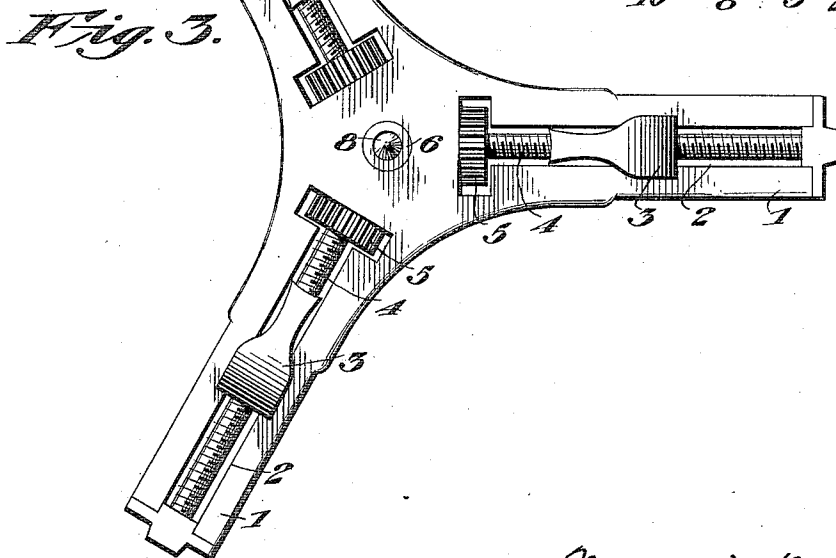
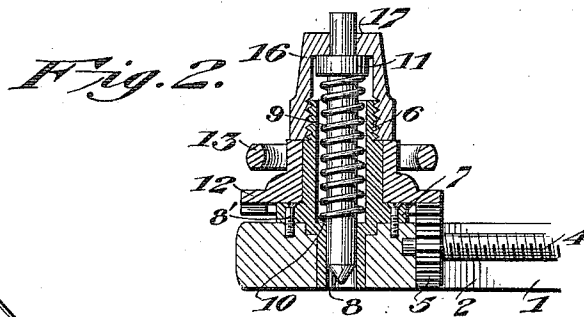
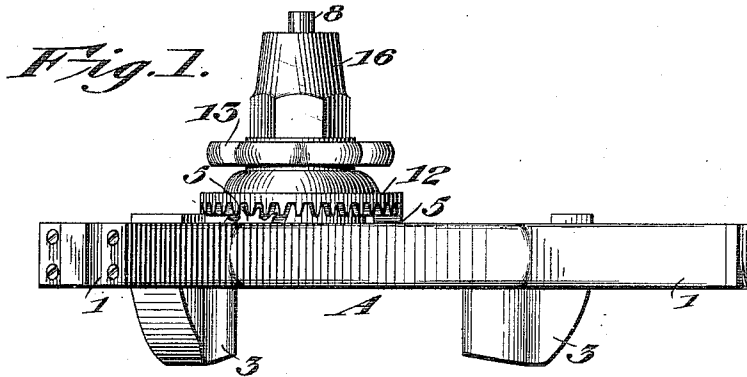


M. H. ONEAL.
 CENTERING DEVICE.
 APPLICATION FILED JUNE 18, 1910.

986,205.

Patented Mar. 7, 1911.



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UNITED STATES PATENT OFFICE.

MAURICE H. ONEAL, OF MILTON, PENNSYLVANIA.

CENTERING DEVICE.

986,205.

Specification of Letters Patent.

Patented Mar. 7, 1911.

Application filed June 18, 1910. Serial No. 567,734.

To all whom it may concern:

Be it known that I, MAURICE H. ONEAL, a citizen of the United States, residing at Milton, in county of Northumberland and State of Pennsylvania, have invented certain new and useful Improvements in Center-Punches, of which the following is a specification.

