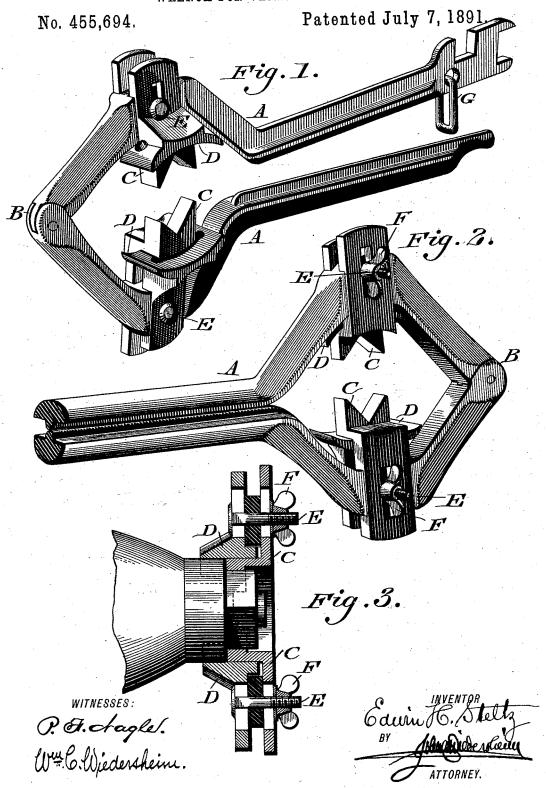
## E. H. STELTZ. WRENCH FOR VEHICLE WHEELS.



## UNITED STATES PATENT OFFICE.

EDWIN H. STELTZ, OF EAST GREENVILLE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO MILTON KRAUSS, OF SAME PLACE.

## WRENCH FOR VEHICLE-WHEELS.

SPECIFICATION forming part of Letters Patent No. 455,694, dated July 7, 1891.

Application filed December 3, 1890. Serial No. 373,469. (No model.)

To all whom it may concern:

Be it known that I, EDWIN H. STELTZ, a citizen of the United States, residing at East Greenville, in the county of Montgomery and State of Pennsylvania, have invented a new and useful Improvement in Wrenches for Vehicle-Wheels, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a wrench adapted 10 to unscrew a nut from a vehicle-axle and simultaneously remove the wheel therewith.

Figure 1 represents a perspective view of a wrench embodying my invention. Fig. 2 rep-15 sents a perspective view of a portion of the opposite side thereof. Fig. 3 represents a transverse section thereof, including a side elevation of a nut-axle and portion of a wheelhub.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates two arms, which are pivoted together, as at B. The portion of the arms near the pivot 25 B is widened, and to the same are secured the jaws C D, the jaws C having angular faces, whereby they may grasp a nut, and the jaws D having circular faces, so as to embrace the hub-band of the wheel, said jaws D being 30 placed aside of the jaws C and being set back of the same, so as to readily reach said band. The shanks of the jaws are slotted to receive bolts E, whereby the jaws may be adjusted relatively to different sizes of nuts and bands,

35 said bolts being provided with nuts F for firmly holding the jaws and retaining the same in adjusted position.

The operation is as follows: The arms are opened and presented to the nut and band and then closed against the same by properly grasping the handle portion of the arms, the latter then being prevented from separating by means of the locking-link G. The wrench is now turned, whereby the nut is unscrewed 45 and the wheel simultaneously rotated and withdrawn from the axle. It is evident that the nut may again be screwed to the axle by properly manipulating the wrench, so that the nut is clamped or grasped, the wheel being also properly located on said axle.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is-

1. A wheel-wrench consisting of two arms pivotally connected, and two sets of jaws con- 55 nected with said arms and extending transversely thereof, said jaws being adjustable in the direction of their length, one of said sets having angular faces and the other set having curved faces, said parts being combined 60

substantially as described.

2. A wheel-wrench consisting of two arms pivoted together at or near one of each of their ends and having spread portions near said pivotal connection, and two sets of jaws 65 connected with said arms at said spread portions and adjustable in a transverse direction to said arms, one of said sets having angular faces and the other having curved faces, said parts being combined substantially as de- 70 scribed.

3. A wheel-wrench consisting of two arms pivotally connected and having widened or spread portions near said connections, two sets of jaws, each having slotted shanks and 75 one set having angular faces and the other set circular faces, and fastening-bolts with nuts, said parts being combined substantially as described.

4. A wheel-wrench consisting of two arms 80 pivotally connected, adjustable jaws connected with each of said arms, having an angular face, and an adjustable jaw connected with each of said arms, having a circular face, said latter set of jaws being placed 85 aside of and set back from the first set of jaws, said parts being combined substantially as described.

EDWIN H. STELTZ.

Witnesses:

JOHN A. WIEDERSHEIM, WM. C. WIEDERSHEIM.