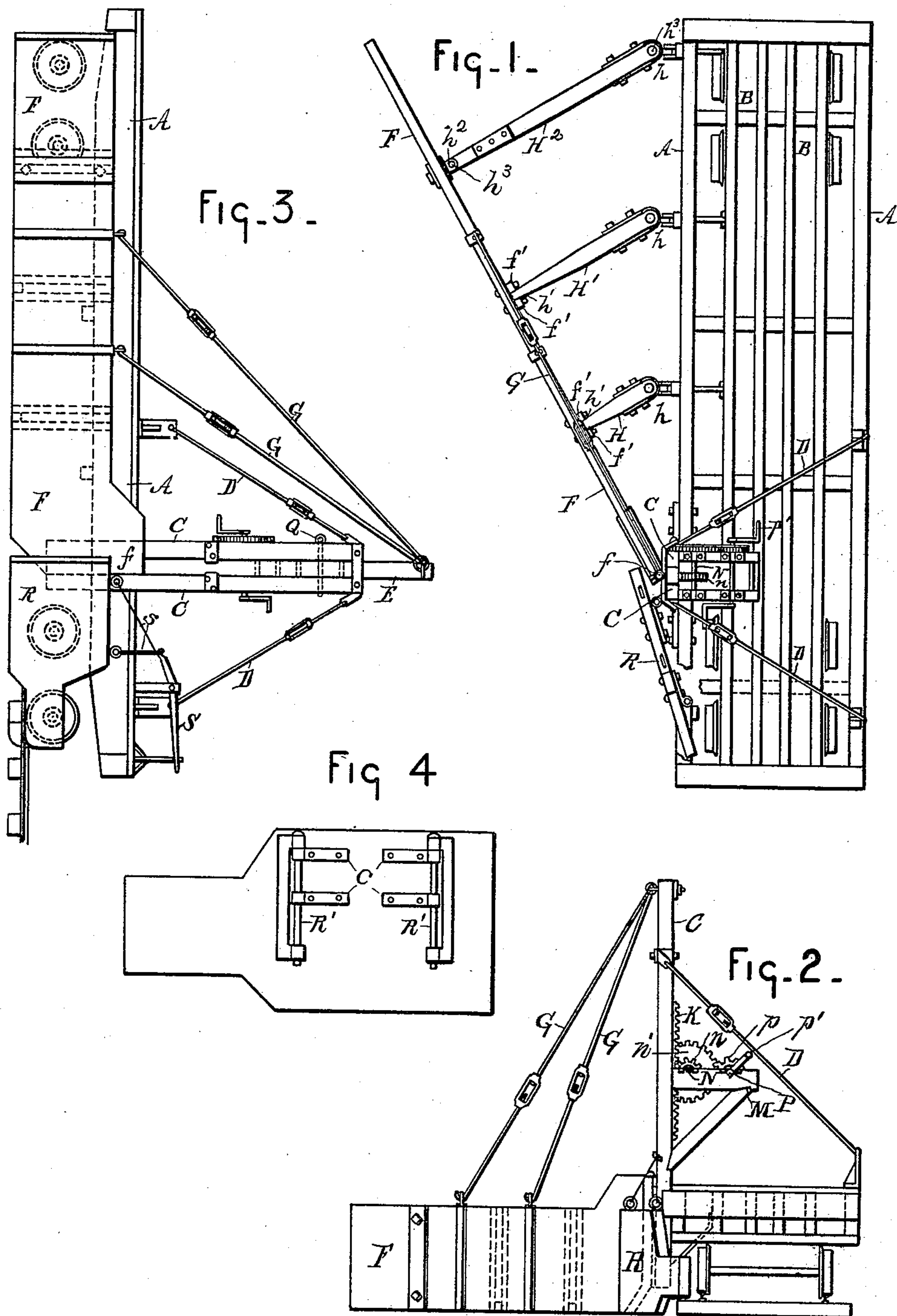


(No Model.)

O. F. JORDAN & R. POTTS.
RAILROAD SCRAPER.

No. 447,777.

Patented Mar. 10, 1891.



WITNESSES
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UNITED STATES PATENT OFFICE.

OSWALD F. JORDAN AND ROBERT POTTS, OF ST. THOMAS, CANADA.

RAILROAD-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 447,777, dated March 10, 1891.

Application filed August 5, 1890. Serial No. 361,035. (No model.)

To all whom it may concern:

Be it known that we, OSWALD F. JORDAN and ROBERT POTTS, subjects of the Queen of Great Britain, residing at St. Thomas, county of Elgin, Province of Ontario, Canada, have invented a certain new and useful Improvement in Railroad-Bed Scrapers; and we declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

In the drawings, Figure 1 is a plan view of an apparatus embodying our invention. Fig. 2 is an end elevation. Fig. 3 is a side elevation. Fig. 4 is an elevation of the smaller scraper.

