(No Model.)

W. J. & A. W. HOUCK.

TRAMMEL POINT FOR BEAM COMPASSES.

No. 510,139. Patented Dec. 5, 1893.

Fig. 2.

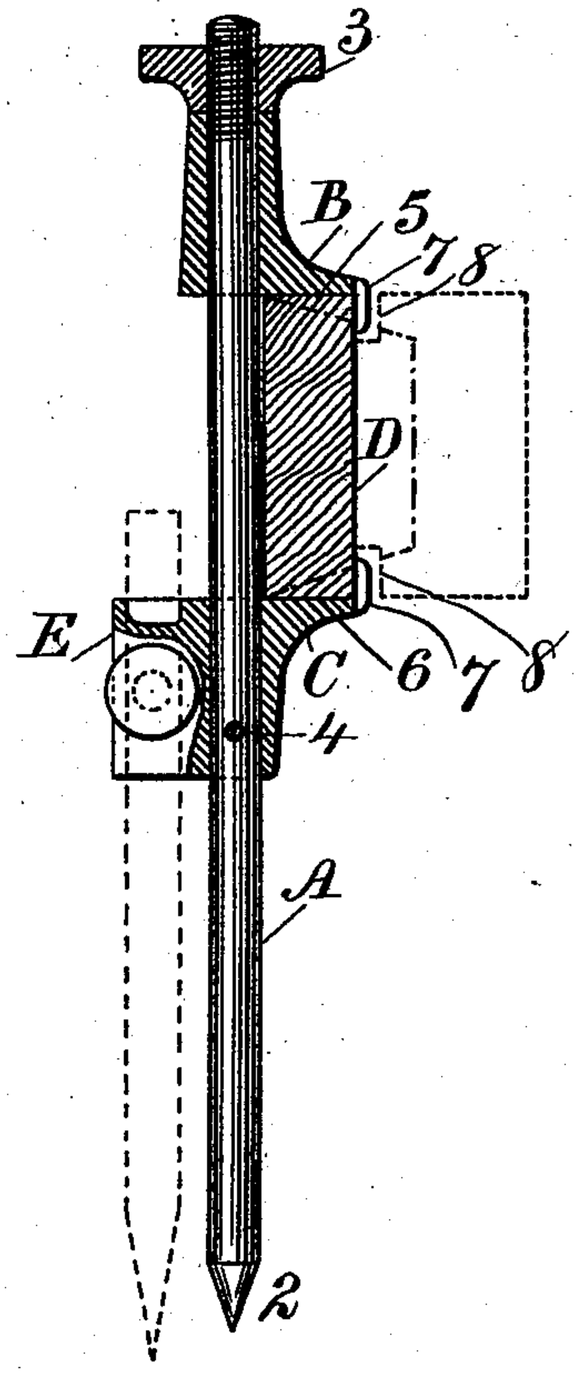


Fig. 1.

