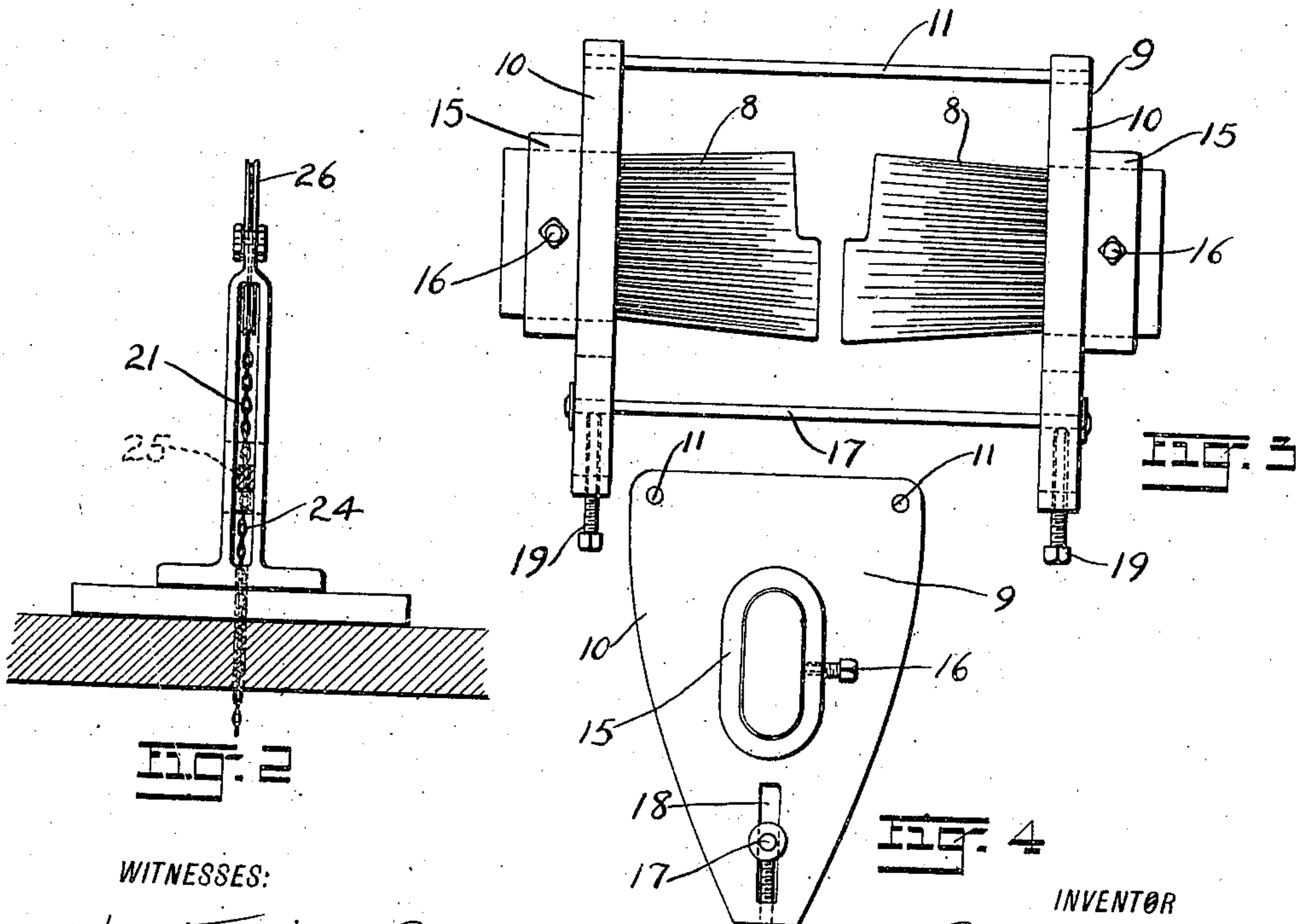
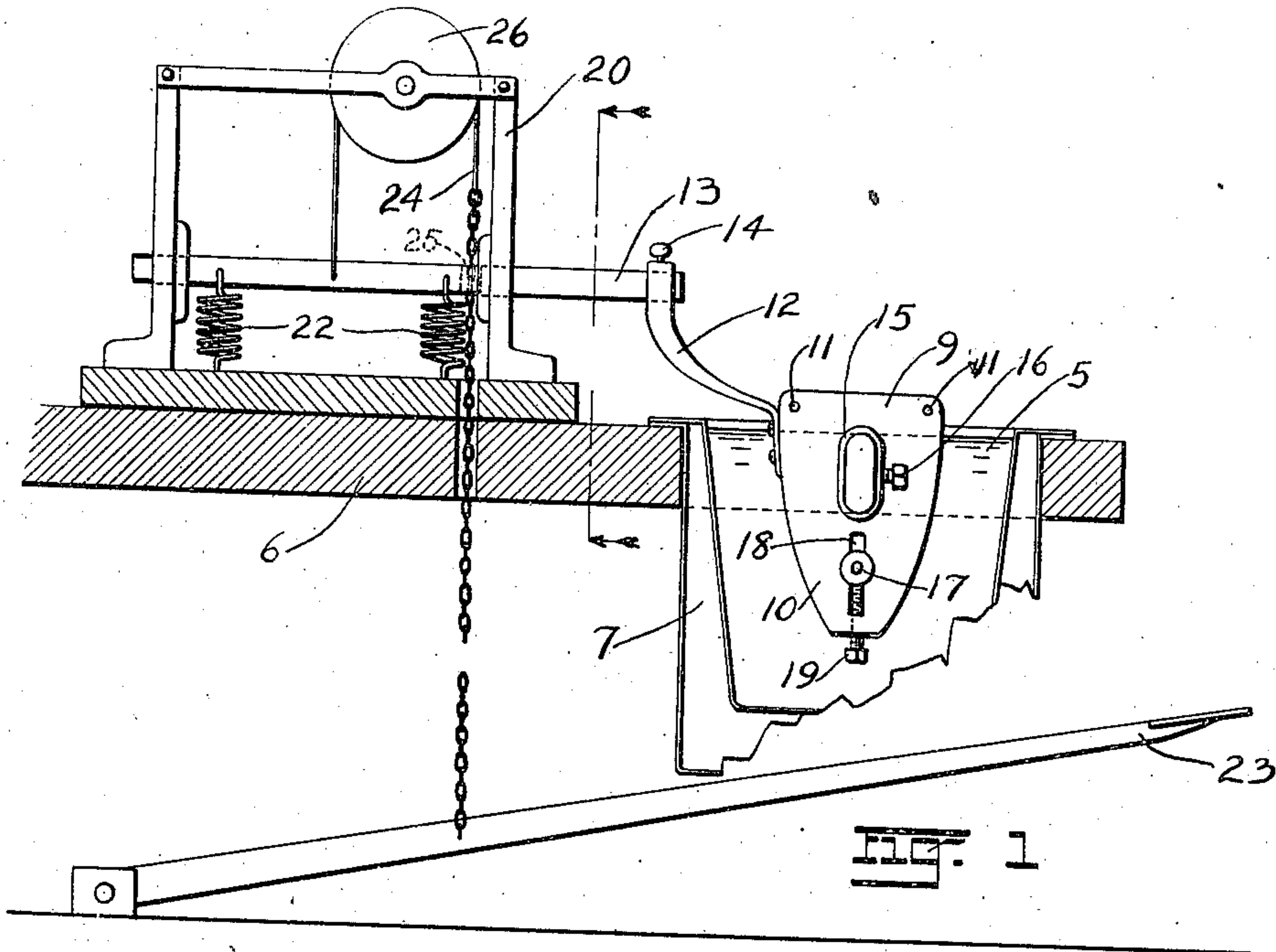


