

(No Model.)

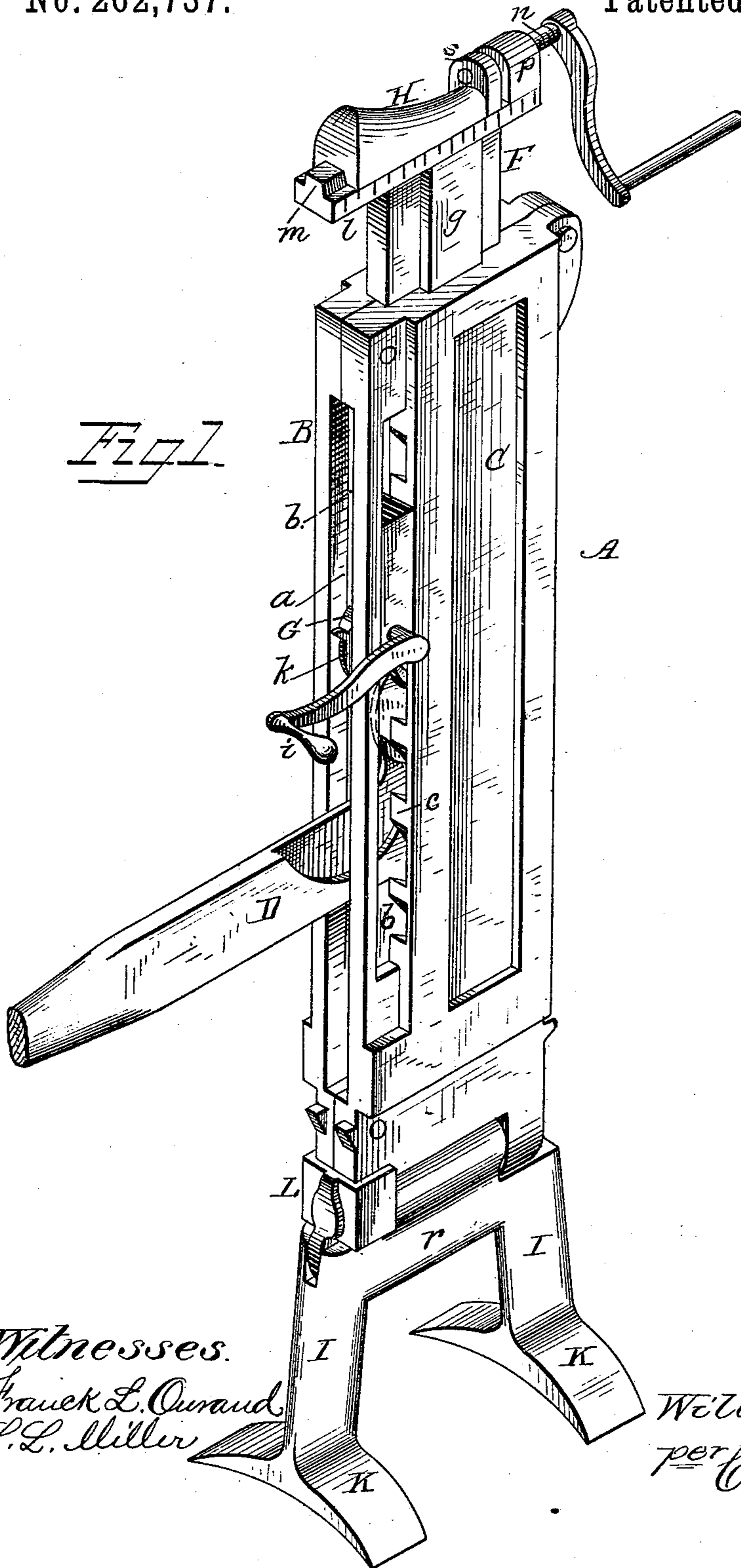
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W. CALLAWAY.

MACHINE FOR REPAIRING VEHICLE WHEELS.

No. 262,737.

Patented Aug. 15, 1882.



Witnesses.

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MACHINE FOR REPAIRING VEHICLE-WHEELS.

SPECIFICATION forming part of Letters Patent No. 262,737, dated August 15, 1882.

Application filed May 31, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CALLAWAY, a citizen of the United States, residing at Walnut, in the county of Marshall and State of Indiana, have invented certain new and useful Improvements in Machines for Repairing Vehicle-Wheels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a perspective view of my invention; Fig. 2, a side elevation, partly in section, showing the interior construction of the operating parts; and Fig. 3, a detail view.

The present invention has reference to certain new and useful improvements in machines or devices for repairing wagon and other vehicle wheels, and for other purposes to which it may be adapted.

The object of the invention is to provide such a machine or device as will be simple in its construction, possess great lifting-power, and be readily and easily operated, as well as effective in its purpose. This object I attain by the construction substantially as shown in the drawings and hereinafter described and claimed.

