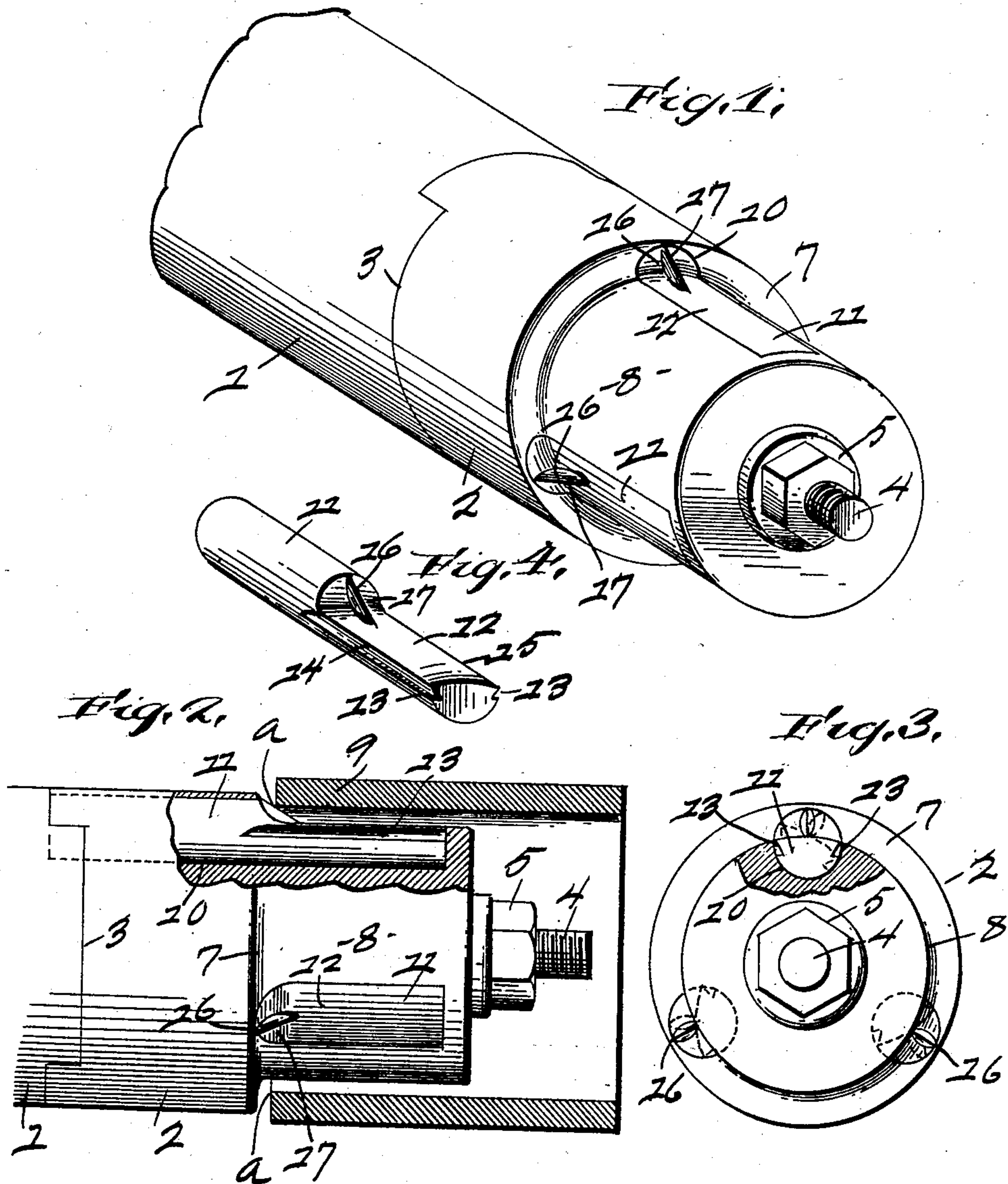


M. C. SEREN.
 AUTOMATIC NIPPLE CHUCK.
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912,421.

Patented Feb. 16, 1909.



WITNESSES,
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UNITED STATES PATENT OFFICE.

MICHAEL C. SEREN, OF TOLEDO, OHIO.

AUTOMATIC NIPPLE-CHUCK.

No. 912,421.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MICHAEL C. SEREN, of Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Automatic Nipple-Chucks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form part of this specification.