P. H. RUE.
GLUING APPARATUS.
APPLICATION FILED FEB. 23, 1910.

963,070.

Patented July 5, 1910.



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PERRY H. RUE, OF FRANKLIN, OHIO.

GLUING APPARATUS.

963,070.

Specification of Letters Patent.

Patented July 5, 1910.

Application filed February 23, 1910. Serial No. 545,353.

To all whom it may concern:

Be it known that I, PERRY H. RUE, a citizen of the United States of America, and resident of Franklin, Warren county, State of Ohio, have invented certain new and useful Improvements in Gluing Apparatus, of which the following is a specification.

This invention relates to gluing apparatus, and particularly to apparatus for applying glue to the ends of articles, such as spokes for wheels.

An object of this invention is to produce a gluing apparatus, which will simplify the operation of applying glue to such articles.

A further object is to produce a gluing apparatus for wheel spokes, which simplifies the operation of applying glue to the tenons and miters of the spokes, and which will save glue.

These and other objects I attain in an apparatus embodying the features herein described and illustrated.

In the drawings accompanying this application and forming a part thereof, Figure 1 is a partial side elevation and sectional view of an apparatus embodying my invention. A portion of the apparatus is shown broken away, for convenience of illustration. Fig. 2 is a section along the line 2—2 in the direction of the arrows in Fig. 1. Fig. 3 is a side elevation of the brushes and the brush mounting frame, which form details of my invention. Fig. 4 is a side elevation of the frame shown in Fig. 3.

Glue is ordinarily applied to wheel spokes by hand and is a tedious and exacting operation, because the glue must be applied evenly, so that it does not squeeze out above the miters when the spokes are inserted into the hub. When the glue is so applied that it squeezes out above the miters, it is necessary for the finisher to remove the excess, before applying the finish. Thus my invention saves time both in the gluing operation and in the finishing process, and moreover renders the gluing operation more uniform.

The apparatus includes a water or steam heated glue pot, brushes capable of moving into and being withdrawn from the pot, adjustable means for rendering the apparatus capable of being employed with wheel spokes of different size, and means for operating the brushes.