In the accompanying drawings, A represents a rectangular upright frame of cast metal, which I form in two sections, B C. These sections are connected together at the top and bottom by rivets, screws, bolts, or other suitable fastenings, and are so formed or recessed upon their interior sides that a space, *a*, will be left for the operating parts, hereinafter described. The sections B C, which form the frame A, may be so connected together as to admit of their ready separation when desired, each section having a guide-slot, *b*, running lengthwise thereof nearly its entire length, and a series of steps, *c*.

The operating-lever D has a head, E, at an angle thereto, and upon one of its sides flanges *d*, disposed upon a segment of a circle, as shown

in Fig. 2, and a pin, *e*, projecting from both its sides, which rests upon one of the series of steps *c* upon each side of the sections B C, respectively, thus forming a fulcrum for the lever. Upon the interior sides of the sections B C are formed grooves *f*, into which fit guides *g* upon the sides of a standard, F, said standard at its lower end being cast with a bearing, *h*, to which is journaled a roller, G, having a suitable crank-handle, *i*, for operating it when required. The curved edge *j* of the head E bears against the periphery of the roller G when the standard F is being elevated, the guides *g*, fitting in the grooves *f*, steadying the standard in its vertical movement. The roller G upon one of its sides has projecting radially therefrom stops *k*, which act, in conjunction with the flanges *d* of the lever-head E, to prevent the standard F from receding or being forced down by the pressure or weight it supports. The upper end of the standard F is formed with a bed, *l*, having a guide, *m*, for supporting and guiding a felly-rest, H, which is operated by a screw-rod, *n*, connected to said felly-rest, and engaging with a screw-threaded opening in a bearing, *p*, cast with the bed *l*, thereby enabling the felly-rest to be horizontally adjustable.

To the lower end of the frame are suitably pivoted or hinged two legs, I, connected at their upper ends by a cross-piece, *r*, and at their lower ends having feet K extending laterally upon each side of the legs, and slightly concave upon their under surface to conform to the curvature of the vehicle-hub upon which they rest.

The frame A is held in an upright position by a hinged clamping-plate, L, of any suitable construction.

In using the machine or device the standard is first lowered in the frame A its greatest extent, and the device placed in position between the spokes of a vehicle-wheel, the feet K resting upon the opposite ends of the hub. In this position the device is ready to be operated, and by bearing down on the handle or lever D the curved edge *j*, pressing against

the periphery of the roller G, will cause the standard F to be elevated as the pressure upon the lever is continued. Should the standard F not be elevated a sufficient distance, the lever is raised so that the pins *e* will be disengaged from its steps *c* and placed in the steps next above, when the operation is continued until the rest H is brought in contact with the felly of the vehicle-wheel.

It should be noticed that the fulcrum pin or pins *e* are on a vertical line beyond the center of the standard F, thereby giving increased power and enabling the device to be more effective in its purpose of lifting the felly off the end of the spoke, and admitting a rawhide washer to be inserted between the shoulder of the spoke and felly. The entire wheel may be repaired in this manner, and should the dish of the wheel require truing the shoulder *s* is brought against the tire by the screw-rod *n*, and also against the felly.

By swinging or pulling down the clamp L, as shown in Fig. 2, and the legs I being pivoted to the frame A, will admit of the frame being brought from one spoke to another, as required, without the necessity of again adjusting the device, as previously stated.

The device is applicable to many purposes beside that above described, and, as will be seen, a very effective and simple means is provided by which a vehicle-wheel can be thoroughly repaired with comparatively little trouble or expense.

It may be found necessary to increase the leverage power for heavy lifting, which may be done by employing a suitable drive-wheel and pinion-gearing, these changes or additions being made without departing from the spirit of my invention; also, in connection with my device, a suitable contrivance may be employed to force the lifter to its place at the bottom of the spokes, this also being discretionary; but I desire to be understood as reserving the right to its use in connection with my invention.

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

1. The frame A, having upon its interior sides steps *c* and grooves *f*, in combination with the standard F, provided with roller G, and the lever D, having head E and curved edge *j* and pins *e*, substantially as and for the purpose set forth.

2. The frame A, having pivoted to its lower end legs I, with feet K, and the clamp L, in combination with the standard F and means for operating it, substantially as and for the purpose specified.

3. The standard F, and means for operating it, said standard having bed *l*, guide *m*, and bearing *p*, in combination with the felly-rest H and screw-rod *n*, and the flange *s*, substantially as and for the purpose described.

4. The frame A, having steps *c*, guide grooves or slots *b*, and the lever D, having head E, with curved edge *j*, flanges *d*, and pins *e*, in combination with the standard F, carrying roller G and stops *k*, constructed to operate substantially as and for the purpose set forth.

5. The frame A, consisting of the two detachable sections B C, said frame having pivoted to it the legs I, with feet K, and the clamp L, in combination with the standard F, carrying at its top the adjustable felly-rest H, with the flange *s*, substantially as and for the purpose set forth.

6. The frame A, constructed, as described, in two sections, each of which has grooves *f*, steps *c*, and slots *b*, and the hinged or pivoted legs I, having feet K, and the clamp L, in combination with the standard F, formed with guides *g*, bearing *h* for roller G, the adjustable felly-rest H, and means for operating said standard, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM CALLAWAY.

Witnesses:

SAMUEL PARKER,
D. A. SNYDER.