

E. E. GREEN.
WHEEL TRUING DEVICE.
APPLICATION FILED AUG. 2, 1909.

952,038.

Patented Mar. 15, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

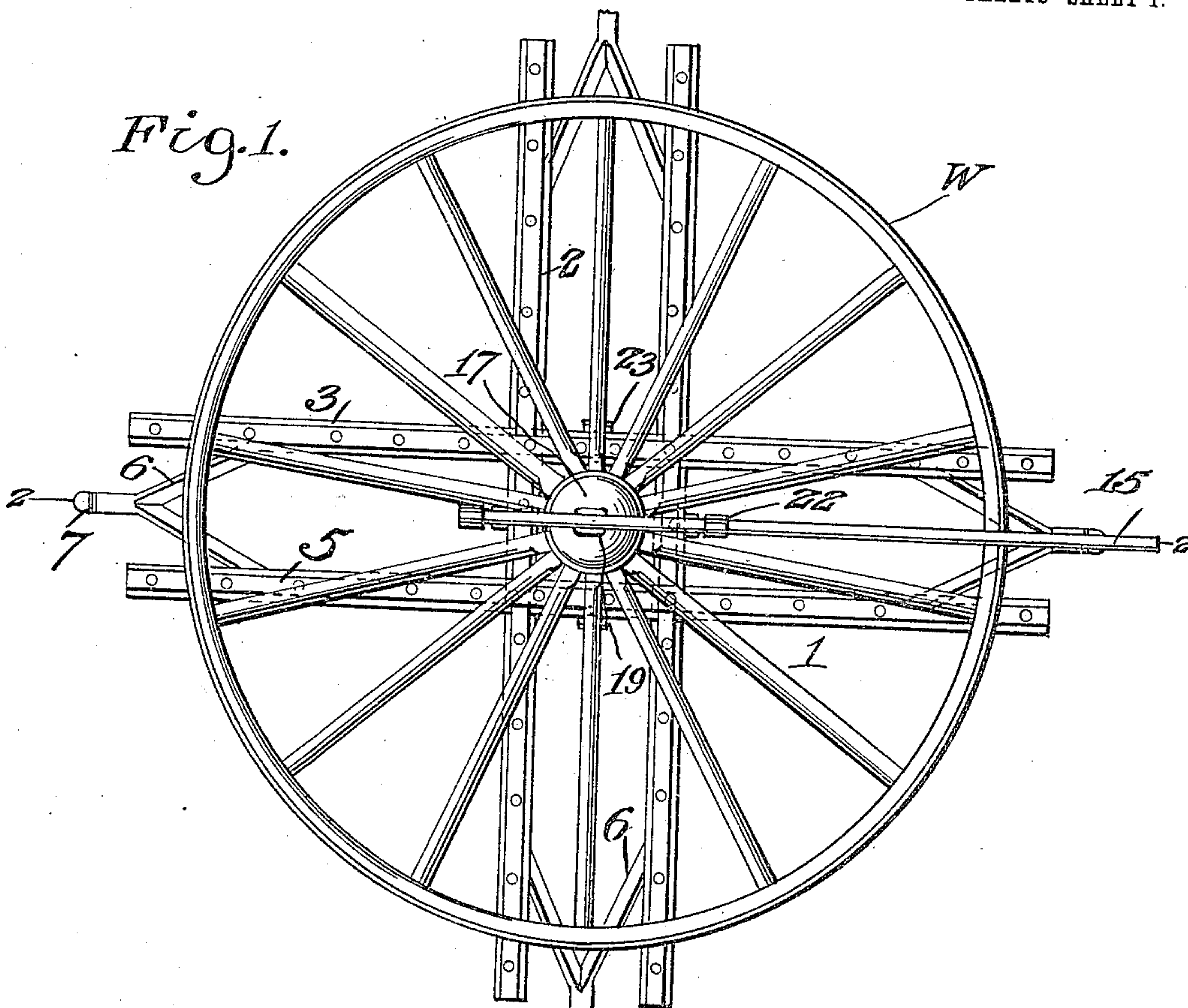
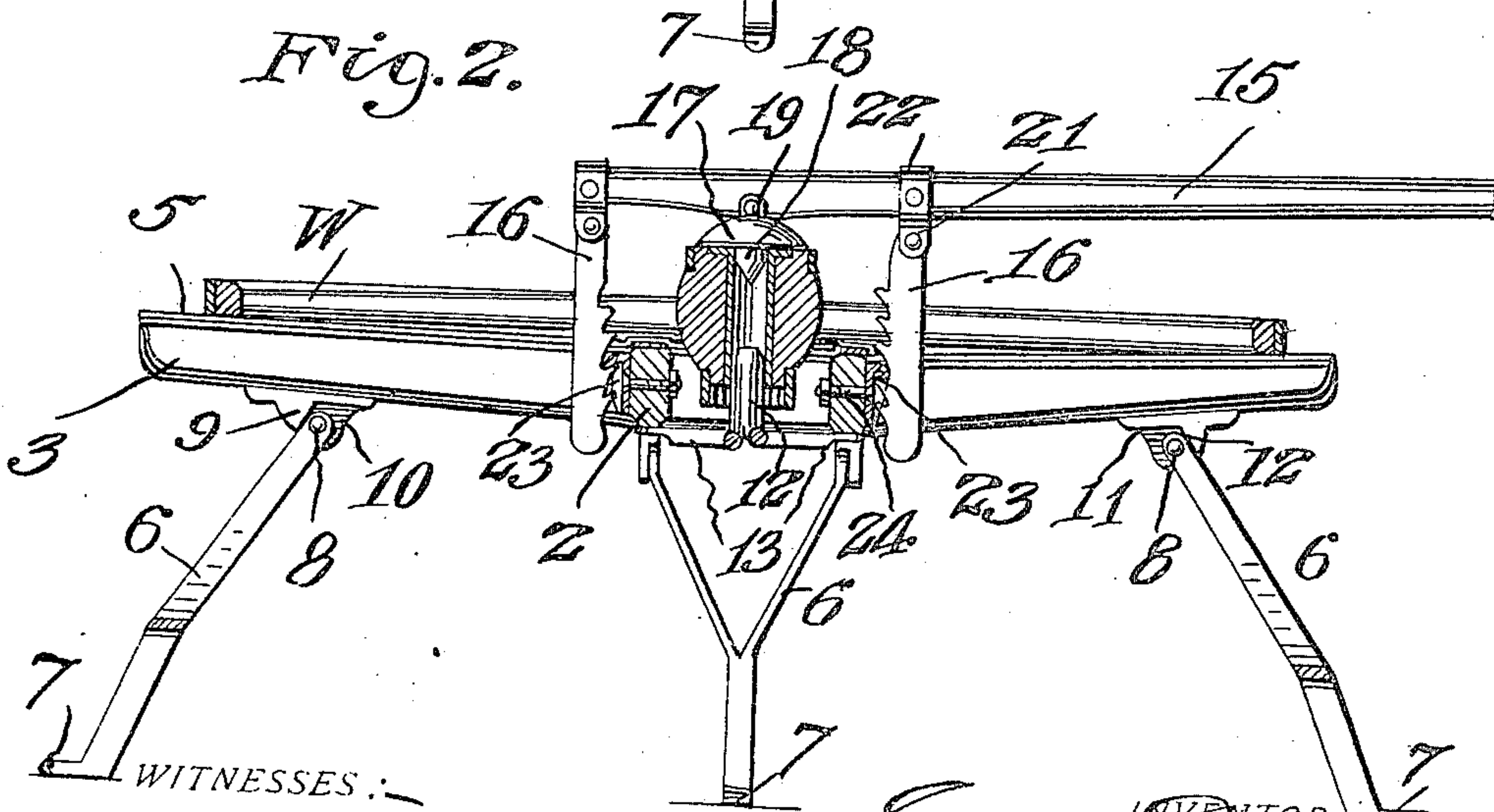