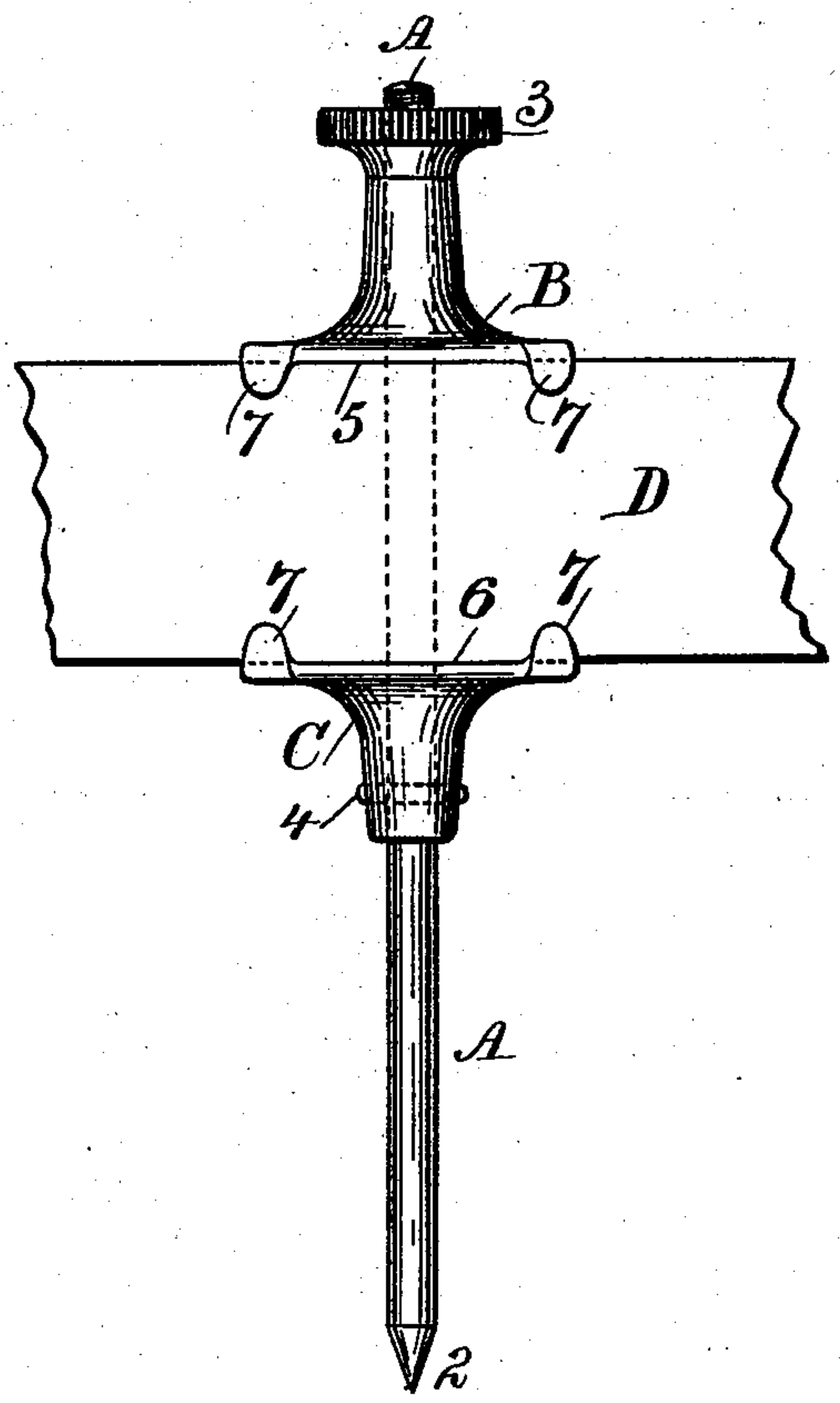
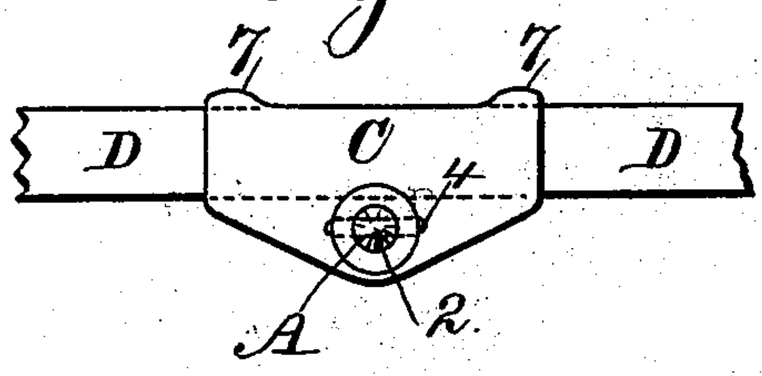


Fig. 3.



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WILLIAM J. HOUCK AND ARLINGTON W. HOUCK, OF NEWARK, NEW JERSEY.

TRAMMEL-POINT FOR BEAM-COMPASSES.

SPECIFICATION forming part of Letters Patent No. 510,139, dated December 5, 1893.

Application filed June 19, 1893. Serial No. 478,068. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM J. HOUCK and ARLINGTON W. HOUCK, citizens of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented an Improvement in Trammel-Points, of which the following is a specification.

