

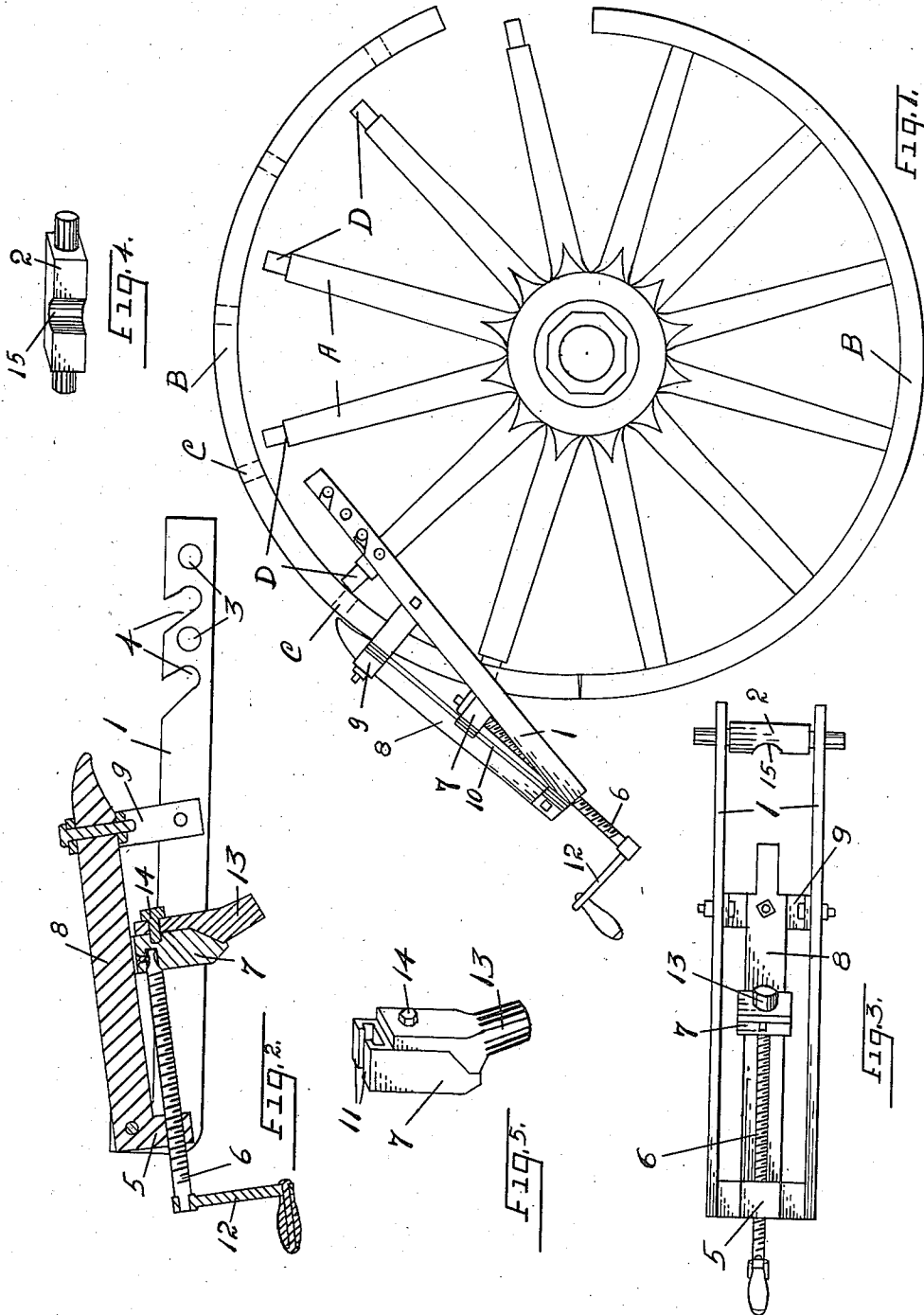
J. BLACKFORD.

SPOKE CLAMP.

APPLICATION FILED APR. 6, 1912.

1,034,398.

Patented July 30, 1912.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES BLACKFORD, OF SALT LAKE CITY, UTAH.

SPOKE-CLAMP.

1,034,398.

Specification of Letters Patent.

Patented July 30, 1912.

Application filed April 6, 1912. Serial No. 689,039.

To all whom it may concern:

Be it known that I, JAMES BLACKFORD, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented certain new and useful Improvements in Spoke-Clamps, of which the following is a specification.

