

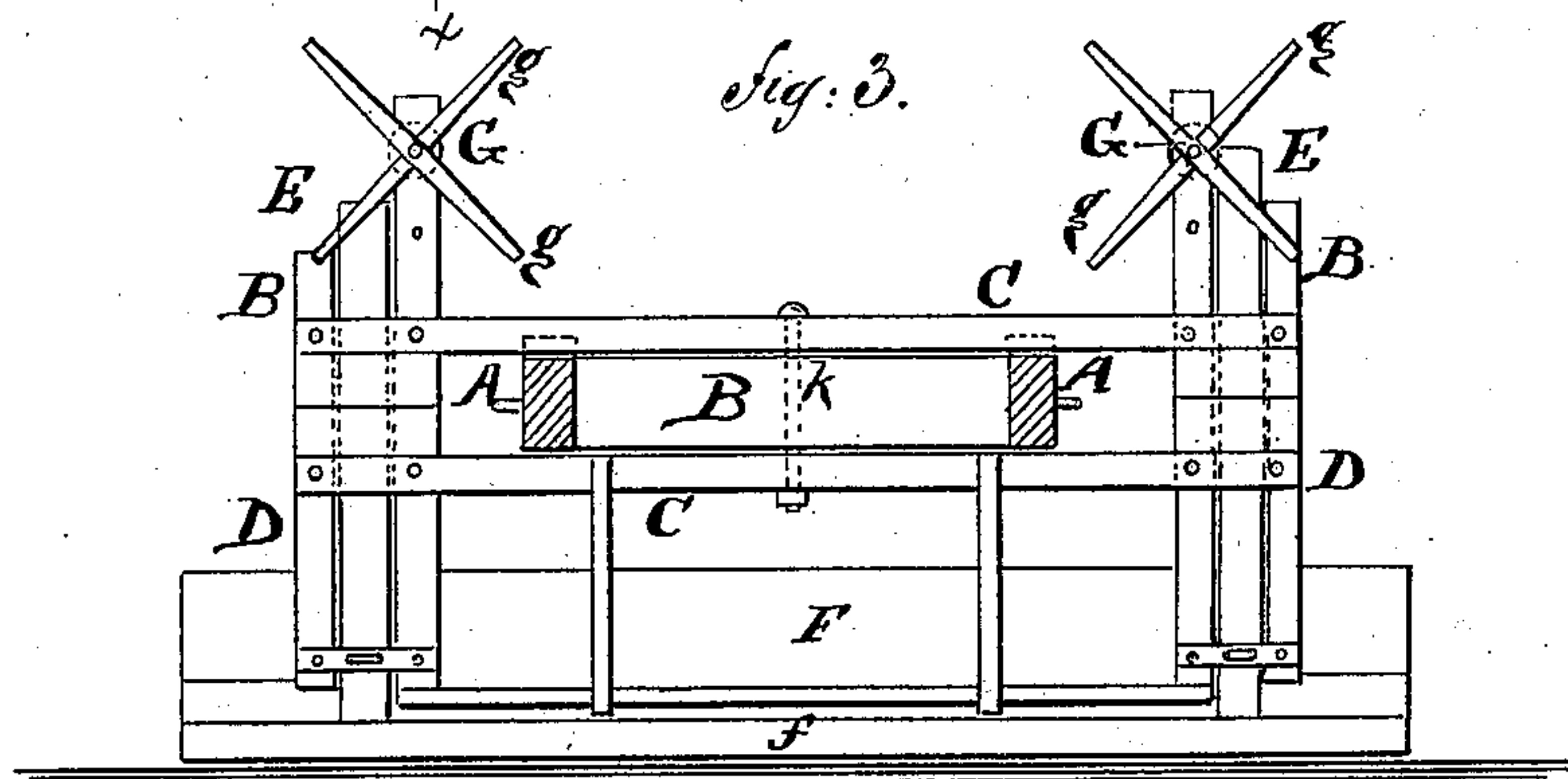
