

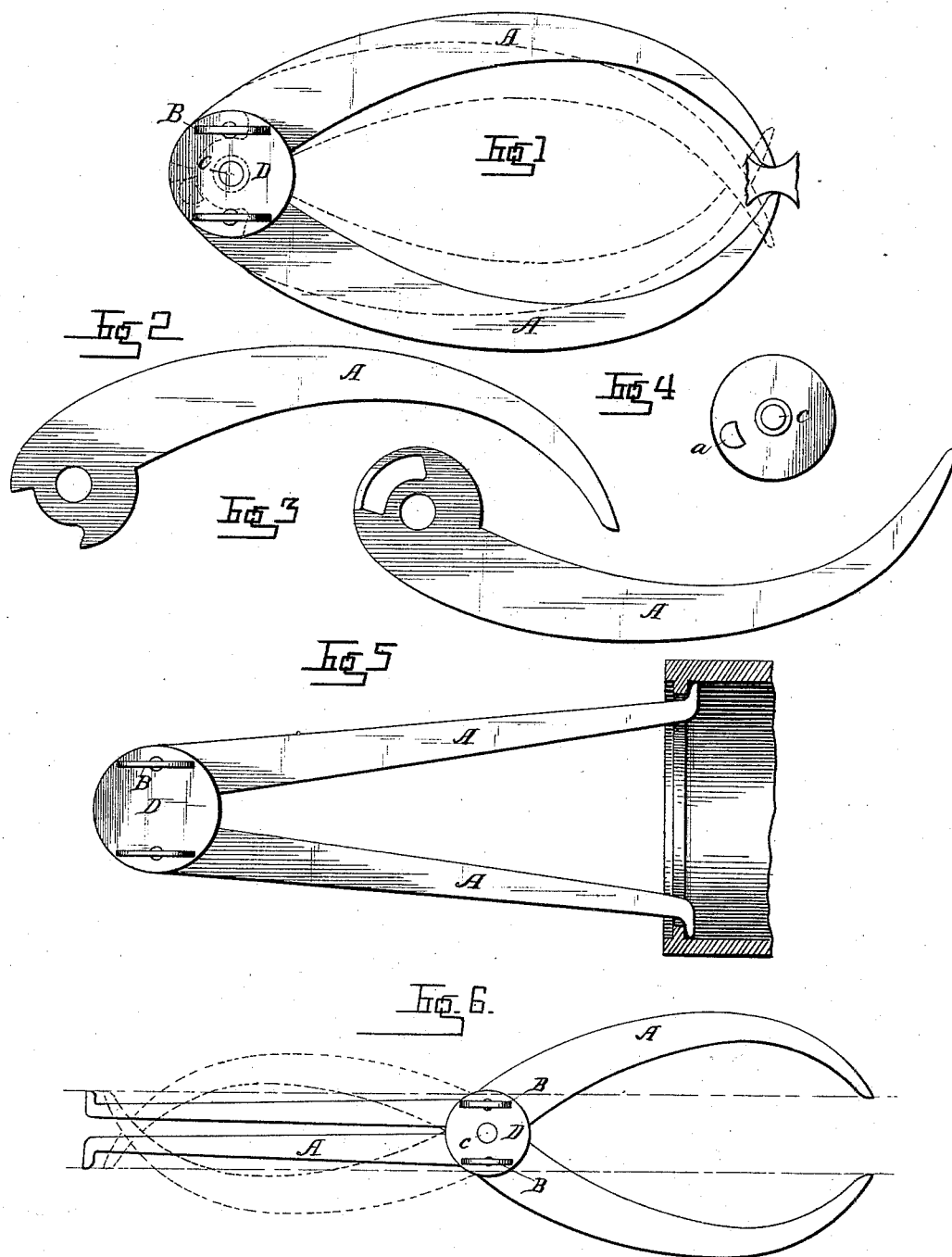
(Model.)

W. P. DODSON.

CALIPERS.

