and are adapted to come in contact with the surface of the soil of the ground for the purpose of preventing the scraper blade 14 from having side draft. The levers 29 are fulcrumed upon the frame 1 and the links 30 are pivotally connected with the said levers, and each link 30 is provided with a pin 31 which is adapted to pass through the eye 20 of the shank 19 located at the same side of the implement as that upon which the said link is located. The semi-circular brace is attached to the rear side of the scraper blade 14 and is provided

with a series of perforations 33. The brace rod 34 is adapted to be inserted at its rear end in any one of the perforations 33 and at its forward end in a perforation 35 of a lug 36 mounted upon the tongue 2. The said rod 34 may be located at either side of the tongue 2, and together with the brace 33 forms an effectual means for holding the scraper blade 14 at a desired angle. The foot rest 37 depends from the upper portion of the frame 1.

The seat is located some distance behind the axle 3 in order that the weight of one occupying the said seat may in a measure counterbalance the weight of the tongue 2 whereby the weight of the machine or its parts upon the necks of the draft animals will be minimized. As the blade 14 is located in advance of the wheels 1 the said blade will even the surface of the road over which the machine is traveling so that the wheels 4 will run on a smooth surface.

By reference to Fig. 1 of the drawings it will be seen that the flanges 5 are in reality plates which are slightly concaved at their centers as at 5' and which are bolted to the outer sides of the wheels 4; the said plates have central openings for the reception of the hubs of the wheels 4. The said plates are held in place upon the wheels 4 by means of the clamp bolts 39 which pass transversely through the plates and the space between the spokes of the wheels 4 and the rims 40 which bear against the inner sides of the spokes of the wheels 4. By such an arrangement the plates 5 may be readily removed from the wheels when worn out and new ones substituted in their stead.

What is claimed is:—

1. A scraper comprising a wheel-mounted

frame, a scraper-blade pivotally connected with the frame, and adapted to be obliquely disposed with relation to the same with either of its ends foremost, a lever mechanism located at each side of the frame, and means for connecting the lever mechanism at the side of the frame with that end portion of the scraper blade lying at the same side of the frame when the said end portion of the scraper blade is in its rearward position and the opposite end portion of the scraper blade is disconnected from the lever mechanism at the opposite side of the frame.

2. A scraper comprising a wheel-mounted frame, a scraper blade pivotally connected with the frame, a lever mechanism mounted upon the frame, a shank adjustably mounted at the end portion of the scraper blade, means for connecting the said shank with the said lever mechanism, and a colter blade carried by the lower end of the said shank.

3. A scraper comprising a frame, wheels supporting the same and having peripheral flanges at their outer sides, a cross-bar supported transversely of the frame and having at its ends portions which are adapted to engage the peripheries of the supporting wheels and serve as scrapers for the same, the ends of the said cross-bar bearing against the inner faces of the flanges of the wheels, and a scraper blade carried by the frame.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES HENRY OSTEN.

Witnesses:

H. A. DODDERIDGE,
H. SIMMONS.