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G. H. ROCHFORD & F. A. HOTSON.

THRESHER LEVELING DEVICE.

APPLICATION FILED FEB. 23, 1906.

FIG. 1

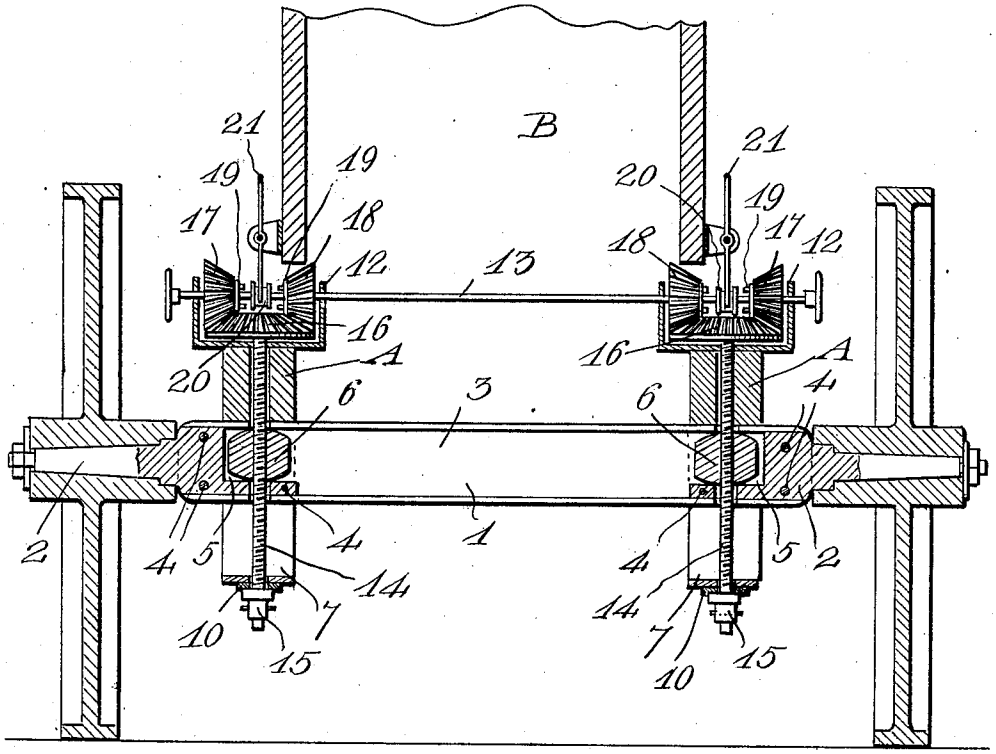
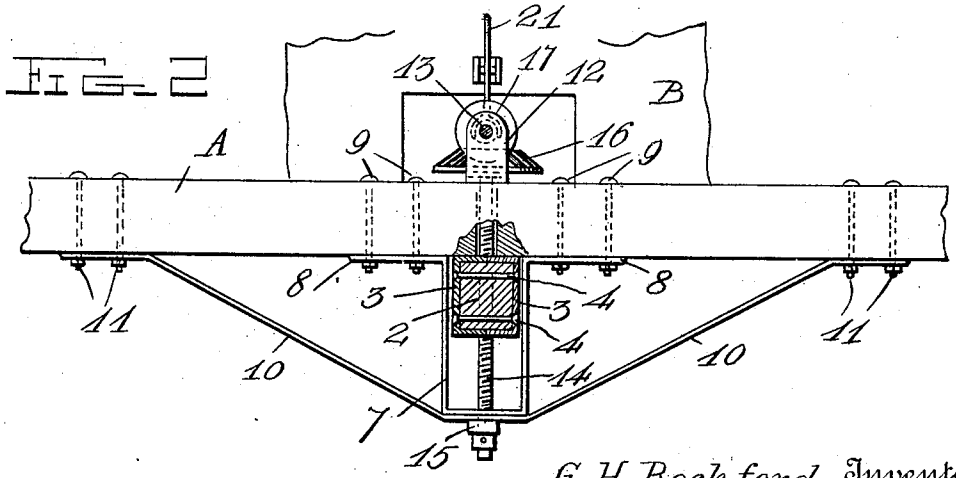


FIG. 2



Witnesses

C. [illegible]

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THRESHER-LEVELING DEVICE.