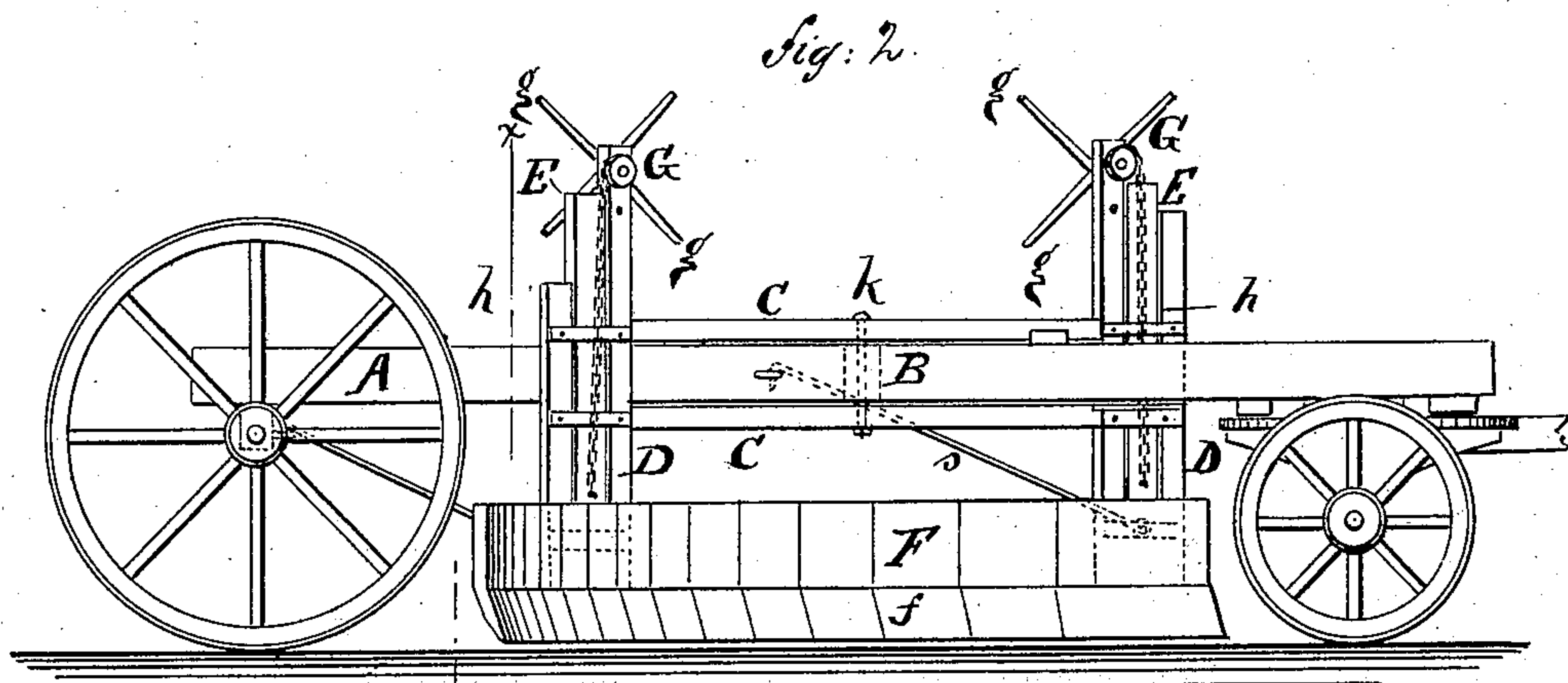
