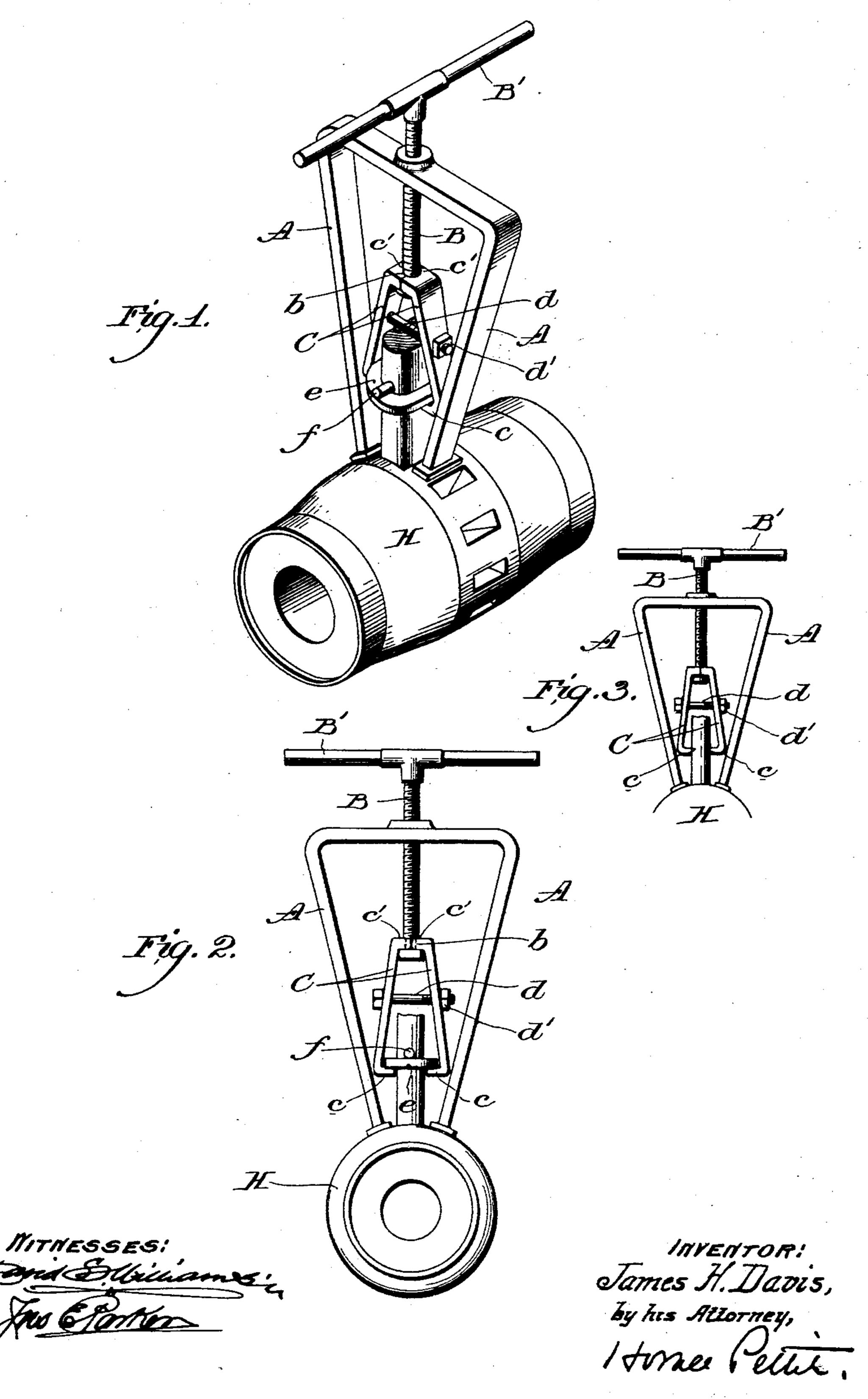
(No Model.)