Fig. 2.



WITNESSES:

Jac. P. Mahler,
E. M. Rickette

INVENTOR

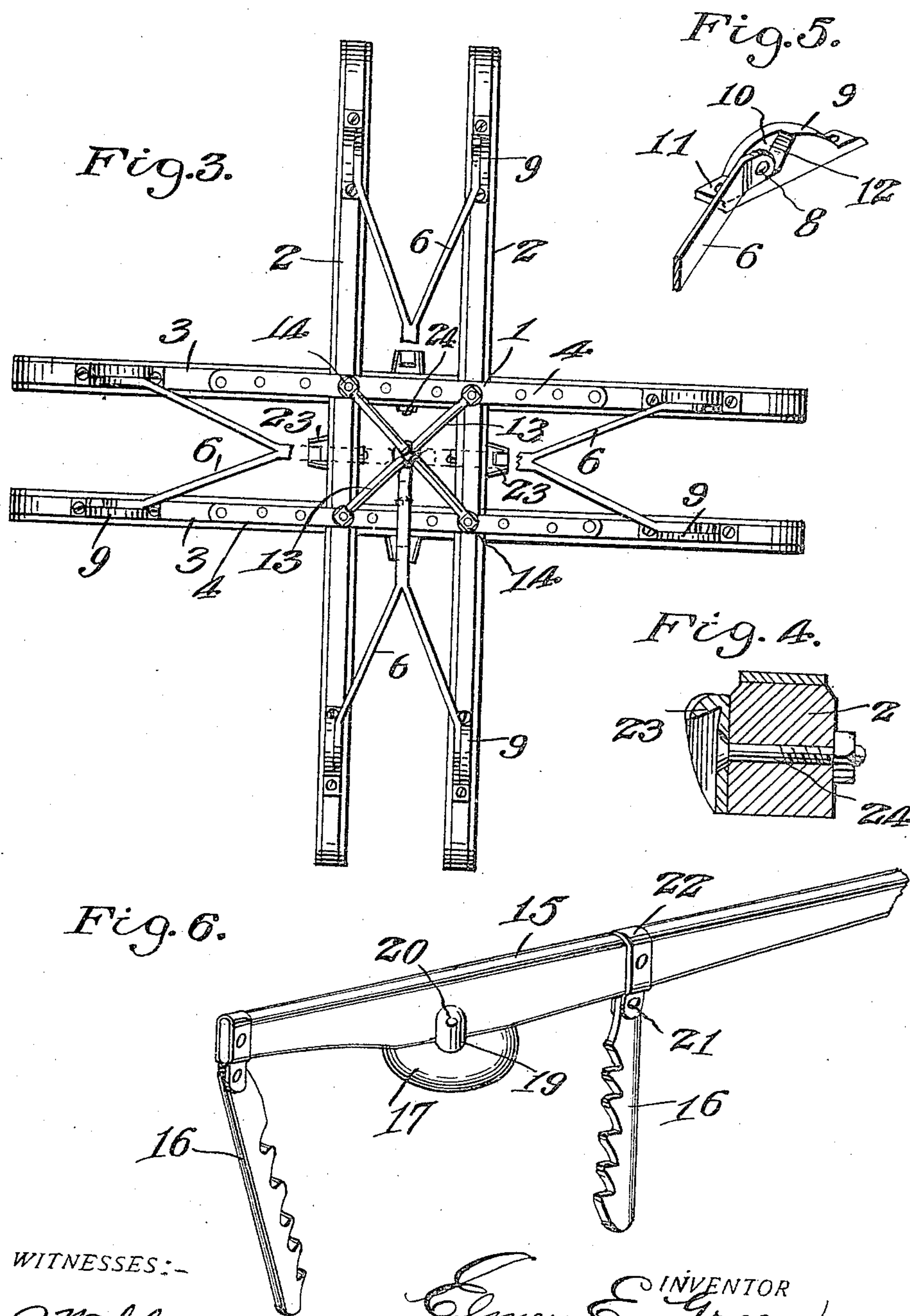
Elmer E. Green

By Watson E. Coleman
Attorney

952,038.

E. E. GREEN.
WHEEL TRUING DEVICE.
APPLICATION FILED AUG. 2, 1909.

Patented Mar. 15, 1910.
2 SHEETS—SHEET 2.



WITNESSES:-

Joe. P. Mahler.
E. M. Ricketts

INVENTOR
Elmer E. Green
By Watson E. Coleman
Attorney

UNITED STATES PATENT OFFICE.

ELMER E. GREEN, OF WALKERSVILLE, MARYLAND.

WHEEL-TRUING DEVICE.

952,038.

Specification of Letters Patent.

Patented Mar. 15, 1910.

Application filed August 2, 1909. Serial No. 510,824.

To all whom it may concern:

Be it known that I, ELMER E. GREEN, a citizen of the United States, residing at Walkersville, in the county of Frederick and State of Maryland, have invented certain new and useful Improvements in Wheel-Truing Devices, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to improvements in truing devices for the wheels of wagons and other vehicles.

15 The object of the invention is to provide a simple and inexpensive device of this character which will be strong and durable in use and effective in operation and which when not in use may be compactly folded to occupy but little space.

20 With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

25 Figure 1 is a top plan view of the improved truing device showing a vehicle wheel upon it; Fig. 2 is a vertical section taken on the plane indicated by the line 2—2 in Fig. 1; Fig. 3 is a bottom plan view of the device showing its supporting legs in folded position and the inner ends of some of them broken off; Fig. 4 is an enlarged detail section through one of the keeper plates and the body bar to which it is secured; 35 Fig. 5 is a detail perspective view showing one of the pivotal devices for the foldable supporting legs; and Fig. 6 is a perspective view of one wheel compressing and clamping means.

40 The invention comprises a horizontally disposed body or stand 1 on the top of which a wheel W may be supported and clamped. The body 1 is preferably formed from two pairs of spaced parallel body bars 2, 2—3, 3, 45 arranged so that they cross or intersect at right angles. These bars which are preferably made of wood and suitably jointed or interlocked are reinforced upon their bottom edges by metal straps 4 and upon their 50 upper edges by metal straps 5, the straps 5 extending from end to end of each of the bars 2, 3 and serving also as wear strips or plates on which the rim of the wheel W rests. The upper faces of the body bars are 55 also preferably inclined downwardly to a slight extent from their ends to the center

of the body so that the latter is somewhat dished, as will be seen on reference to Fig. 2.