No. 828,506. Specification of Letters Patent. Patented Aug. 14, 1906.

Application filed February 23, 1906. Serial No. 302,500.

To all whom it may concern:

Be it known that we, GEORGE H. ROCHFORD and FRANK A. HOTSON, citizens of the United States, residing at Austin, in the county of Mower and State of Minnesota, have invented certain new and useful Improvements in Thresher-Leveling Devices; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention is an improved adjustable axle for threshing-machines and means for adjusting the same in order to support a threshing-machine when in operation in a level position to facilitate the operation thereof; and our invention consists of certain novel features of construction, combination, and arrangement of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a vertical transverse sectional view of the body or casing of a threshing-machine provided with a rear vertically-adjustable axle and adjusting mechanism therefor embodying our improvements. Fig. 2 is a partial side elevation of the same, in which the axle is shown in section.

In the embodiment of our invention here shown the axle comprises the intermediate portion 1 and the stubs 2. The intermediate portion is made of a pair of channel or angle steel bars 3, arranged with their channel sides opposed to each other, so that the said intermediate portion of the axle is hollow. The inner ends of the stubs 2 are secured in the ends of the intermediate portion by means of bolts 4, which also serve to secure the sections of the intermediate portion of the axle together. The said stubs 2 have recesses 5 at their inner ends, which recesses are open at their upper sides, and in the said recesses are nuts or blocks 6, which are thus secured to the axle to be carried thereby. The upper and lower sides of the nuts or blocks 6 are rounded to permit them to play angularly in the recesses 5 to the required extent.

The sills A of the threshing-machine casing B are provided on their under sides with U-shaped guide-standards 7, having outwardly-extending arms 8 at their upper sides, which bear against the under sides of said sills and are secured thereto by bolts 9. The rear axle of the construction above described extends through and is guided vertically by the said guide-standards. The latter are braced by means of brace-rods 10, the ends of which are bolted to the sills, as at 11.

On the upper side of the sills at points above the axle are bearing-brackets 12, which may be either of the form here shown or of any other suitable form and in which is journaled a shaft 13, which is disposed transversely with reference to the threshing-machine casing. Elevating-screws 14 engage the threaded openings in the nuts or blocks, are provided at their lower ends with washers 15, which bear against the under side of the brace-rods 10, and their upper portions extend through the sills A and are journaled in the brackets 12. To the extreme upper ends of the said screws are secured bevel-gears 16. The shaft 13 is provided with pairs of bevel-gears 17 18, which are loose thereon and engage opposite sides of the gears 16. Each of the said gears 17 18 is provided at its inner side with a clutch member 19, and on the said shaft 13 are splined clutch members 20, which may be moved into engagement with the clutch members of the gears 17 or 18, as may be desired, and each of which when locking one of said gears to the shaft enables the other to be rotated independently of the shaft. Shifting-levers 21 are provided for shifting the said clutch members 20. The shaft 13 is provided at its ends with cranks or handles 22, by means of which it may be rotated.

It will be understood that by appropriately setting the clutch members 20 and by rotating the shaft 13 the screws may be turned in the required direction to raise or lower the rear end of the threshing-machine, or the screws may be simultaneously revolved in opposite directions, so as to cause the threshing-machine casing to be disposed angularly with reference to the axle, as may be required to adjust the threshing-machine casing to a level when the machine is standing on uneven ground.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A threshing-machine having an axle, means to permit vertical and angular adjustment of the machine with reference to the axle, screws to raise and lower opposite sides of the machine with reference to the axle, gears on said screws, a shaft disposed transversely with reference to the machine, gears

loose on said shaft and engaging opposite sides of the screw-gears, and means to lock either of the last-mentioned gears to the said shaft, to cause the screws to be simultaneously turned either in the same or in opposite directions, substantially as described.

2. A threshing-machine having an axle, and means to permit vertical adjustment of the machine with reference to the axle, nuts or blocks mounted in the axle for angular motion, and adjusting-screws engaging said nuts or blocks, substantially as described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

GEORGE H. ROCHFORD.
FRANK A. HOTSON.

Witnesses:
E. W. MARSH,
R. L. JOHNSON.