

No. 796,473.

PATENTED AUG. 8, 1905.

G. W. TINKEY.

TIRE SETTER.

APPLICATION FILED NOV. 17, 1904.

Fig. 1.

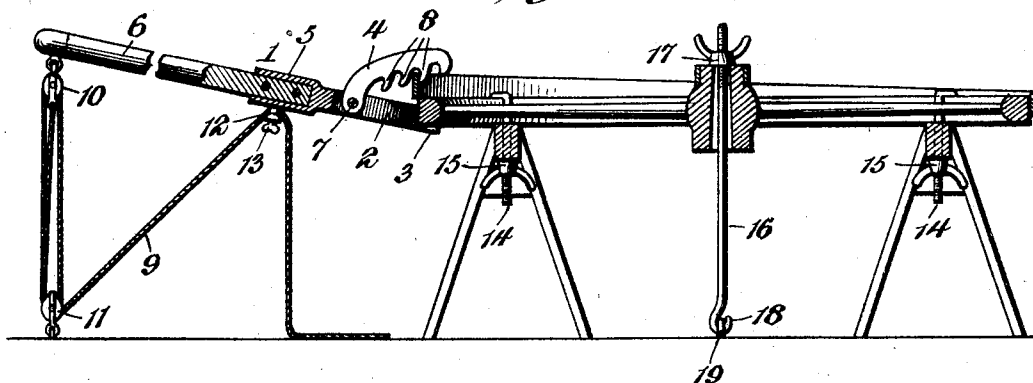


Fig. 2.

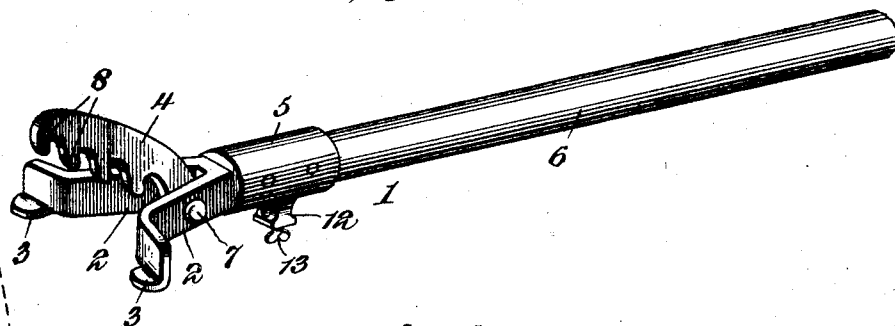


Fig. 3.

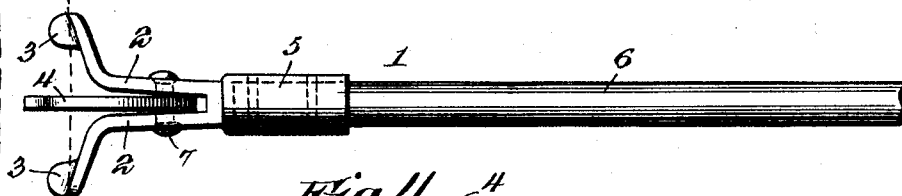
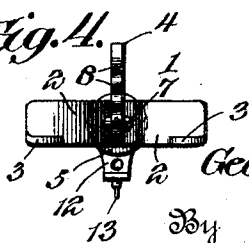


Fig. 4.



Witnesses

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GEORGE W. TINKEY, OF PLYMOUTH, OHIO.

TIRE-SETTER.

No. 796,473.

Specification of Letters Patent.

Patented Aug. 8, 1905.

Application filed November 17, 1904. Serial No. 233,141.

To all whom it may concern:

Be it known that I, GEORGE W. TINKEY, a citizen of the United States, residing at Plymouth, in the county of Huron and State of Ohio, have invented a new and useful Tire-Setter, of which the following is a specification.

The invention relates to improvements in tire-setters.

The object of the present invention is to improve the construction of tire-setters and to provide a simple, inexpensive, and efficient device of great strength and durability capable of enabling a heated tire to be readily placed on a wheel without hammering the same to drive it in position on the felly.

A further object of the invention is to provide a device of this character capable of enabling great power to be easily exerted on a wheel and adapted in setting a tire to be securely held in engagement with the same and with the felly, whereby the former may be gradually drawn on the same.