The apparatus illustrated is particularly adapted for applying glue to wheel spokes, but I do not wish to limit my invention, as

it may be employed in gluing other articles, such as chair rungs, or other parts of furniture.

In the apparatus illustrated, I have shown a glue pot 5, mounted on a work bench 6, and surrounded by an ordinary water or steam heating vessel 7. Brushes 8 are so arranged, that glue may be applied to each side of the tenons and miters of a spoke at the same time. The brushes 8 are mounted on a movable frame 9, which consists of two end pieces 10, cross braces 11, and a bracket 12, which is bifurcated, each prong being secured to one of the end pieces 10. The bracket is adjustably mounted on a horizontal bar 13, and is held in place on the bar by a clamp nut 14. Each brush 8 is adjustably mounted on one of the side pieces 10, so that the distance between the brushes can be varied to accommodate different sizes of spokes. Each brush is secured in place in a collar 15, mounted on the end piece 10, by a clamp nut 16. An adjustable stop bar 17 is mounted on the frame 9, below the brushes 8. Each end of the bar 17 is mounted in a slot 18, formed in one of the pieces 10, and its position in the slot is controlled by a clamp nut 19, so arranged that the bar may be raised or lowered.

The inner or free end of each brush 8 is trimmed so that the outer portion will contact with the miter of the spoke, while the lower portion is in contact with the tenon. The spoke to be glued is inserted between the brushes from above, and the stop bar 17 by contacting with the end of the spoke prevents the brush from applying glue too high up on the miters, and, therefore, controls to some extent the application of the glue to the spoke. This bar is adjustable, so that the apparatus may be employed with spokes having tenons and miters of different lengths. The brushes 8 are shown as made of bristles, but any material may be employed which is suitable for applying the glue to the spokes.

The horizontal bar 13 is mounted on a frame 20, which is shown mounted on the work bench 6. The bar 13 projects through, and is held in place, in slots or ways provided in the upright of the frame. Coil springs 22 are mounted between the frame 20 and the bar 13, and are arranged to hold the bar in such a position, that the brushes 8 will be immersed in the glue contained in the glue pot 5.

The bar 13 is raised, for the purpose of

raising the brushes 8 out of the glue pot, by means of a foot lever 23, which operates the bar through a chain and cord connection 24. The connection 24 passes through a slot 5 25, provided in the bar 13, and runs over a pulley 26, mounted on the frame 20, and then is secured to the bar about midway between the springs 22.

In the operation of gluing a spoke, the 10 brushes 8 are raised, by depressing the lever 23, and the end of the spoke is inserted downwardly between the brushes until it contacts with the bar 17. This operation applies the necessary amount of 15 glue to both sides of the tenon and both miters at the same time. When the spoke is withdrawn from the brushes, the lever 23 is released and the springs 22 move the brushes back into the glue pot. One object 20 in providing the springs 22 is to resist the upper movement of the brushes 8, so that the operator cannot move them too rapidly and thus spatter glue on the outside of the glue pot.

25 By employing my invention, a uniform amount of glue is applied to each spoke and is evenly distributed over the portion of the spoke to be glued. The apparatus may be so adjusted that just sufficient glue is ap- 30 plied to each spoke, that no excess glue will squeeze out above the miters, when the spoke is inserted in the hub. The frame 9 on which the brushes 8 are mounted may be readily removed from the bar 13, merely by 35 unclamping the bolt 14 and moving the bracket 12 along the bar. With this arrangement, the brushes 8 and the stop bar 17 may be readily adjusted.

What I claim is:

40 1. A gluing apparatus comprising a brush frame, laterally adjustable brushes mounted on said frame and between which the article

to be glued may be inserted, a glue pot, and means for moving said frame into and for withdrawing it from said glue pot. 45

2. A gluing apparatus comprising a glue pot, a frame movable into and out of said pot, brushes mounted on said frame and between which the article to be glued is adapted to be inserted, and an adjustable 50 stop bar for determining the position of the article to be glued during the gluing operation.

3. A gluing apparatus comprising a glue pot, a frame movable into and out of said 55 pot, brushes adjustably mounted on said frame and between which the article to be glued is adapted to be inserted, and an adjustable stop bar for contacting with the article to be glued, to determine its position 60 during the gluing operation.

4. A gluing apparatus comprising a glue pot, a frame movable into and out of said pot, brushes mounted on said frame and between which an article to be glued may 65 be inserted, means for adjusting the position of said brushes to vary the distance between them, and an adjustable stop for determining the position of the article to be glued relative to the brushes during the gluing 70 operation.

5. A gluing apparatus comprising a glue pot, a frame movable into and out of said pot, brushes mounted on said frame, and between which the article to be glued may be 75 inserted, means for adjusting said brushes laterally to vary the distance between them, a movable bar on which said frame is adjustably mounted, and an operating lever for actuating said bar.

PERRY H. RUE.

Witnesses:

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