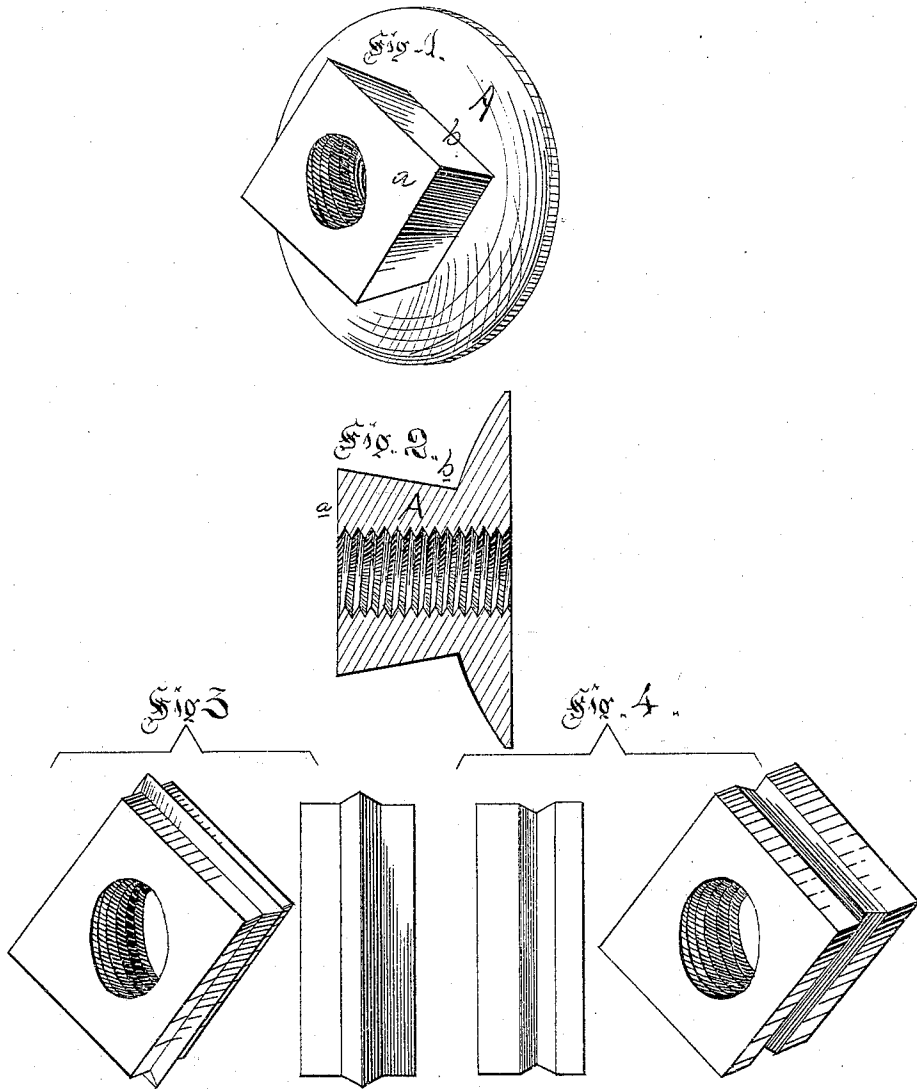


F. L. DELFER.

Nuts.

No. 134,649.

Patented Jan. 7, 1873.



Witnesses

L. H. Kerr.  
Geo. Barth.

Inventor

Frank Leo Delfer  
By his atty.  
R. C. Smith

# UNITED STATES PATENT OFFICE.

FRANK L. DELFER, OF BURLINGTON, IOWA.

## IMPROVEMENT IN NUTS.

Specification forming part of Letters Patent No. 134,649, dated January 7, 1873.

*To all whom it may concern:*

Be it known that I, FRANK LEO DELFER, of Burlington, in the county of Des Moines and State of Iowa, have invented a new and useful Improvement in Axle and other Nuts; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of an axle-nut constructed after my plan; Fig. 2 is a longitudinal section of the same; and Figs. 3 and 4 represent modifications in the manner of constructing the same.

My invention is particularly applicable to axle-nuts of wagons; and its object is to enable a properly-constructed wrench to gripe or lock over some laterally-projecting portions of the nut so that it can only be detached by the recession of the wrench-jaws, whereby, when the wrench has once been fixed to the nut the same may be turned around and around until the nut is removed from its screw. My invention, therefore, consists in a nut formed of less lateral dimensions toward its center or rear than at its front, so that the jaws of a suitable wrench may clasp over the larger part and gripe the nut by the smaller part, and thereby, without pressure from the jaws of the wrench, the nut will be held securely.

A represents a wagon-axle nut, with the face *a* made larger in lateral dimensions in the central portion, and a sort of groove, channel, or recess, *b*, is thereby formed along the side and extend-

ing around the nut. Into this channel or recess the ends of the wrench-jaws enter, as it were, clasping over the projecting edge of the face *a*, so that when the wrench is once fixed it need not be detached until the nut has been removed from its screw and replaced thereon.

To farmers and other persons unskilled in machinery who have occasion to remove wagon or other nuts from their screws, the slipping of the wrench from the nut is often a source of great inconvenience and annoyance; but with nuts constructed as above described, this trouble and annoyance may be entirely avoided.

For convenience I have only described a wagon-axle nut, but it is apparent that the nut may be made with a rib like that shown in Fig. 3, or with a distinct groove like that shown in Fig. 4, if, for any cause, either should be more desirable; but the nut so made would evidently accomplish the same result, as above set forth. It is also evident that nuts constructed as above described may be employed in many other places with equal advantage.

Having described my invention, what I claim as new is—

A screw-nut constructed with its front greater in lateral dimensions than its central or rear portions, substantially as and for the purpose set forth.

F. L. DELFER.

Witnesses:

L. H. KERR,  
R. D. O. SMITH.