Our invention is designed to produce an apparatus for attachment to a railway-car whereby the road-bed may be leveled or scraped to any depth desired, or whereby any desired scraping or cleaning may be done; and it consists of a combination of devices and appliances hereinafter described and claimed.

In carrying out the invention, A represents the frame-work, and B the trucks, of any ordinary flat car.

C C are upright posts, either metal or wood, attached rigidly to the side of the frame-work A and suitably guyed by the rods D, extending to the opposite side of the car.

E is a movable upright post supported between the stationary posts C, the latter acting as guides or ways.

F is the scraper board or wing, one end f hinged to the upright post E. Guy ropes or rods G extend from the top of the post E to the middle and outer portions of the wing, and the entire scraper is thus sustained by the post E.

H H' H² are braces, with the inner ends h hinged or pivoted to the frame and adapted to be thrown over backward onto the car or swung horizontally back against the car, or the joint may be double and allow of either movement, the object being to allow the brace to be set back out of the way of the wing when it is closed against the car. The outer ends h' of the braces H H' rest in slots or recesses formed by the pieces f' on the face of the wing. The

brace H² is engaged to the wing by a hinge h^2 . When it is desired to throw the wing in against the car, the braces H H', being hinged to the car-frame, can be thrown upward over onto the platform of the car, while the rods h^3 of the hinges at the outer and inner ends of the brace H² may be withdrawn and the brace be removed and placed on the car. The wing can then be thrown in against the car-frame.

In order that the wing may be raised or lowered so as to scrape at the desired height, we provide on the face of the post E a rack-bar K, and on a frame-work M, extending horizontally from the posts C C, we journal the shaft N, having the pinion n , which meshes with the rack-bar, and having also the pinion n' , which meshes with the pinion p on the shaft P. This shaft P has its ends squared to receive the cranks p' . Thus by means of the cranks the post E and scraper or wing can be raised or lowered, and can be held in the desired position by any suitable means, as, for instance, the pin Q, which is passed through the posts C and E.

R is a smaller scraper-board, located in front of the main wing or scraper and adapted to pick up the surplus dirt or gravel just outside of the rail and to pick up that which is too near the rail for the ends of the large scraper to catch. This smaller board is fastened to the frame by the strap-irons c , having eyes in their ends which embrace but freely slide up and down on rods R', attached to the frame of the car. The small board can be raised or lowered by means of the lever S, which is connected with the edge of the board by the chains s .

It is of course obvious that our apparatus can be constructed in whole or in part of metal, and we would be understood as covering the construction whether of wood or metal. So, also, other mechanism than the rack-bar and pinion might be utilized to raise and lower the scraper without departing from our invention.

As will be seen by reference to Figs. 2 and 3, the lower edge of both scrapers is cut away at the end adjacent to the frame, thus allowing the bed outside of the ties to be scraped or cut to a depth below the surface of the ties

by the larger scraper, while the recess in the small scraper allows it to be brought in adjacent to the track-rail.

It will be readily seen that, if desired, both sides of the car may be equipped with our apparatus, and while we have only shown the apparatus on one side it is of course understood that by our invention we contemplate a construction with the scraper on either or both sides of the car.

What we claim is—

1. A railroad-bed scraper consisting of the combination, with a railway-car, of the wing or scraper F, suspended from the side of said car, mechanism for adjusting said scraper vertically, and braces H and H', having one end pivoted to the car and the other resting in recesses on said wing and bracing against it, substantially as and for the purposes described.

2. In a railway road-scraper, the combination, with a railway-car, of two upright posts rigidly engaged to the side thereof, a movable post between and supported by the rigid posts, the wing or scraper F, having one end hinged to the post and the other end supported therefrom by guy ropes or rods, and means for raising and lowering the movable post, substantially as described.

3. In a railway road-scraper, the combination, with a railway-car, of a wing or scraper F, hinged to a support on the side thereof and adjustable either vertically or horizontally to vary the angle, and another scraper in front of the former, attached to the car and movable vertically thereon, substantially as described.

4. In a railway road-scraper, the combination, with a railway-car, of a wing or scraper F, supported from a vertically-movable post, and means for moving said post vertically, consisting of the rack-bar on said post and one or more pinions connected with a crankshaft and meshing with said rack-bar, substantially as described.

5. The combination, with a railway-car and a main wing or scraper extending therefrom, of a supplemental scraper located in advance of the main scraper and recessed at its end, so that one end may project over the ties, substantially as described.

In testimony whereof we sign this specification in the presence of two witnesses.

OSWALD F. JORDAN.

ROBERT POTTS.

Witnesses:

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