My invention relates to spoke clamps, and has for its object to provide a clamp whereby the free end of the spokes of a vehicle may be drawn nearer to each other and held in position, in order that they may enter the holes provided in the felly of the wheel. These objects I accomplish with the device illustrated in the accompanying drawings in which similar letters of reference indicate like parts throughout the several figures and as described in the specifications forming a part of this application.

Figure 1 is an elevation of the hub and spokes of an automobile wheel, with one half of the felly in place thereon, and the other half of the felly in position to be driven on the spokes with my device in place thereon. Fig. 2 is a longitudinal section through the device. Fig. 3 is a plan view of the device looking in a direction away from the hub of the wheel. Fig. 4 is a view in perspective of the clamp or lug which engages the spokes. Fig. 5 is a view in perspective of the clamping jaw.

In manufacturing and repairing vehicle wheels having wooden spokes, the rims or fellies used thereon are more often made of wood, and have holes or mortises therein through which a tenon on the free end of the spoke is to be inserted.

As will be obvious the arc of the circle between any two spokes at the end of the tenon D, is longer than the arc at their base, and in order that the arc on the inner face of the felly between any two mortises C within which the said tenons D are to be inserted may be such that the spokes will enter the said mortises C, the free ends of the spokes must be drawn and held in position to register with said mortises C, while the felly may be driven into place.

I have provided a clamp whereby the free end of the spokes on which the tenon has been turned, may be drawn and held in position to enter the mortise C in the felly B, enabling the one workman to place the felly on the spokes without assistance.

My device consists of plates 1 having open

cuts 4 and holes 3 alternately placed therein, to receive and hold the spoke lug 2. The opening or hole 3 in one plate, being in alinement with the open cut 4 in the other plate, thus enabling me to insert one end of the said spoke lug 2 through the hole 4, and then to insert or place the other end of the said spoke lug 2 in the opposite cut 4. The said spoke lug has a portion of one side cut out to fit the circumferential shape of the spoke, as at 15. In the other end of the plates 1 is secured or formed integral therewith, the vise nut 5, internally threaded to receive the threaded screw 6. On one end of said screw 6 is detachably fitted, the clamping jaw 7, and on the other end is firmly attached the handle 12, by which the said screw is turned within said vise nut 5. Integrally formed on said vise nut 5, is the guide carriage 8, one end of which is extended and cut in the form of an arc of a circle corresponding to the peripheric face of the felly of the wheel. Said end of said guide carriage 8 is secured in fixed relation to the free end of said plates 1 by the bracket braces 9. The guide carriage 8 has the top or face extended on each side as flanges 10, and the said clamping jaw 7 has inwardly extended flanges 11 formed thereon to engage said flanges 10, thus forming a travel channel on said guide carriage 8 for said clamping jaw 7. Detachably secured on one side of said clamping jaw 7 is the felly lug 13, provided thereon to enter and engage within the respective mortises C. Said felly lug 13 is held in place by the thumb screw 14.

In the operation of my device the felly to be put on is driven partially in place on one spoke A, but the next spoke will not be in position to enter the mortise. The device is placed on the felly with the felly lug 13 inserted in the partially filled mortise C, and the spoke lug 2 is placed on the opposite side of the next spoke; then by turning the said handle 12 the whole device except the felly lug 13 and clamping jaw 7, is moved around on the wheel and the free end of the engaged spoke is drawn, until it registers with the adjacent mortise C, the workman then partially drives the felly into place at that point and fully drives it into place at the first spoke. The device is then removed from its first position and reset in engagement with the third or next spoke with the felly lug 13 in the partially filled mortise C

of the previously sprung spoke A, and in like manner until the felly is in position.

Having thus described my device I desire to secure by Letters Patent and claim:—

- 5 1. A spoke clamp of the class described consisting of side plates; a vise nut secured thereto internally threaded; a threaded screw adapted to be turned in said nut; a guide carriage integral with said nut; a
10 clamping jaw slidable on said carriage; a felly lug secured on said jaw; and a spoke lug detachably fitted in said side plates.
2. A device of the class described consist-

ing of plates; an internally threaded nut secured to one end of said plates; a guide carriage secured to said nut; a felly lug slidable on said carriage; and a spoke lug detachably fitted in said plates; with a threaded screw adapted to be turned in said nut. 15

In testimony whereof I have affixed my signature in presence of two witnesses. 20

JAMES BLACKFORD.

Witnesses:

JOHN FITTON,

A. C. CANDLAND.