

(No Model.)

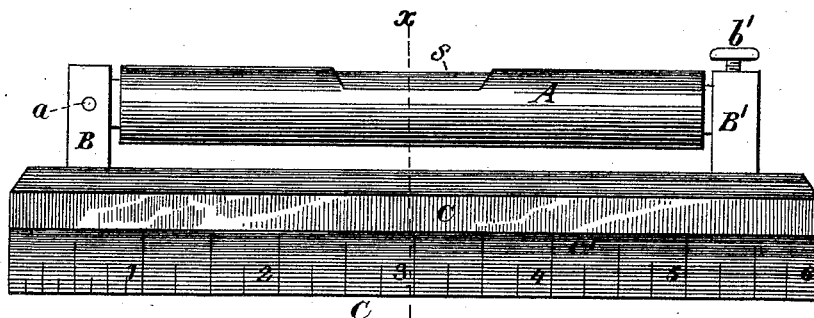
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## APPARATUS FOR LEVELING AND MARKING SHAFTS.

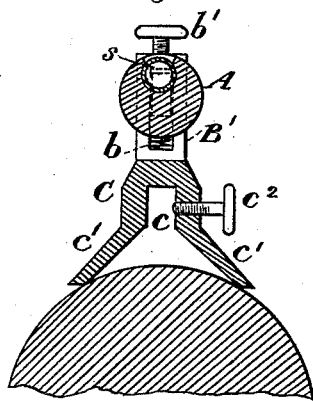
No. 423,094.

Patented Mar. 11, 1890.

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

A. Ruppert.

H. A. Daniels

*Inventor:*

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# UNITED STATES PATENT OFFICE.

EDWARD HENRY TAYLOR, OF PATERSON, NEW JERSEY.

## APPARATUS FOR LEVELING AND MARKING SHAFTS.

SPECIFICATION forming part of Letters Patent No. 423,094, dated March 11, 1890.

Application filed December 3, 1888. Serial No. 292,556. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD HENRY TAYLOR, a citizen of the United States, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Implements for Leveling and for Marking Shafts for Millwrights and Machinists; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to implements for leveling shafts and other parts of machinery also for marking shafts to lay out key-seats to be cut therein; and the invention consists in an improved construction of a combined level and shaft-marker, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a side view of my improved device. Fig. 2 is a vertical section taken on line  $x x$  of Fig. 1.

A designates a level-holder in which is mounted a spirit-level, the said holder having one end pivoted at  $a$  to a pillar B, the opposite end being adjustably secured in a slot  $b$  in the pillar B' by a screw  $b'$ . The pillars B B' are mounted on a base C, and are preferably cast solid therewith. As shown in the drawings, the said base is provided with a central groove  $c$  and the diverging legs or side parts  $c'$ , the latter extending outward at a right angle with each other. On the outside of one or both of the sides  $c'$  is formed a scale, marked in inches and fractions thereof, so that the device may be used as a gage in laying out key-seats to be cut in shafts. The purpose of the groove  $c$  is to receive a blade

of a carpenter's square, which, when placed therein, is secured by the screw  $c^2$ . When thus adjusted, the implement may be used for the purpose of a plumb-bob. An ordinary straight-edge may also be inserted and secured in the groove  $c$ , and the implement may then be used in leveling the insides of cylinders.

A millwright or machinist in leveling shafting can place the implement on a shaft and leave it there while he levels the shaft, handling the latter with both hands and at the same time observing the level  $s$ . The level may be used for several similar purposes, as steam-pipe fitting, &c.

When it is desired to lay out a key-seat to be cut in a shaft, the implement is placed longitudinally on the shaft, and the workman, using a scriber, marks on the shaft the length of the key-seat from the scale on the side of the implement, and then marks the parallel lines within which the cutting is to be done, using the straight-edge of the leg or side part of the base C as a guide for his marking-tool, thus dispensing with a separate rule for the purpose.

In practice my device is found to be a great convenience to millwrights, machinists, and steam-pipe fitters.

I claim—

A tool consisting of a level-holder and a level which is mounted therein, a base provided with a central groove  $c$ , divergent side parts  $c'$ , a side screw  $c^2$ , and a scale marked along the edge of a side part, and pillars B B', which support the level-holder, substantially as set forth and described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD HENRY TAYLOR.

Witnesses:

JESSE ASPINALL,  
JOHN HARDMAN.