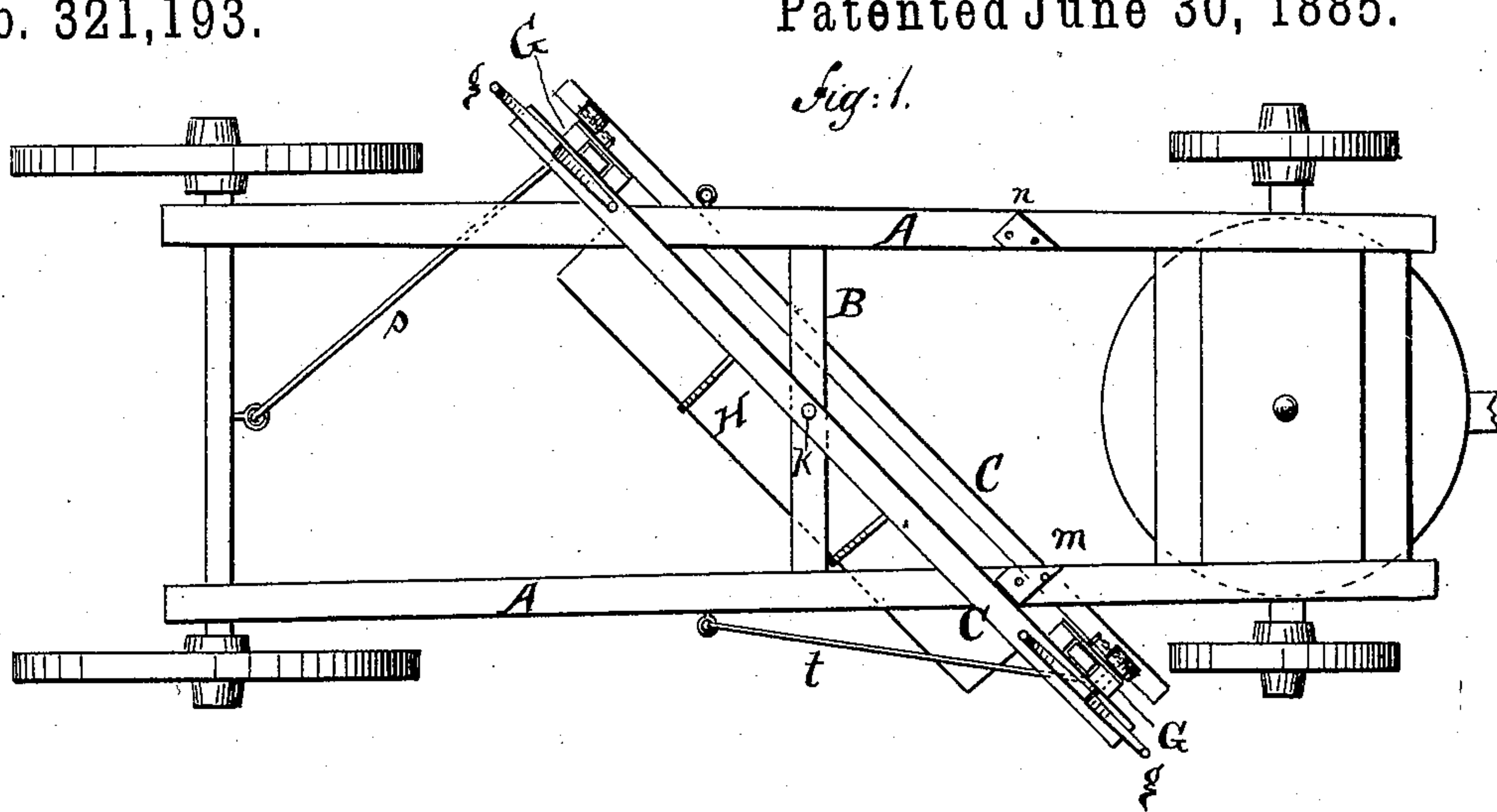
(No Model.)

