(No Model.)

D. S. TALLMAN.

DEVICE FOR DRAWING OUT SPOKES FROM WHEEL HUBS.

No. 288,511. Patented Nov. 13, 1883.

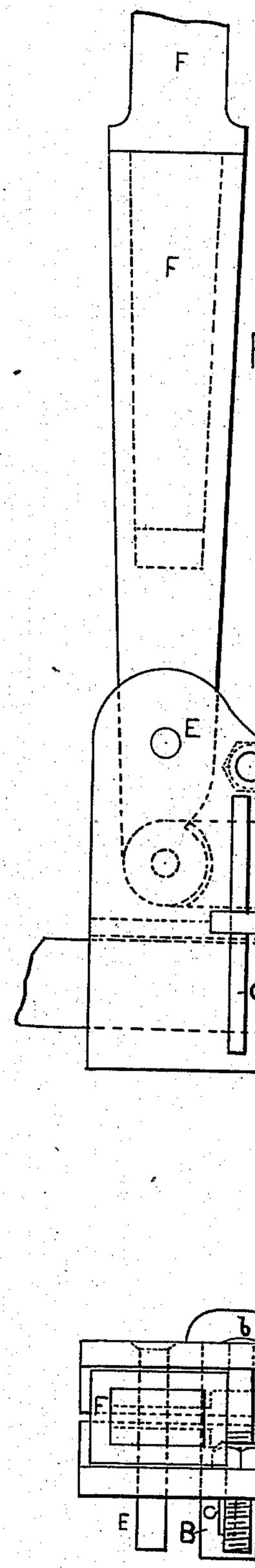


