(Model.)

B. F. TYLER.

SPIRIT LEVEL.

No. 310,154. Patented Dec. 30, 1884.

Fig. 1.

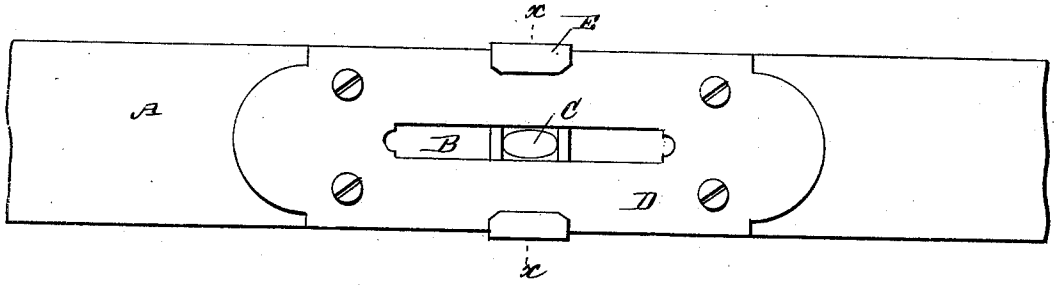


Fig. 2.

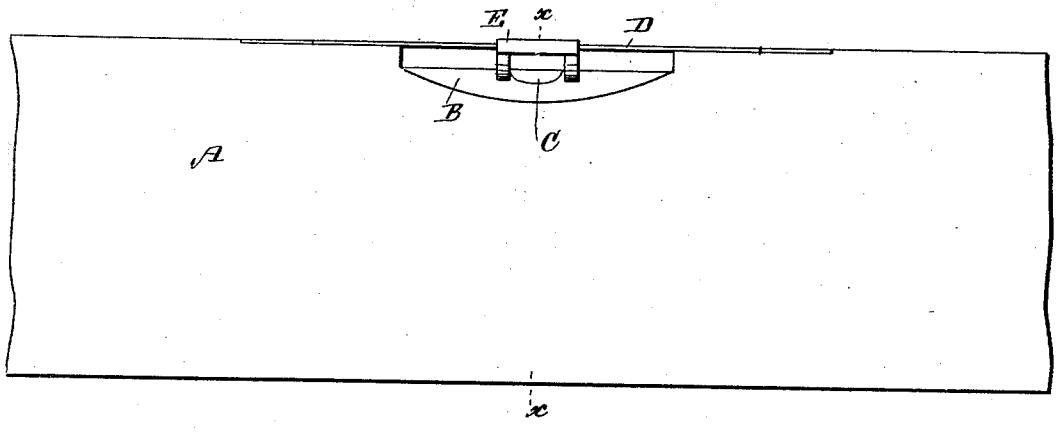
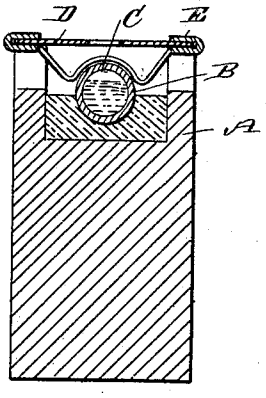


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

BENJAMIN F. TYLER, OF SALEM, NEW JERSEY.

SPIRIT-LEVEL.

SPECIFICATION forming part of Letters Patent No. 310,154, dated December 30, 1884.

Application filed July 31, 1884. (Model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. TYLER, of Salem, in the county of Salem and State of New Jersey, have invented certain new and useful Improvements in Levels, of which the following is a full, clear, and exact description.

The object of my invention is to provide certain new and useful improvements in levels, whereby the taking of levels, inclinations, &c., is greatly facilitated.

The invention consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the level provided with my improvement. Fig. 2 is a longitudinal view of the same. Fig. 3 is a cross-sectional elevation on the line *x x*, Fig. 1.

In the level tube or bar A the spirit-tube B is held, in which an air-bubble, C, is produced in the usual manner. A guard-plate, D, is secured on the bar or tube A over the spirit-tube B. On the guard-plate D a slide, E, is held, which extends partly or entirely over the spirit-tube, and is very close to or in contact with the same. The width of the slide is equal to the length of the bubble C, or the slide can be provided with a slot equal in length to the length of the bubble. The slide can be so adjusted that the ends of the slot coincide with the ends of the bubble when the level is absolutely level, whereby the taking of true and exact levels is facilitated. If two inclined surfaces are to be arranged precisely parallel, the level is placed on one of them, and the slide E is so adjusted that it will be over the bubble in the spirit-tube. The slide remains in this position, and the other surface is then so adjusted or arranged, planed, cut, or subjected to any other treatment until the bubble of the spirit-tube is below the slide—that is, in the same position as on the other surface.

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

1. The combination, with a spirit-level, of a slide extending transversely across the spirit-tube, and adapted to be moved in the direction of the length of said tube, substantially as herein shown and described.

2. The combination, with a spirit-level, of a slide extending transversely across the spirit-tube, and provided with a slot of the same length as the bubble in the tube, substantially as herein shown and described.

3. The combination, with a spirit-level tube and its guard D, of the slide E, having its ends bent over the side edges of the guard, substantially as herein shown and described.

BENJAMIN F. TYLER.

Witnesses:
J. M. LIPPINCOTT,
GEORGE HITCRAFT.