H. D. COOK.

ROAD SCRAPER OR PLANER.

No. 321,193.

Patented June 30, 1885.



WITNESSES:

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HIRAM DWIGHT COOK, OF DRY BROOK, NEW YORK.

ROAD SCRAPER OR PLANER.

SPECIFICATION forming part of Letters Patent No. 321,193, dated June 30, 1885.

Application filed January 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, HIRAM DWIGHT COOK, of Dry Brook, county of Ulster, State of New York, have invented a new and useful Improvement in Road-Scrapers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying sheet of drawings, forming part of this specification.

10 This invention is in the nature of an improvement in a road scraper or planer; and the invention consists in a road scraper or planer the scraper proper of which is provided with means for adjusting it vertically, 15 and is secured to a frame pivoted to the carriage-frame, so as to be moved diagonally across the carriage and secured in either of two such diagonal positions in the manner and by the means I will now proceed to set 20 forth and claim.

In the accompanying sheet of drawings, Figure 1 is a plan or top view of my device. Fig. 2 is a side view of same. Fig. 3 is a vertical cross-section in the plane of line *x x*, Fig. 2, looking in the direction of the arrow. 25

Similar letters of reference indicate like parts in the several figures.

In repairing and leveling roads it has been customary to employ the ordinary scoop-scraper; but such an implement is found objectionable, for the reason that it must be passed and repassed over the width of the road, thereby consuming time. Besides, its tendency to gouge furrows in the road leaves the surface 30 gullied. To obviate these objections and to construct a scraper that shall operate substantially as a planer for the surface of the road, producing a uniformly-smooth surface and enabling the work to be quickly performed, I 40 make my device with a suitable frame, A, of timber or otherwise, of convenient length and width. This frame may be supported on the ordinary wheels and axles of a wagon in precisely the same manner as is the body of a 45 wagon. Midway from the ends of the frame A is fixed a cross-beam, B. To this cross-beam B is centrally pivoted a frame, C, to the ends of which are secured guides D. These guides are placed at right angles to the frame 50 C, and they project above and below said frame.

Within these guides D are fitted sliding posts E. To the lower ends of these sliding posts is bolted the planer or scraper F. This planer or scraper may be made of any suitable timber, with its lower edge curved or at a bevel, 55 as shown in Fig. 2; and this curved portion may be sheathed and shod with sheet or cast metal bolted to it; or, if desired, the entire curved portion *f* of the planer or scraper may be made of metal and bolted to the upper or 60 wooden part of the same.

To the upper end of one of each of the guides D are fixed windlasses G, with suitable operating-handles, *g*; and around these windlasses are wound cords or chains *h*, the lower end of 65 said cords or chains being fixed to the planer or scraper F near its ends. Now, when my device is constructed substantially as described it is operated by hitching a team of horses or oxen to it and hauling it to the road 70 to be operated upon and swinging the frame C, and with it, of course, the scraper or planer F and guides D, posts E, and windlasses G, until the planer or scraper F, by reason of the central pivot, *k*, assumes a position more or 75 less diagonal to the frame A; and the height of the lower edge of the planer or scraper above the surface of the road may be adjusted by operating the windlasses G by means of the handles *g* thereof, in this way raising or 80 lowering the planer or scraper, so as to pass over the surface of the road, planing or scraping down the inequalities and leveling off the road-surface.

The operator of the machine, standing upon 85 the platform H, can by means of the windlasses G, as the machine proceeds; cause the planer or scraper to cut or scrape deeper in some places than others, as may be required, he having his hands upon the handles *g* of the wind- 90 lasses G, in that way regulating the depth of cut either of the whole width of the planer or scraper, or by adjusting one windlass and not the other causes it to cut to a depth greater or less at one end than at the other. 95

When the planer or scraper is swung diagonally to the frame A, as shown in Fig. 1, it is held in that position by abutting against cleats 100 *m* and *n*, as the case may be, and such position is maintained by the hook-bars *s* and *t*, secured

to the frame or axle of the device at one end and to the frame C at the other. Of course it is obvious that if desired the frame C may be swung at right angles to the frame A and
5 held in that position, and in fact the scraper or planer may be adjusted to any angle greater or less than a right angle, the adjustment depending upon the judgment of the operator and the nature of the soil and the require-
10 ments of the work to be done.

Now, since this planer or scraper may be of any convenient width, and can be adjusted to cut or scrape to any desired depth, it is clear that it can be used for the purpose of scrap-
15 ing or planing and leveling the surface of the roadway with great expedition, since it will not be necessary to cause it to pass repeatedly over its own track, except in exceptional in-

stances, by swinging the scraper or planer so that it is diagonal to the course at which it 20 travels. The earth that it scrapes up as it progresses readily moves along the face of a scraper, passing off at one of its ends.

Having now described my invention, what I claim as new, and desire to secure by Letters 25 Patent, is—

In a road scraping or planing device, a frame, C, in combination with a vertical adjustable scraper or planer, F, a pivot, *k*, cleats *m* and *n*, and hook-bars *s* and *t*, substantially 30 as described.

HIRAM DWIGHT COOK.

Witnesses:

J. H. HITT,

O. A. SWARTS.