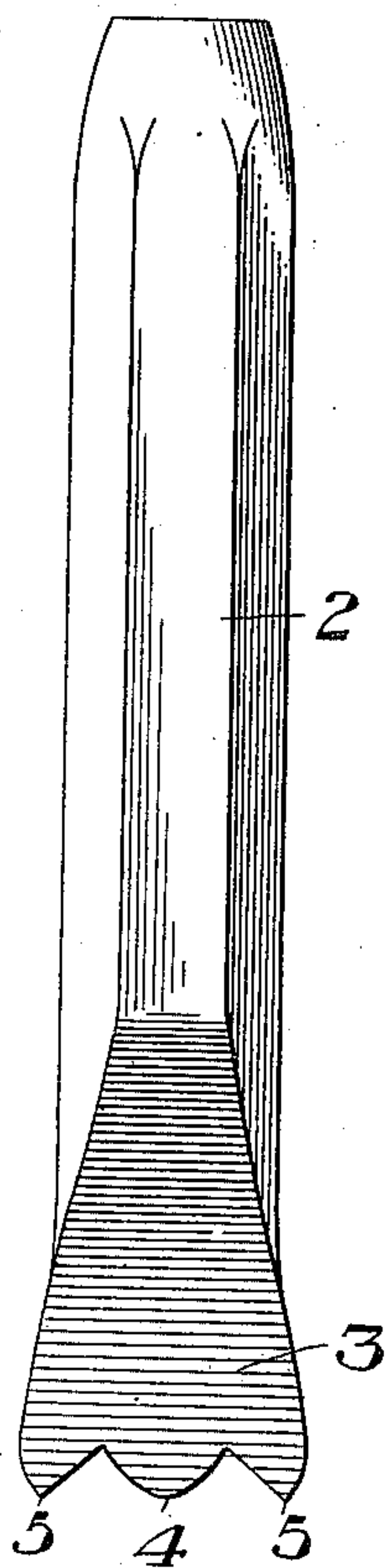


R. A. CLARK.  
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APPLICATION FILED AUG. 2, 1909.

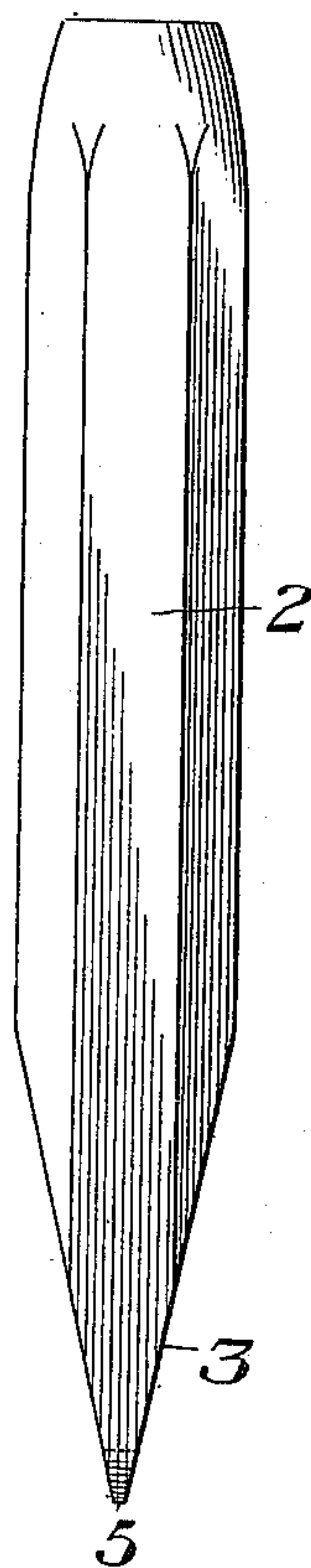
964,393.

Patented July 12, 1910.

*Fig. 1.*



*Fig. 2.*



WITNESSES

*R. A. Balderson*  
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INVENTOR

*R. A. Clark,*  
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*his Attys*

# UNITED STATES PATENT OFFICE.

RUSSELL A. CLARK, OF PITTSBURG, PENNSYLVANIA.

## NUT-LOCKING TOOL.

964,393.

Specification of Letters Patent.

Patented July 12, 1910.

Application filed August 2, 1909. Serial No. 510,731.

*To all whom it may concern:*

Be it known that I, RUSSELL A. CLARK, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Nut-Locking Tool, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figures 1 and 2 are front and side views respectively of a tool embodying my invention.

My invention has relation to a tool designed for use in locking nuts on bolts; and is more particularly designed as an improvement upon the device described and claimed in the patent to Kootz and Schirmer, No. 819,289, of May 1st, 1906. The tool disclosed in said patent comprises a wedge having a central spur or tooth adapted to be driven into the end of a bolt to spread the thread of the bolt into the thread of the nut; and also having swaging spurs which act in a direction at right angles to the main body of the wedge to force portions of the material of the nut into a slot in the bolt. In the use of tools such as shown in the said patent, difficulty has been experienced by reason of the teeth or spurs breaking off in use.

The object of the present invention is, to improve the construction of the tool in such a manner that the spurs or teeth will stand up to their work and the efficiency of the tool will be increased.

Referring to the drawings, the numeral 2 designates the shank of the tool which terminates at its lower portion in a wedge-shaped blade 3, this blade being widened, as shown. The lower or entering edge of the blade or wedge is formed with a central tooth or spur 4, preferably of convex form, and is flanked at both sides by a tooth-shaped swaging spur 5, the spur 5 being of the same length as the central spur 4. The points of the swaging spurs 5 are adapted to enter the metal of the nut and force it inwardly into engagement with the slot of the bolt, while the central wedge or spur 4 is adapted to enter the slotted end of the bolt and spread the same into engagement with the thread of the nut. By making this central tooth of convex form, it is not only much

stronger and less liable to break in use, but it also acts more efficiently to center the tool with respect to the bolt and nut when applied thereto.

In the tool described in the patent above referred to, there was insufficient support behind the swaging spurs, and they soon broke down in service. In the present tool, the distance between the points of swaging spurs 5, for any given size of tool, is the same as the distance between the points 4 of the spurs of the said patent, for the same size of tool, but it will be noted that there is added outside of each of the points 5 a considerable body of metal. These added bodies of metal efficiently back up and support these spurs in use. I also prefer to make the wedge-shaped blade much more blunt than that shown in the said patent in order to provide a stronger tool.

In practice, the convex central tooth or spur 4 is preferably of a width at its base corresponding to substantially one-half the distance between the points of the swaging spurs 5.

It will be understood that the tools are made in different sizes, for the different sizes of bolts and nuts which are to be locked.

What I claim is:—

1. A nut-locking tool comprising a shank having a wedge-shaped blade, said blade having its lower edge formed with a central tooth or spur, and two flanking swaging spurs one at each side of the central spur, the body of the blade being extended laterally from the points of the swaging spurs to properly back and support the same; substantially as described.

2. A nut-locking tool, comprising a blunt wedge having its lower edge formed with a central convex tooth or spur and having a pointed swaging spur at each side of the central tooth or spur, the metal of the wedge being extended laterally from the points of the swaging spurs to properly support and back the same; substantially as described.

In testimony whereof, I have hereunto set my hand.

RUSSELL A. CLARK.

Witnesses:

GEO. H. PARMELEE,  
H. M. CORWIN.