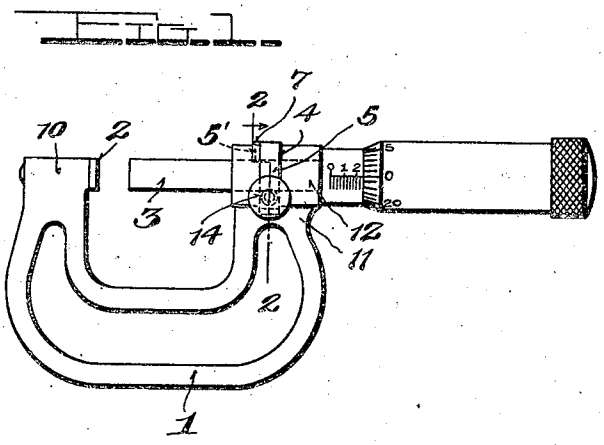
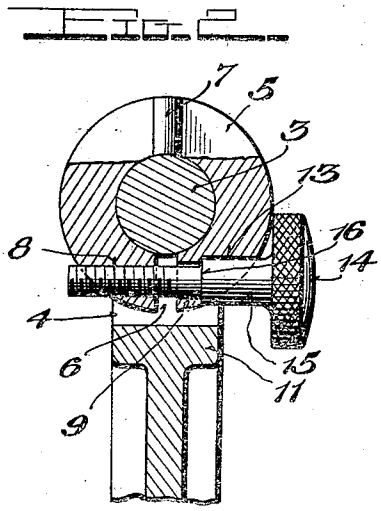
Feb. 27, 1923. 1,446,926.

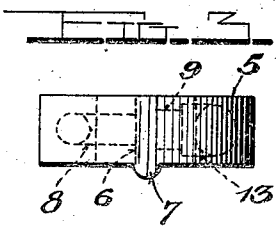
J. W. PARKER.

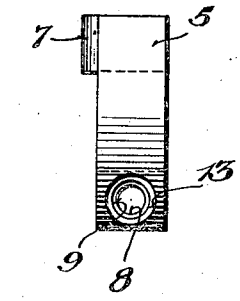
MICROMETER.

FILED MAR. 15, 1922.









John W. Parker INVENTOR.

BY

Joseph A. Miller ATTORNEY.

Patented Feb. 27, 1923. 1,446,926

UNITED STATES PATENT OFFICE.

JOHN W. PARKER, OF BARRINGTON, RHODE ISLAND, ASSIGNOR TO BROWN & SHARPE MANUFACTURING COMPANY, OF PROVIDENCE, RHODE ISLAND.

MICROMETER.

Application filed March 15, 1922. Serial No. 543,932.

To all whom it may concern:

Be it known that I, JOHN W. PARKER, a citizen of the United States, residing at Barrington, in the county of Bristol and State of Rhode Island, have invented new and useful Improvements in Micrometers, of which the following is a specification.

This invention relates to certain new and useful improvements in micrometers and the primary object thereof is to provide improved means for effectually locking the spindle in its adjusted position, and to further provide locking means for the spindle, which upon operation attains locking of the spindle without causing any rotation or movement thereof, so as to thereby not disturb the set adjustment of the spindle.

A further object of the invention is to provide means for the above described purpose which can be easily and quickly operated, which is simple and economical in construction, and which contains a minimum number of parts, and parts not likely to become deranged or rendered inoperative in use.

Further and other objects will be later set forth and manifested in the course of the following description.

In the drawings:

Figure 1 is a side elevation of the invention;

Figure 2 is an enlarged section on line 2—2 of Figure 1;

Figure 3 is a detailed top plan view of the clamping ring; and

Figure 4 is a side elevation of the clamping means.

In proceeding in accordance with the present invention the micrometer depicted in the drawings has the usual frame 1 of yoke form, one arm 10 of which carries the anvil 2 and the opposite arm 11 the rotatable spindle 3.

The arm 11, has the bearing 12 for the spindle 3, the bearing being slotted at 4. One of the walls formed by the cut-out 4 is provided with a recess 5′, the latter located so as to extend through the uppermost arc of the bearing 12. The locking means consists of a clamping ring 5 which latter is split as indicated at 6, and at a point diametrically opposite to the split 6 the inner side of the ring is provided with a radially extending rigid key 7, the latter conformably engaging or received in the recess 5′. In this manner, it will be seen that since the clamping ring is closely fitted in the cut-out 4 of the bearing 12, the same will be held against movement either circumferentially of the spindle, or longitudinally thereof. One end of the ring is perforated and threaded at 8, while the opposite end has a perforation 9, countersunk at its outer end at 13. A screw 14 is employed, which has its threads engaged with the threads of perforation 8, and has an intermediate enlarged part 15, forming a shoulder 16, which latter abuts the wall resultant from the formation of the countersunk portion 13.

It will now be apparent that following adjustment or setting of the spindle 3, the screw 14, is turned to cause the shoulder 16 thereof to impinge against the bottom wall formed by the counterbore 13, whereupon it will be apparent that the two ends of the ring will be drawn together and about the spindle 3, so as to hold the same against all movement, i. e., longitudinal or rotary. Since the clamping ring 5, is held against turning by the key 7 engaging in the recess 5′, it will be seen that the clamping ring cannot turn or rotate, and since the same closely fits in the cut-out 4 for the bearing 12, the ring is held against longitudinal movement. It will furthermore be seen that the locking means is devoid of all other parts likely to become deranged or otherwise rendered unfit for service, and since the key 7 occurs at a point diametrically opposite to the split of the clamping ring, the two ends of the latter are caused to bear with uniform clamping action or pressure on the spindle, thereby to in no way disturb or affect the set adjustment thereof.

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

1. In a micrometer caliper, in combination with a frame having a slotted spindle bearing, one side wall of the slot having a recess extending through the uppermost part of the bearing, a clamping ring fitted in the slot so as to be held against movement longitudinally of the spindle and having a radial key received in the recess, said ring having a split located diametrically opposite to the key thereof, one end of the split ring having a threaded hole and the other end having a counter-sunk hole, and a screw extended through the holes and

threaded into engagement with the threaded hole and having an enlarged part forming a shoulder engaging the bottom wall formed by the countersunk hole.

2. In a micrometer caliper, in combination with a spindle bearing having a cut-out and a recess in one wall formed by the cut-out, a clamping ring fitted in the cut-out and having a key engaging in the recess, the clamping ring being split at a point diametrically opposite to the key, and a screw extended through the split ends of the ring for drawing the ring about the spindle.

3. In a micrometer caliper, in combination with a spindle bearing having a cut-out, a split clamping ring encircling the spindle and arranged in the cut-out, means to hold the ring against rotation, and means connected to each end of the ring for simultaneously drawing the ends of the ring together so as to clamp the latter to the spindle.

4. In a micrometer caliper, in combination with a spindle bearing having a cut-out, a split clamping ring encircling the spindle and arranged in the cut-out, means to hold the ring against rotation, and a screw connected to the split ends of the ring for drawing the latter about the spindle.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN W. PARKER.

Witnesses:
M. A. KINGSLEY,
J. A. MILLER.