Another object of the invention is to provide a tire-setter capable of being readily applied to wheels of various sizes.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a vertical sectional view of a tire-setter constructed in accordance with this invention and shown applied to a wheel. Fig. 2 is a perspective view of the felly-engaging lever and the tire-engaging hook. Fig. 3 is a plan view of the same. Fig. 4 is an end elevation of the lever and the hook.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a felly-engaging lever provided with a pair of diverging arms 2, forming a fork and having their terminals bent laterally and provided at their lower edges with lips 3. The laterally-bent ends of the arms fit against the outer face of the felly, and the lips engage the lower face of the same when the wheel is arranged as shown in Fig. 1. By this

construction the lever is effectually prevented from slipping and there is no liability of marring or otherwise defacing the felly. The diverging arms, which receive a hook 4, are preferably formed integral with a tubular shank 5, which forms a socket for a handle 6, and the latter may be constructed of wood or any other suitable material, as will be readily understood. The hook 4, which consists of a flat plate or piece, is permanently secured at its inner end between the arms of the lever by means of a pivot 7, which pierces the arms and the hook and which is preferably headed at its ends, as shown; but any other form of pivot may be employed. The lower edge of the hook is provided with a plurality of bills or engaging portions 8, which are adapted to engage over the upper edge of a tire, as clearly illustrated in Fig. 1 of the drawings. The lips are placed beneath the felly, and the hook is engaged with the upper edge of the tire, and by swinging the lever downward the tire may be readily drawn over the felly. The hooks enable the device to be adjusted to wheels of various sizes, and also enable the device to be reengaged with the tire after the same has been partly set. In order to enable the lever to be readily swung downward and to be held at any adjustment an operating-rope 9 or other flexible connection is provided and is arranged on upper and lower pulleys 10 and 11. The upper pulley, which is mounted in a suitable block is connected with the outer end of the lever and one end of the rope is connected with the block. The lower pulley-block is a double one, as indicated in Fig. 1, and the rope is roved through the blocks, as shown, being extended from the upper pulley-block to the lower one, then back again to the upper one, and then to the lower one, from which the flexible connection extends to a clamp 12. The clamp consists of a block or a lug having an opening for the passage of a rope and provided with a threaded aperture intersecting the rope-opening and receiving a clamping-screw 13 for engaging the rope 9. By this construction the lever may be readily swung downward with sufficient force to draw the tire over the felly, and it may be held at any adjustment by clamping the rope, so that should it become necessary to use any other tool during the operation and before a tire has been completely placed on a wheel the operator will be free to do so and there will be no liability of the tire and the setting device accidentally falling from the wheel.

The wheel is securely clamped on a pair of trestles by means of bolts 14, extending through the tops of the trestles and having outwardly-extending arms for engaging the felly of the wheel. The threaded portions of the bolts receive nuts 15, arranged at the lower faces of the tops of the trestles and provided with suitable wings for enabling them to be readily rotated. The trestles and the wheel are held against upward movement by means of a rod 16, connected at its lower end with the floor or other supporting-surface and provided at its upper end with a nut 17. The lower end of the rod is provided with a hook 18, which is linked into a fixed eye 19, suitably anchored to the floor. The upper portion of the rod extends through the hub of the wheel, which is engaged by the nut 17. By this construction it is firmly clamped while the tire is being set.

Instead of employing the nuts 15, as shown in Fig. 1 of the drawings, the trestles may be provided with fixed nuts or interiorly-threaded openings, so that the bolts 14 may be adjusted by simply rotating them. The hook-bolts are designed to prevent the back of the wheel from rising when the lever is operated, and for this purpose it is not necessary that they should tightly clamp the wheel, but simply form rigid engaging members.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. A tire-setter, comprising a lever provided with opposite rigid arms spaced apart and having laterally-extending terminal portions arranged to fit against the outer face of the felly of a wheel, said terminals being provided at the bottom with projecting lips arranged to engage beneath the felly, and a tire-engaging hook pivotally mounted between the arms.

2. A tire-setter, comprising a lever provided with opposite felly-engaging arms having a shank, a lug extending from the shank and provided with an opening, a set-screw mounted on the lug, a tire-engaging hook pivotally mounted between the arms, adjusting means connected to the outer end of the lever and embodying guide-pulleys and a flexible connection, the free end of the flexible connection being passed through the opening of the lug and adapted to be engaged by the set-screw, and means for anchoring the said adjusting means.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE W. TINKEY.

Witnesses:

JOHN HANKAMMER,
LEWIS GEBERT.