Architects, builders, carpenters, and others, frequently employ a bar or strip of wood to which are connected points to be used in measuring or in describing circles or arcs of circles, and sometimes the points are both made of metal and sometimes one point is provided with a pencil. Difficulty has heretofore been experienced in constructing the points in such a manner as to be adapted to bars that are sufficiently heavy for trammels of considerable length or sufficiently light for short lengths, and in addition to this the clamping devices that have connected the points with the bars are very liable to injure the surface of the wood of the bar, and this is objectionable not only in the matter of appearance but also the depressions resulting from the pressure of the clamping screws are liable to interfere with the easy and accurate adjustment of the points upon such bar.

In the present invention we make use of two similar clamps to act at opposite edges of the trammel or beam and a rod or bar passes through these clamps and at one side of the beam and terminates with a screw and nut, and the other end of the rod is formed as a point. By this means the clamps act directly upon the rod forming the point and also upon the edges of the bar or beam to clamp the same, and the extent of surface is sufficient to prevent injury to the wood of the beam or bar, and the clamping devices are adapted to bars that are either light or heavy according to their length; and in cases where a pencil is required, a tube or socket for the reception of the same is provided adjacent to the trammel point and preferably upon one of the clamps.

In the drawings, Figure 1 is an elevation of the trammel point and a portion of the bar. Fig. 2 is a view of the trammel point sectionally of the bar. Fig. 3 is a plan view endwise of the point.

The point of the rod A is preferably of steel sharpened at the end 2 and screw threaded at the other end for the reception of the nut 3, and this rod A passes through the clamps B and C and it is secured to the clamp C by any suitable means, such for instance as a cross pin 4, and the surfaces 5 and 6 are adapted to rest upon and grasp the opposite edges of the trammel or beam D which may be of any desired length and of sectional shape adapted to the surfaces 5 and 6 of the clamps B and C.

If desired the surfaces 5 and 6 may be at a slight inclination as shown by dotted lines in Fig. 2 so that the trammel or beam D may be triangular or trapezoidal in section and hence may be of any desired width to obtain the required strength; we have however represented the claws 7 upon the back edges of the clamps B and C, which claws pass down either behind the back surface of the trammel or beam D or into grooves in the opposite surface of such trammel or beam, as indicated by the dotted lines at 8. By this construction the trammel points are adapted to the trammel or bar which may be made use of, and the nut 3 acting to press the clamps toward each other, causes their surfaces 5 and 6 to grasp and firmly bind upon the opposite edges of the trammel or beam D, and the extent of surface contact is sufficient to prevent the wood of the trammel being dented or injured by the compressing action of the nut; hence these improved trammel points are adapted to bars or trammels of ornamental wood with highly finished surfaces without the risk of injury.

At E we have represented a tube connected with the clamp C and adapted to receive a pencil passing through the same, as indicated by the dotted lines.

It is to be understood that with a beam compass two of the trammel points, as before described, are made use of and that both may be adapted to the reception of pencils, or only one, or in cases where pencils are not required the tube E may be dispensed with.

We claim as our invention—

1. The combination with the rod A pointed at one end and screw threaded at or near the other end, of the clamps B and C through which the rod A passes and which clamps have surfaces 5 and 6 adapted to engage and clamp

upon the opposite faces of the trammel or bar, and the nut 3 for acting upon the movable clamp, substantially as set forth.

2. The combination with the trammel or beam, of a rod adapted to pass across at one side of the same, two clamps upon said rod one of which is permanently connected, and a nut screwed upon the rod to act upon the other clamp, such clamps having surfaces adapted to grasp the trammel or beam at the opposite edges thereof, substantially as set forth.

3. The combination with the trammel or beam, of a rod adapted to pass across at one side of the same, two clamps upon such rod one of which is permanently connected, a nut screwed upon the rod to act upon the other clamp, such clamps having surfaces adapted to grasp the trammel or beam at the opposite edges thereof, and projecting claws to pass down at the back of the trammel near the edges thereof, substantially as set forth.

Signed by us this 14th day of June, 1893.

WM. J. HOUCK.
ARLINGTON W. HOUCK.

Witnesses:
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