

J. E. WRIGHT.

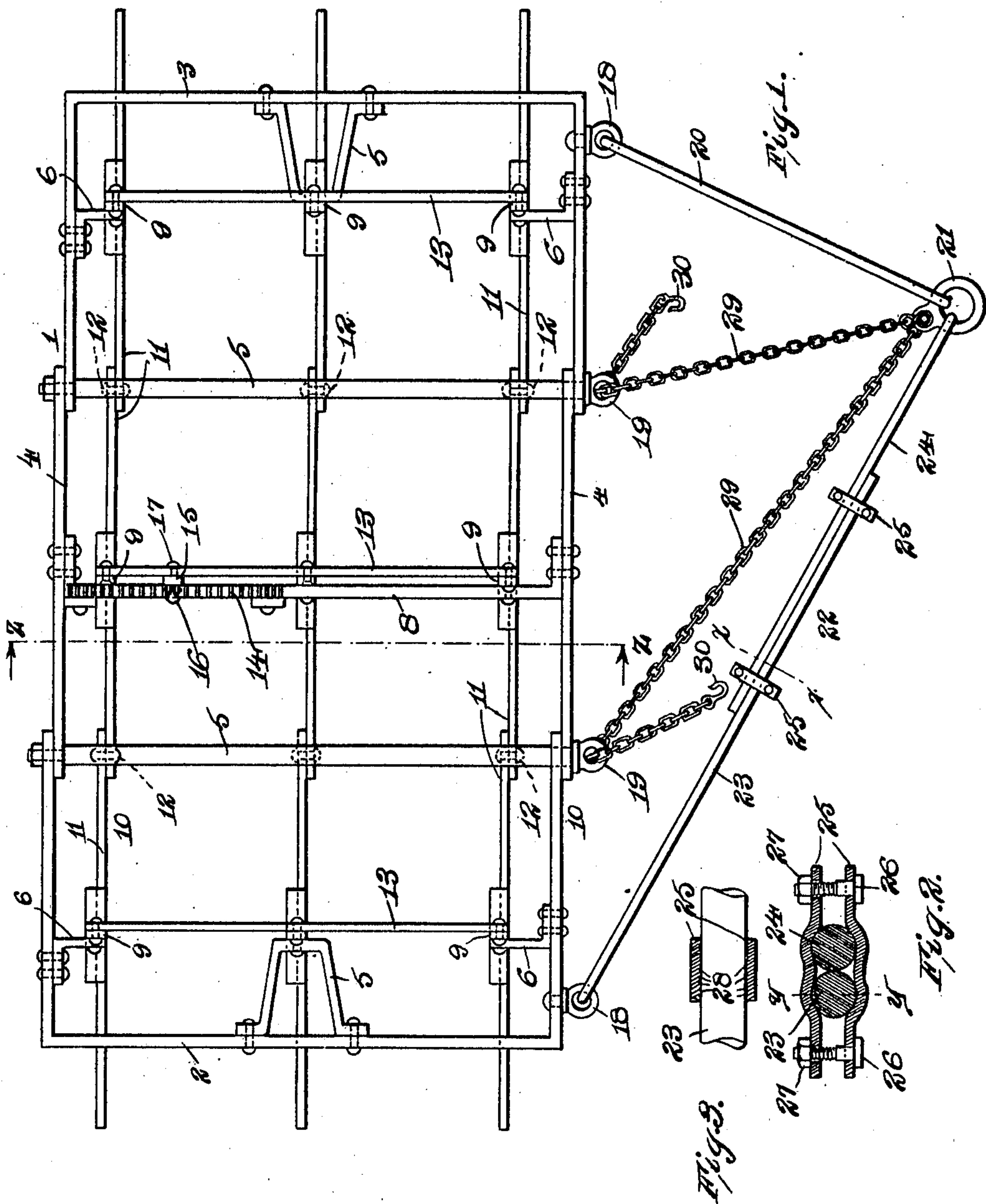
DRAG.

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2 SHEETS—SHEET 1.



Witnesses:

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UNITED STATES PATENT OFFICE.

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DRAG.

970,155.

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To all whom it may concern:

Be it known that I, JOHN E. WRIGHT, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Drags, of which the following is a specification.

My invention relates to drags or scrapers designed for employment for leveling or smoothing rough surfaces.

The object of my invention is the provision of a device of the character mentioned which will be so designed as to be adapted, when in use, by its own gravity, to adjust itself into conformity with the arched or transversely concaved surface of an ordinary road; one which may be adjusted as to its angular disposition relative to the direction of travel thereof; and one in which the scraping blades may be adjusted as to their angular disposition relative to the plane of the road surface acted upon.

A further object is the provision of a scraper as mentioned which will be efficient in operation and of strong, durable, and economical construction.

Other objects will appear hereinafter.

With these objects in view my invention consists in a drag or scraper characterized as above mentioned and in certain details of construction and arrangement of parts all as will be hereinafter fully described and particularly pointed out in the appended claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a top plan view of my device in its preferred form, Fig. 2 is an enlarged sectional detail taken on line $x-x$ of Fig. 1, Fig. 3 is a section on line $y-y$ of Fig. 2, Fig. 4 is a front elevation of the device, the draft bars and chains being removed, and Fig. 5 is a vertical section taken on line $z-z$ of Fig. 1.