No. 302,685.

Patented July 29, 1884.



Witnesses:
John H. Hinkel
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Inventor:
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UNITED STATES PATENT OFFICE.

WILSON P. DODSON, OF PHILADELPHIA, ASSIGNOR TO HIMSELF, AND
ALEXANDER H. EGE, OF MECHANICSBURG, PENNSYLVANIA.

CALIPERS.

SPECIFICATION forming part of Letters Patent No. 302,685, dated July 29, 1884.

Application filed February 20, 1884. (Model.)

To all whom it may concern:

Be it known that I, WILSON P. DODSON, a citizen of the United States, and a resident of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Calipers, of which the following is a specification.

The object of my invention is to provide an improvement in calipers by means of an inexpensive appliance, the structure of which is so simple and at the same time so readily adjustable to the recording of measurements that the results attained are both rapid and reliable—an end that is indispensable in those cases in which the calipers have to be changed from their enforced position before the measurements can be recorded.

To more fully explain my invention, reference is had to the accompanying drawings and letters marked thereon, which form a part of my specification, in which similar letters refer to like parts in each of the figures.

Figure 1 shows a plan view of my outside calipers complete. Fig. 2 shows the form of one of the arms detached. Fig. 3 is a modification of another possible shape. Fig. 4 shows the hub with one of the disks removed. Fig. 5 shows a plan view of the inside calipers. Fig. 6 shows a modification of the calipers when used both for outside and inside measurements by the use of the same instrument.

A A are the legs, more or less curved, or of such other form as may be most desirable or convenient, and revolving upon a pivot, D, as ordinarily. The legs A A are furnished at their pivotal extremities with slotted or re-entrant shoulders to bear upon a lug, a, whose functions in turn limit the lateral range of the legs. When the calipers are used to take a measurement, the one leg is rotated on its pivot c until one of the shoulders of the leg abuts against the lug a, when said leg is clamped fast thereto by the screw B. The other leg is then rotated toward the former until the space included between the two free ends of the legs corresponds with the measurement required, when said latter leg is also clamped fast thereto. The former or lug-en-

gaging arm is then released from its clamped position, and the legs are separated to the degree required to disengage the calipers from the object measured, when the unclamped leg is again brought back to contact with its lug, and clamped fast again thereto. The position in which the legs A A are now clamped records the required distance or measurement. The same instrument may be used as an inside caliper, the parts being arranged substantially as shown in dotted lines, Fig. 1.

In Fig. 6 I have shown a modification in which the same instrument may be used both for outside and inside measurements simultaneously, without taking separate measurements respectively.

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

1. In calipers, a hub provided with one or more stops or lugs, two pivoted arms with shoulders adapted to be brought against said lug or lugs, and eccentrically located clamps, whereby either or both arms may be fixed after adjustment.

2. The combination, with the hub and arms of calipers, of one or more stops which may be brought against shoulders of one or the other of the arms after it is set, and means for clamping said stop in position to serve as a guide for resetting the arm, substantially as set forth.

3. In calipers, a disk provided with a stud, an arm pivoted to the disk and having a cut-away portion, the sides of which are adapted to bear against the stud, and another arm having a cut-away portion, and means for securing it in position, as set forth.

4. In calipers, the combination, with a pivoted arm and means for clamping it in position, of another arm adapted to be adjusted to a desired position and there secured, the first arm being also adapted to be unclamped and moved from its first clamped position to allow the removal of the calipers from the thing calipered, and to be restored to its said first clamped position again, thereby indicating the measurement of the thing calipered.

5. In calipers, the combination, with a

pivoted arm, of means for clamping said arm,
and another arm capable of being adjusted for
measuring distances, so constructed that the
first arm may be moved from its first position,
5 allowing the removal of the calipers, and re-
turned to its said first position after the cali-
pers are so removed.

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

WILSON P. DODSON.

Witnesses:

OSCAR R. MEYERS,
CHAS. N. DUNHAM.