FIG. 1

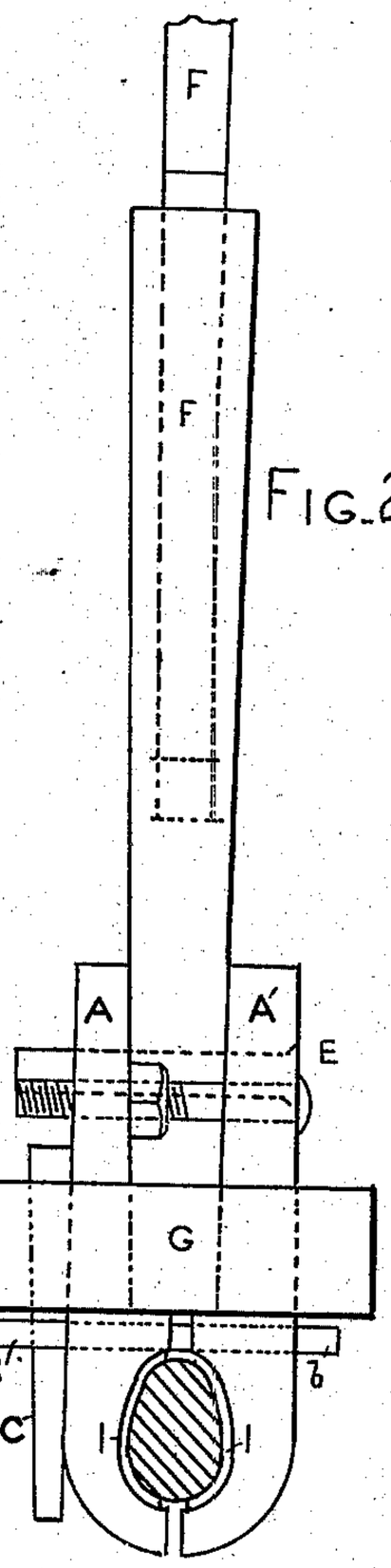


FIG. 2

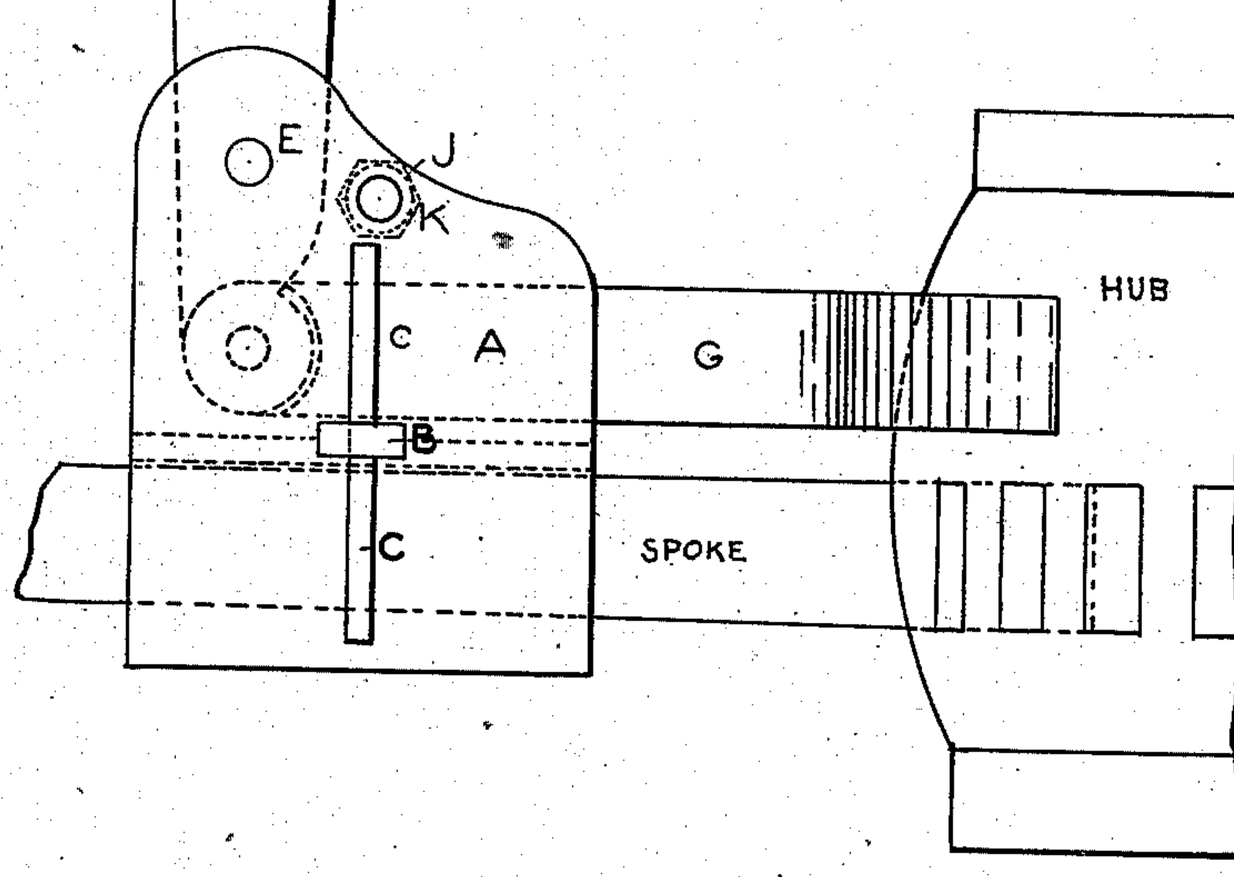
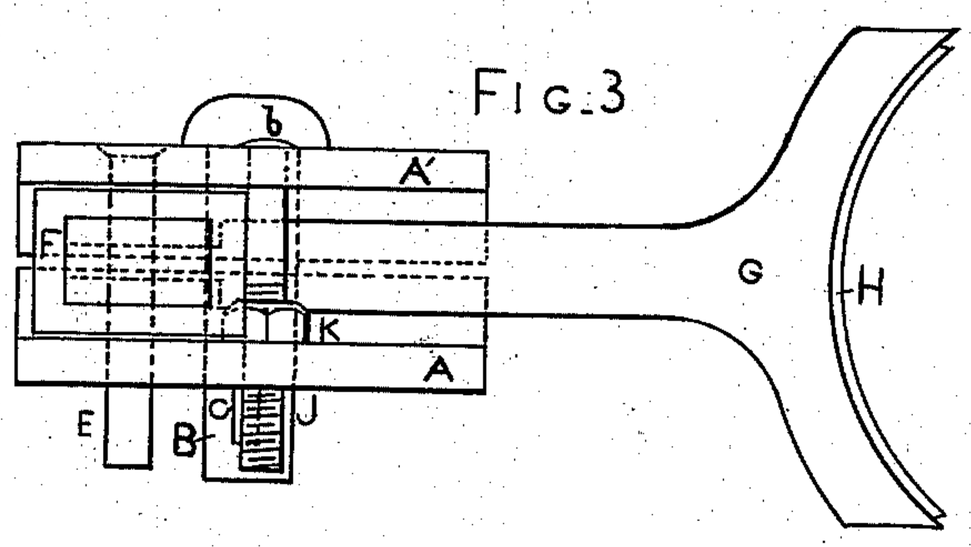


