

(No Model.)

J. CANNEY.
NIPPLE HOLDER.

No. 524,777.

Patented Aug. 21, 1894.

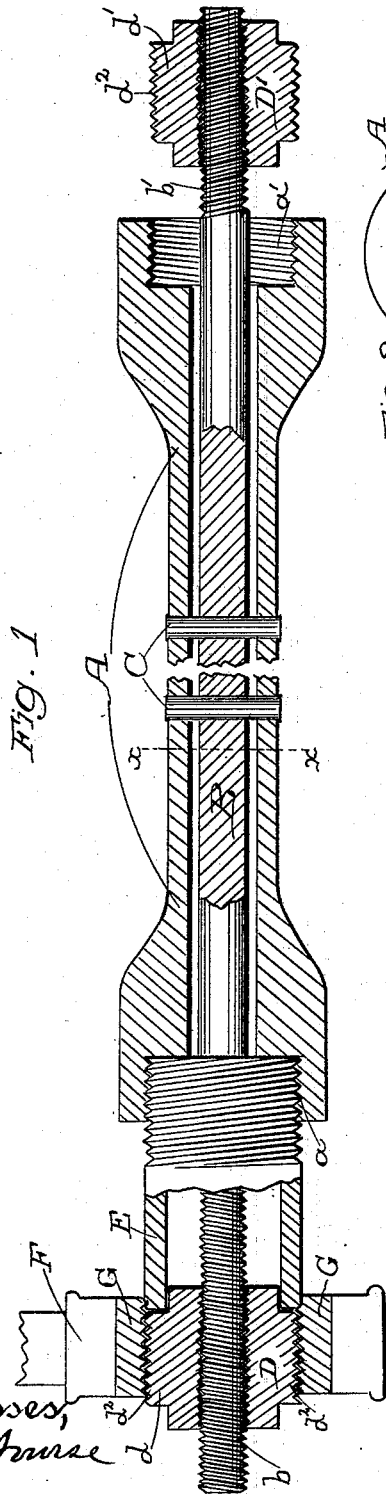


FIG. 1

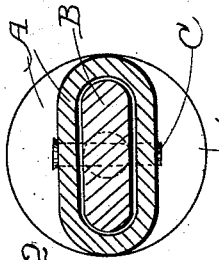


FIG. 2

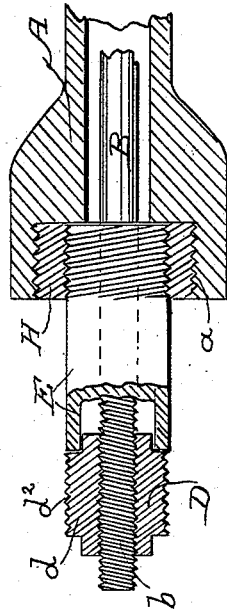


FIG. 3

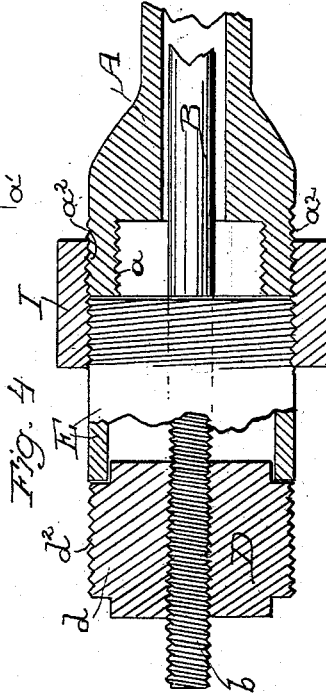


FIG. 4

Witnesses,
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UNITED STATES PATENT OFFICE.

JOSEPH CANNEY, OF BUTTE, MONTANA.

NIPPLE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 524,777, dated August 21, 1894.

Application filed December 11, 1893. Serial No. 493,426. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH CANNEY, a citizen of the United States, residing at Butte city, Silver Bow county, State of Montana, have invented an Improvement in Nipple-Holders; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the general class of screw-thread cutting appliances, and particularly to that nipple holder heretofore patented to me July 25, 1893, No. 502,224, to which said patent reference is hereby made.

My invention consists in certain new and useful improvements in said nipple-holder, said improvements being hereinafter fully described and specifically claimed.

The objects of these improvements are, first, to dispense with what is known as the "leader screw" or "draw thread" and the set screws, of the ordinary die stock by providing means for directing and forcing the die on the nipple without the use of said leader screw or draw thread and set screws, and, second, to adapt the holder for the cutting of different sized nipples, both of which objects will be more fully explained hereinafter.

Referring to the accompanying drawings for a more complete explanation of my invention,—Figure 1 is a longitudinal section of my nipple-holder. Fig. 2 is a central cross section of same on line $x-x$ of Fig. 1. Fig. 3 is a detail section showing the arrangement for smaller nipples. Fig. 4 is a section showing the arrangement for larger nipples.