Referring now to the drawings 1 indicates a rectangular frame or body of the device which is of a sectional nature it being comprised of similar U-shaped end sections 2 and 3, and intermediate sections or bars 4 the extremities of which are pivotally secured to the extremities of the members 1 by means of longitudinally extending pivotal rods 5 whose extremities extend through the overlapping ends of said sections. Rigidly secured to the transversely extending portions of the frame 1 adjacent the extremities thereof are inwardly projecting brackets 6 and centrally secured to the longitudinally extending portions of said frame are brackets 7, said brackets 6 and 7 at the same end of said frame being so arranged that the outer ends thereof are disposed in longitudinal alinement. Having its respective extremities rigidly secured centrally to said transverse portions of said frame 1, is a central longitudinally extending bracket or bar 8.

Rocker arms 9 are pivoted intermediate their extremities to the brackets 6, 7 and 8, those arms mounted at one end of the frame 1 being in alinement with each other. The lower ends of said arms are preferably enlarged or flared and the arms in transverse alinement are rigidly secured to a scraper blade 6. Each of the latter is comprised of pivoted sections 11, the pivotal points 12 in said blades being coplanar with corresponding pivotal points in the frame 1, as clearly shown in Fig. 1.

The upper extremities of longitudinally alining of the arms 9 are pivotally connected to bars 13. Arranged upon the bracket 8 adjacent the rearward extremity thereof, is a segmental rack 14. Having its lower end pivoted at the center of curvature of the rack 14 is a lever 15 upon which is carried the ordinary pawl mechanism 16 adapted for coaction with the teeth of said rack to lock said lever automatically to the latter in any position to which it may be adjusted. Said lever is pivotally connected at 17 with the central one of the bars 13, hence an operative connection between said lever and the scraper blades 10 is established and whereby the angular adjustment of the latter relative to the plane of the surface engaged thereby may be readily effected by merely locking said lever.

Provided upon the front portion of the frame 1 adjacent the respective extremities thereof are eyes 18 and secured to the forward extremities of the rods 5 similar eyes 19. Having its rearward extremity connected to one of the eyes 18 is a rigid draft bar 20 connected at its forward extremity to an eye 21. Connected to and extending between the eye 21 and the other of the eyes 18 is an adjustable draft bar 22 which, as seen, is considerably longer than the bar 20 for a purpose which will be hereinafter

described. The latter is comprised of overlapping sections 23 and 24 which may be rigidly connected by pairs of clamping straps 25, the comprising members of each of
 5 said pairs of said straps being connected by bolts 26 and nuts 27 threaded upon said bolts. In order to prevent slippage of the sections 23 and 24 in said clamping straps, the latter are preferably provided upon
 10 their inner surfaces with longitudinally extending grasping teeth 28, as shown in Fig. 3. Having their forward extremities connected to the eye 21, the same extending rearwardly therefrom and passing through
 15 the eyes 19 are draft chains 29. The rearward extremities of said chains are provided with hooks 30 adapted to engage any of the links of said chains and whereby the latter may be adjusted to any length desired to
 20 correspond with any adjusted length of the bar 22. With this provision it will be observed that, in use, the device will be drawn in an angularly disposed position relative to the line of travel, and further with this
 25 provision, that any desired adjustment as to such angular disposition thereof may be readily effected. Hence, with the provision of a device of the construction as shown and described, one in which the scraping blades,
 30 because of the sectional character thereof and of the supporting frame, will of their own accord adjust themselves to the transverse form of the surface acted upon; one in which said blades, by means of the lever
 35 15, may be adjusted as to their angular disposition relative to the plane of the surface engaged thereby; and one in which the entire device and hence said blades may be adjusted as to the angular disposition there-
 40 of relative to the direction of travel, will be provided.

While I have shown what I deem to be the preferable form of my device I do not wish to be limited thereto as there might
 45 be various changes made in the details of construction and the arrangement of parts described without departing from the spirit of the invention comprehended within the scope of the appended claims.

50 Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. A device of the class described comprising a sectional body frame, sectional
 55 scraper blades arranged beneath said frame, rocker arms connecting said frame and said blades, means for adjusting the angular disposition of said blades relative to said frame, and adjusting draft bars connected to said
 60 frame, substantially as described.

2. A device of the class described comprising a sectional body frame, sectional scraper blades arranged under said frame, rocker arms connecting said frame and said blades, and means connected with said arms
 65 for adjusting the angular disposition of said blades relative to said frame, substantially as described.

3. A device of the class described comprising a sectional body frame, sectional
 70 scraper blades arranged below said frame, rocker arms pivoted to said frame and rigidly connected to said blades; means connected with said arms for adjusting the angular disposition of said blades relative
 75 to said frame, and adjustable draft members connected to said frame, substantially as described.

4. A device of the class described comprising a sectional body frame, sectional
 80 scraper blades arranged below said frame, rocker arms pivoted to said frame and rigidly connected at their lower ends to said blades, a lever mounted upon said frame and operatively connected with the upper ends
 85 of said arms for adjusting the angular disposition of said blades relative to said frame, and longitudinally adjustable draft members loosely connected to said frame, substantially as described. 90

5. A device of the class described comprising a body frame, said frame being comprised of a plurality of loosely pivoted sections, scraper blades arranged below said frame, each of said blades being comprised
 95 of a plurality of loosely pivoted sections adapted to move freely with the sections of said frame, rocker arms pivoted to said frame and connected at their lower ends to said blades, bars connecting the upper ends
 100 of longitudinally alining of said arms, a lever mounted upon said frame and operatively connected with said connecting bars for adjusting the angular disposition of said blade relative to said frame, and a plurality
 105 of adjustable draft members connected at their rearward extremities to said frame and at their forward extremities to a common eyelet or link whereby, when said frame is drawn through the medium of said draft
 110 members, the same will be obliquely disposed relative to the line of travel thereof, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of
 115 two subscribing witnesses.

JOHN E. WRIGHT.

Witnesses:

JOSHUA R. H. POTTS,
 W. C. SMITH.