FIG. 3



WITNESSES

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DEVICE FOR DRAWING OUT SPOKES FROM WHEEL-HUBS.

SPECIFICATION forming part of Letters Patent No. 288,511, dated November 13, 1883.

Application filed September 1, 1883. (No model.)

To all whom it may concern:

Be it known that I, DAVID S. TALLMAN, a citizen of the United States, residing at Reno, Washoe county, State of Nevada, have invented a new and Improved Device for Drawing Out Spokes from Carriage and Wagon Wheel Hubs, of which the following is a specification.

My invention relates to a tool which will be useful to carriage and wagon repairers in removing damaged, new, or broken spokes from wheel-hubs; and it consists in a combination of a clamping device, which is secured on the spoke to be withdrawn, and a vertical lever and horizontal push-bar, so arranged and jointed together as to be operated to push the hub from off the spoke, as hereinafter described, or draw the spoke out.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of my invention. Fig. 2 is an end view, and Fig. 3 is a plan.

In all the figures like letters of reference represent like parts.

A A′ are the two separate sides or jaws of my spoke-clamp, shaped about as shown in the drawings, each jaw having a proper recess to fit one side of the average wheel-spoke. I will have, say, three sizes of the tool, to suit small, medium, and large sized wheels. The two jaws are connected together just above the spoke by the straight key B, run through a slotted hole in each jaw, which key has a double head on one end, at *b′*, and a slotted hole on the other end, just outside the clamp-jaw. A taper key, C, drives through this slot and draws the two jaws of the clamp together when the spoke is inserted between. At E there is a fulcrum-pin to support the draw-lever F. At the lower end of this draw-lever there is secured by a hinge-joint a push-bar, G, which has an end so shaped as to encircle nearly one-third of the hub, and, if necessary, a piece of leather, rubber, or other soft substance, H, may be placed between the hub and the push-bar, to prevent injury to the hub when a heavy pressure is brought against it. Also, a similar provision may be made for avoiding injury to the spoke, as well as to give a better frictional hold for the clamp. (See Fig. 2, where I show the protecting strips I.)

In drawing the two clamp-jaws together by driving the key C they would bind on the draw-lever F and prevent its free action, if it were not for the separating screw-bolt J, which has an adjusting-nut, K, upon it, so that the jaws A A′ cannot be drawn together farther than this nut will allow. By adjusting this nut the clamp may be also accommodated to the various thicknesses of spokes. The lever F need not be a long lever, but may be, as shown, simply a socket, into which a wooden or iron bar is inserted when the device is used.

The operation is simple and as follows: The wheel is placed on the flat and firmly held in any suitable way. My clamp is then placed upon the spoke to be drawn at a point close up to the hub. The clamp is then drawn tightly by driving the taper key C. The lever F is then drawn back, the push-bar goes forward to impinge against the hub, and with little effort the spoke is drawn out. A screw-bolt and nut may be used instead of the keys B and C; but I prefer the keys. The inside of the clamp, where it inclasps the spoke, may be roughened by grooves cut in their face, or in any other way, so as to prevent slipping.

What I claim as my invention, and desire to secure by Letters Patent, is as follows:

A spoke-extractor consisting of a combination of a clamp having jaws A A′ and suitable means to draw them together to tightly grasp the spoke, a vertical draw-lever, F, with its fulcrum at E on the clamp, above the push-bar G, and the push-bar G, attached to the lower end of the draw-lever below the fulcrum, substantially as and for the purpose described.

DAVID S. TALLMAN.

Witnesses:
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