This invention relates to chucks and particularly to chucks for holding nipples while the thread is being cut thereon, the object being to provide a simple, inexpensive and effective construction which shall operate automatically as the nipple blank is placed thereon to firmly engage and hold the latter while the thread is being cut.

A further object is to provide a chuck for holding a nipple to permit either a right or left thread to be cut thereon.

To this end the invention embodies certain novel details of construction and the combination of parts hereinafter shown, described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the chuck showing the gripping edges of the gripping members retracted; Fig. 2 is an elevation in part section, a nipple being shown in position thereon, the latter being in section; Fig. 3 is an end view of the chuck, the same being partly in section; and Fig. 4 is a detail of one of the rotatable gripping members.

Referring to the drawings, in which like reference numerals indicate corresponding parts, 1, indicates a stock adapted to be firmly held either in a machine head, or in a vise where the chuck is employed in shops for threading nipples by means of manually operated threading devices; 2, a solid nipple-holding head detachable from the stock at 3 and held in place by a stud 4 extending centrally therethrough and having a nut 5 thereon; 7, a shoulder upon the head, the forward portion 8 of the head being reduced to receive a nipple blank 9; 10, bored recesses in the head equidistant from and parallel to the axis thereof; the recesses intersecting the cylindrical face of the reduced portion 8; 11, gripping members freely rotatable in the recesses 10, the forward portions 12 being cut away and forming con-

tinuations of the cylindrical face of the portion 8; 13, grooves on opposite sides of the gripping members to provide gripping edges 14 and 15 at the side margins of the cut-away portions 12; 16, inclined ribs upon the gripping members providing outwardly extending engaging means for the nipple at the angle of the shoulder 7 and the reduced portion 8, the ribs being provided with sharp edges 17.

In operation, the gripping members are normally in the position in full lines in the several figures of the drawings, the cut-away portions 12 forming continuations of the cylindrical sides of the reduced portion 8. When the blank nipple is placed upon the reduced portion 8 the inner margin *a* contacts with the sharp edges 17 of the several ribs 16, the blank being thereby accurately centered. As shown, the ribs 16 extend directly outward from the axes of the gripping members and they are disposed midway between the gripping edges 14 and 15, so that upon rotating the nipple blank slightly after contact with the ribs, the gripping members will be caused to rotate simultaneously, the edges on one side of each gripping member being projected outwardly and engaging the inner face of the blank. Upon cutting the thread upon the blank, the turning force thus exerted will cause the gripping edges to enter deeper into the blank and firmly hold the same. To disengage the blank from the chuck after the thread is cut, the same is rotated backward slightly.

By reference to the drawings it will be seen that the gripping edges upon the gripping members are disposed on opposite sides thereof in a plane which cuts the axis of rotation, one-half of each member being cut away. It is also observed that the inclined rib on each member is perpendicular to the plane of the gripping edges. Thus, after the nipple has been placed upon the chuck and contacts with the ribs, by slightly rotating the same, in one direction, the gripping edges on one side of each gripping member will be projected, and by turning the nipple in the opposite direction the gripping edges on the opposite side will be projected. Thus it is seen that the chuck is actuated automatically to hold a nipple to cut either a right or a left thread thereon.

What I claim is:—

1. In a nipple chuck, a stock having a shoulder and a reduced nipple receiving end,

and provided with recesses bored through the shoulder and intersecting the reduced end, gripping members rotatable in said recesses having gripping edges at the sides normally contracted within the face of the reduced end, and outwardly extending ribs upon the gripping members adapted to be engaged by the nipple to rotate said members and project the gripping edges thereon.

2. In a nipple chuck, a stock having a shoulder and a reduced nipple receiving end, and provided with recesses bored through the shoulder and intersecting the reduced end, gripping members rotatable in said recesses provided with gripping edges at the sides, and outwardly extending inclined ribs upon the gripping members disposed at the angle of the shoulder with the reduced nipple receiving end.

3. In a nipple chuck, a stock provided with semi-cylindrical recesses in the sides thereof, and semi-cylindrical gripping members rotatable in said recesses, the side margins of the gripping members being sharpened to provide means for engaging the nipple, and an outwardly extending rib upon each gripping member adapted to be engaged by the nipple to rotate the gripping members and project the sharpened margins thereof.

In testimony, that I claim the foregoing as my own I affix my signature, in presence of two witnesses.

MICHAEL C. SEREN.

Witnesses:

A. L. KNEPPER,
CARL H. KELLER.