The hollow stock A, with its internally right-handed threaded socket a at one end, and its internally left-handed threaded socket a' at the other end, is the same in all material respects as in my previous patent. The rod B which is fitted to and passes through the stock and is secured therein by suitable means, as by the cross pin C, is likewise similar to the rod B of my previous patent, said rod having the left-handed threads b and the right-handed threads b' which are the reverse of the threads in the sockets a and a' of the stock at corresponding ends.

The holding nuts D and D' which are seated upon the ends of the rods B are differently constructed from the holding nuts of my previous patent, and in this difference lies my first improvement in the nipple holder.

Instead of having shoulders, which in my former patent were made small enough to avoid the dies by which the thread is cut upon the nipples, the nuts, in my present improved device, are made with shoulders d and d' serving as before to bear on the outer ends of the nipples, but in addition thereto, by being made larger, both in diameter and length, serve to force and guide the dies upon the nipple E. These shoulders have an exterior diameter equal to that of the exterior diameter of the nipple E, and said shoulders are externally threaded, as shown at d^2 , with a pipe thread similar to that which is to be cut upon the exterior of the nipples. This exterior thread d^2 of each nut must correspond in direction to the interior thread of said nut, that is to say, if the interior thread be right-handed, the exterior thread on the shoulder must be right-handed, and if the interior thread be left-handed, the exterior thread on the shoulder must be left-handed. The length of these shoulders should be as long as the thickness of the dies.

In the ordinary die stock used for cutting threads, there is on one side what is termed a "leader screw" or "draw thread" device. It consists of a projection having an exterior thread upon which is seated an internally threaded ring, said ring being fitted with set screws in radial planes on its outside. In threading any sized pipe up to one inch, the die, which is seated in the stock, is forced on by hand; but where larger sizes are to be cut, the die cannot be forced on by hand to cut the thread, and, consequently, this "leader screw" or "draw thread" device has to be used. It is used by running the screw-threaded ring over on to the nipple and securing it by the set screws. This will hold the die stock to the nipple, and then by turning the stock it will advance upon its screw-threaded ring which will thereby cause the die to take hold of the nipple and start the thread. When two or three threads are cut on the nipple, the set screws are loosened, and the die has then hold enough to complete the thread.

I have herein shown the die stock F, with its die G, and I have dispensed entirely with the "leader screw" or "draw thread" device, and the set screws thereof.

The die G, as shown, is seated directly upon and engages with the exterior thread d^2 of the holding nut, and as this thread is on a shoulder which has the same diameter as the nipple, it is obvious that by turning the die stock, the threaded shoulder will lead, guide and force the die accurately and effectively upon the nipple E upon which it will cut the proper thread. Thus the holding nuts D and D' being made with large and wide exteriorly threaded shoulders, serve the purpose of guides and means for forcing the die upon the nipple without the use of the "leader screw" or "draw thread" and the set screws commonly employed.

My second improvement lies in adapting the nipple-holder to cut different sized nipples. This is accomplished by making the threaded socket of the holder with a sufficiently large interior diameter to receive a large sized nipple. Now, to fit it for a smaller sized nipple, a bushing, such as H, is screwed into the socket, said bushing having its threaded interior of a diameter to suit the diameter of the nipple which is fitted to it and upon which the thread is to be cut.

The holding nuts, heretofore described, will be of different sizes to conform to the size of the nipples to be cut, but all adapted to be seated upon the same rod B, and to be used in connection with the same stock A.

In order to cut larger sized nipples than the socket in the stock is adapted for, I cut an exterior thread a^2 on the end of the stock A, and upon this I screw a socket I having its interior threaded, and of a diameter sufficient to receive the size of nipple to be cut.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the stock and rod of a nipple holder, substantially as described,

a holding nut seated on the end of the rod and having a shoulder equal in diameter to the exterior diameter of the nipple against which it bears, said shoulder being exteriorly threaded whereby the die is seated thereon and is guided and forced directly by the shoulder-thread, upon the nipple, substantially as herein described.

2. In combination with the stock and rod of a nipple holder substantially as described, a holding nut seated upon the end of the rod, said nut having a shoulder equal in diameter to the exterior diameter of the nipple against which it bears, and having a length equal to the thickness of the die, said shoulder being exteriorly threaded and adapted to engage the die whereby the latter is guided and forced directly upon the nipple, substantially as herein described.

3. In a nipple holder of the character herein described, the combination of a bushing adapted to be seated in the end socket of the stock of the holder, and holding nuts having exteriorly threaded shoulders with diameters equal to the interior diameters of the several bushings, substantially as herein described.

4. In a nipple holder of the character herein described, the combination of the stock having upon its end the exterior threads, the internally threaded socket seated upon said stock and adapted to receive the nipple end, and holding nuts having exteriorly threaded shoulders with diameters equal to the exterior diameter of the nipples to be cut, substantially as herein described.

In witness whereof I have hereunto set my hand.

JOSEPH CANNEY.

Witnesses:

ED. WRIGHT,
G. A. PATTEN.