For the purpose of supporting the body or stand in a horizontal position, four fold- 60 able supporting legs 6 are provided. These legs have flattened lower ends or feet 7 and bifurcated upper ends, the spaced or diverging portions of which are pivoted at 8 in shouldered bearing plates or brackets 9 se- 65 cured to the under faces of the body bars 2, 3 adjacent the outer extremities of the latter. The bearing brackets 9 of each pair have their opposing faces recessed, as shown at 10, in Fig. 5, so as to provide angularly dis- 70 posed stop shoulders 11, 12, the latter of which are engaged by the legs when swung downwardly to open position, as shown in Fig. 2. When the legs are folded inwardly and under against the body 1 they lie close 75 to the body so that the device will occupy but little space when not in use.

For the purpose of centering the wheel on the body 1, an upright centrally disposed pivot bearing 12 is provided to enter the 80 hub of the wheel, as shown in Fig. 2. The pivot 12 is in the form of an upstanding pin arranged centrally in the square space formed by the intersecting body bars 2, 3 and it is supported from its lower end by 85 four radiating arms 13 formed integral with said pin or pivot and having their outer ends secured at 14 to the bars 2, 3 at their points of intersection, as shown in Fig. 3.

When the wheel W is arranged on the 90 pivot or bearing 12 and the body bars of the device its hub is adapted to be engaged and forced downwardly by a compressing and clamping device shown more clearly in Figs. 2 and 6 of the drawings and con- 95 sisting of a hand lever 15 carrying two opposing ratchet links 16 and an intermediate bearing 17. The latter is in the form of a circular plate or disk having a flat bottom from which depends a pivot pin 18 adapted 100 to enter the bore of the hub of the wheel, said plate or disk having at its top a bifurcated lug 19 which receives the lever 15 and is pivoted thereto by a transverse pin or pivot 20. The ratchet links 16 have on their op- 105 posing inner faces ratchet teeth and their upper ends are pivoted at 21 in U-shaped clips or strips 22 bent around and secured to the lever 15 at points equally distant from the pivot 20. The ratchet teeth of 110 the links 16 are adapted to engage shouldered or recessed keeper plates 23 which are

secured by bolts or similar fastenings 24, as shown in Fig. 4, to the body bars 2, 3, said keeper plates being arranged centrally on the outer faces of the body bars.

5 In using the invention, the wheel is lifted onto the stand when the latter is set up for use, as shown in Figs. 1 and 2, and said wheel is centered by engaging the lower end of the hub with the lower pivot 12. The
10 lever 15 is then placed across the top of the central portion of the wheel and the pivot pin 18 of the bearing cap 17 is inserted in the upper end of the wheel hub. The ratchet links 16 drop between the spokes
15 of the wheel and may be engaged with either pair of keeper plates 23, as shown in Fig. 2. When the outer or handle end of the lever 15 is depressed, it will be seen that the outer link will serve as the fulcrum
20 support for the lever so that the bearing 17 will force the hub of the wheel downwardly toward the dished central portion of the body 1, and at the same time the inner ratchet link 16 will move downwardly so
25 that it will take a new grip on the co-acting keeper plate 23, thereby locking the clamping or compressing device in adjusted position. When the device is not needed, the compressing or clamping lever may be re-
30 moved from the body 1 and the supporting legs 6 of the latter may be folded against its bottom, as shown in Fig. 3. When thus folded, the device may be placed against the wall or in any narrow space.

35 While I have shown and described in detail the preferred embodiment of my invention, it will be understood that I do not

wish to limit myself to the precise construction set forth, since various changes in the form, proportion and arrangement of parts 40 and details of construction may be resorted to within the spirit and scope of the invention.

Having thus described the invention what is claimed is: 45

A device of the character described comprising a horizontal body to support a wheel and consisting of two pairs of body bars intersecting each other at right angles adjacent their central portions, foldable 50 supporting legs for the body, a fixed upright bearing pin arranged centrally in the body between the pairs of bars and having its lower end formed with radially projecting attaching arms secured to the bottom 55 faces of the bars at their points of intersection, oppositely disposed recessed keeper plates secured on the outer faces of the central portions of the bars, a hand lever, a bearing pivotally connected to the lever ad- 60 jacent one of its ends and consisting of a plate and a centrally arranged pin projecting therefrom, clips on the lever on opposite sides of its bearing, and oppositely disposed ratchet links pivoted to said clips 65 and depending from the lever for engagement with the oppositely disposed recessed keeper plates.

In testimony whereof I hereunto affix my signature in the presence of two witnesses. 70

ELMER E. GREEN.

Witnesses:

HARRY S. GREEN,
LUTHER C. SMITH.