J. H. DAVIS.

MACHINE FOR EXTRACTING SPOKES FROM HUBS OF WHEELS.

No. 520,258.

Patented May 22, 1894.



THE NATIONAL LITHOGRAPHING COMPANY,

## United States Patent Office.

JAMES H. DAVIS, OF SECANE, PENNSYLVANIA.

## MACHINE FOR EXTRACTING SPOKES FROM HUBS OF WHEELS.

SPECIFICATION forming part of Letters Patent No. 520,258, dated May 22, 1894.

Application filed April 4, 1893. Serial No. 469,002. (No model.)

To all whom it may concern:

Be it known that I, James H. Davis, of Secane, Delaware county, and State of Pennsylvania, have invented a certain new and use-5 ful Improvement in Machines for Extracting Spokes from the Hubs of Wheels, of which the following is a full, clear, and exact description.

My invention has for its object the conro struction of a machine for extracting spokes from the hubs of vehicle wheels, when from any cause one or more spokes are to be replaced by new ones, and this object I attain in the manner more fully set forth hereinaf-15 ter, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a spoke extracting device constructed in accordance with my invention, showing it in position on 20 a wheel hub. Fig. 2 is an elevation of the same, and Fig. 3 is an elevation partly in section, of a somewhat cheaper construction, also embodying my invention.

Referring to the drawings H represents the 25 hub of a vehicle wheel having the usual spokes, only one of which, however, has been illustrated.

The machine comprises a standard A, in the form of an inverted U, the ends of which 30 converge so that they may enter between the spokes as shown or if necessary the standard may be turned at a right angle to the position shown in the drawings so that the feet will rest on or near the ends of the hub. In the 35 upper cross bar of this standard is a threaded orifice to which is adapted a screw threaded rod, B, secured by any suitable means, preferably adjustable, carrying at its upper end a suitable handle, as B', by which it may be 40 turned. The form of handle may be varied to suit the work. The lower end of this rod, B, has an annular groove, b, which fits the recessed ends, c', of clutching jaws, C, terminating at their lower ends in inwardly pro-45 jecting fingers, c, which may be square as in Figs. 1 and 2 to engage an auxiliary ring on the spoke, or may be in the form of sharp

teeth adapted to engage directly with the spoke. These two jaws, C, are, after being adjusted, forced toward each other by a bolt, 50 d, and nut, d', so that they may firmly engage

the spoke.

In practice I have found that the form of machine illustrated in Fig. 3 acts effectively with spokes of some classes, but generally I 55 prefer to employ the auxiliary ring, e, fitting tightly against the spoke and held in position by a pin, f, passing entirely through the spoke, immediately above the ring.

Having thus described my invention, what 60 I claim, and desire to secure by Letters Pat-

ent, is—

1. The combination of the standard of U shape form, a threaded rod adapted to an opening in said standard, opposite detachable 65 clutching jaws having their upper ends recessed and adapted to said rod and their lower ends being adapted to engage the spoke to be extracted, and means for forcing said jaws toward each other to effect their engagement 70 with the rod and with the spoke to be extract-

ed, substantially as specified.

2. The combination of the standard, A, having a screw threaded orifice in its upper portion, a vertically disposed screw threaded 75 rod. B, adapted to said screw threaded orifice, there being an annular groove, b, at or near the lower end of said rod, detachable clamping jaws, C, having at their upper ends inwardly projecting recessed lugs, c', adapted 80 to engage in the annular groove, b, inwardly projecting spurs or lugs, c, on the lower ends of said clamping jaws, a transverse screw threaded bolt, d, extending through openings formed in said clamping jaws and a nut, d', 85 provided upon said bolt, d, for positively securing the jaws in position, substantially as specified.

In witness whereof I have hereunto set my hand this 30th day of March, A. D. 1893.

JAMES H. DAVIS.

Witnesses:

HORACE PETTIT, J. BAYARD HENRY.