My invention relates to an improvement in centering devices, and the object is to provide means whereby shafts of different shapes and construction can be held and positioned so that the center of the shaft can be obtained and indicated by the punch.

The invention consists in certain novel features of construction and combinations of parts which will be hereinafter fully described and pointed out in the claims.

In the accompanying drawings:—Figure 1 is a view in side elevation; Fig. 2 is a vertical sectional view; and Fig. 3 is a bottom plan view.

A represents the body, which is preferably provided with three arms 1, 1. Each arm is provided with an elongated slot 2, in which is mounted a sliding jaw 3. Screw-threaded shafts 4 are journaled in the arms and extend the full length of the slots 2. The shafts have a screw-threaded engagement with the jaws 3, whereby upon the rotation of the shaft, the jaws are caused to move. Each shaft is provided at its inner end with a pinion 5. A hollow shaft 6 extends through the body A at the center, and is provided with a base flange 7 which is mounted upon the body A, screws 8' passing through the base flange for holding the shaft in position. A punch 8 is mounted in the shaft, and surrounding the punch is a coil spring 9 which is mounted upon a shoulder 10 formed in the bore of the shaft 6. An annular shoulder 11 is formed on the punch 8, which is engaged by the other or lower end of the spring. A gear wheel 12 is rotatably mounted upon the shaft 6 and is adapted to mesh with the pinions 5. A hand wheel 13 is connected to the gear wheel for rotating it whereby the pinions 5 are rotated, which causes the shafts 4 to rotate, which causes the jaws 3 to be moved through the elongated slots 2. The upper end of the shaft 6 is screw-threaded, and is adapted to receive the cap 16, which is

provided with an opening 17 in the upper end thereof, through which the upper end of the punch 8 extends. The annular shoulder 11 of the punch 8 abuts against the top of the cap to limit the upward movement of the punch after the cap has been screwed upon the shaft 6.

To obtain the center of a shaft, the shaft is placed between the jaws 3, when the gear wheel 12 is rotated, causing the screw-threaded shafts to be rotated for feeding the jaws 3 toward the center of the body of the punch. After the shaft has been properly clamped and centered by the jaws, the punch 8 is struck upon the end which protrudes through the opening 17 in the cap 16, causing the punch to be driven through the shaft 6, and indenting the end of the shaft held between the jaws 3, thereby indicating the center of the shaft, so that the shaft can be placed in the lathe and operated on.

From the foregoing, it will be seen that I have provided a device by which I can readily obtain the center of the shaft to be worked, and which consists of few parts, which can be easily and quickly assembled.

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

1. In a centering device, the combination with a body having arms, jaws slidably mounted on the arms, screw-threaded shafts having screw-threaded engagement with the jaws, pinions on the screw-threaded shafts, of a hollow shaft mounted upon and extending through the body, a spring-controlled punch mounted in the shaft, a gear wheel rotatably mounted upon the shaft meshing with the pinions on the screw-threaded shaft, means for rotating the gear wheel whereby the jaws are moved, and a cap mounted upon the hollow shaft for holding the gear wheel in place.

2. In a centering device, the combination with a body having arms, said arms having elongated slots, of jaws slidably mounted on the arms and received in the slots, screw-threaded shafts journaled in the arms having screw-threaded engagement with the jaws, pinions on the screw-threaded shafts, a hollow shaft mounted upon and extending through the body, a spring-controlled punch

mounted in the shaft, a gear wheel rotatably
mounted upon the shaft meshing with the
pinions, means for rotating the gear wheel
for moving the jaws, a cap mounted upon
5 the hollow shaft having an opening therein
through which the punch protrudes, said
cap adapted to hold the gear wheel in posi-
tion, and means on the punch adapted to en-

gage the cap for limiting the upward move-
ment of the punch. 10

In testimony whereof I affix my signa-
ture, in the presence of two witnesses.

MAURICE H. ONEAL.

Witnesses:

JOHN E. ERWINE,

CHARLES H. ONEAL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
