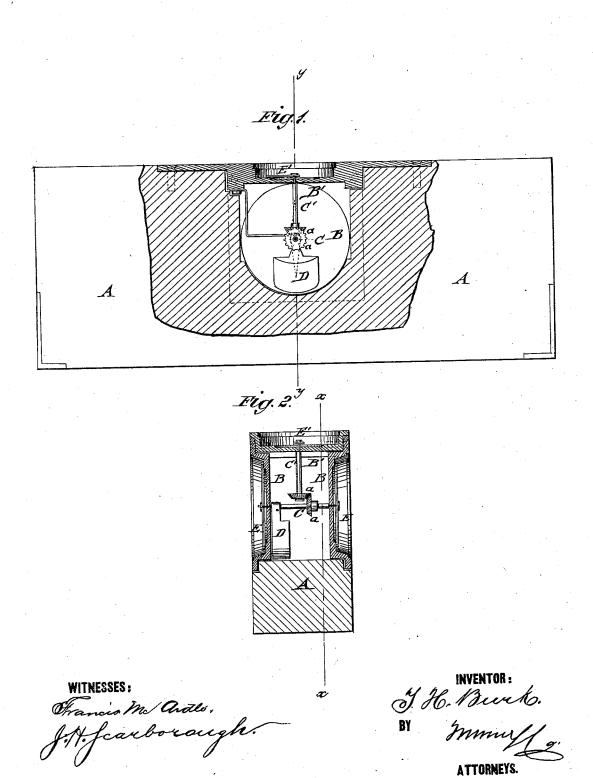
T. H. BURK.

LEVEL.

No. 189,079.

Patented April 3, 1877.



UNITED STATES PATENT OFFICE

THOMAS H. BURK, OF NEW YORK, N. Y.

IMPROVEMENT IN LEVELS.

Specification forming part of Letters Patent No. 189,079, dated April 3, 1877; application filed February 17, 1877.

To all whom it may concern:

Be it known that I, THOMAS H. BURK, of the city, county, and State of New York, have invented a new and Improved Level and Plumb, of which the following is a specifica-

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of my improved level and plumb on line x x, Fig. 2; and Fig. 2, a vertical transverse section of the same on line y y, Fig. 1.
Similar letters of reference indicate corre-

sponding parts.

This invention relates to an improved level and plumb that admits of convenient observation from top and side during use; and it consists of a level and plumb having indicators, which are operated by a weight hung to the center shaft of the side indicators, and working at the same time a top indicator by bevel-gear connection.

In the drawing, A represents the levelingrule, which is recessed at the center to insert side dials B and a top dial, B', secured to the side dials. The indicators or hands E of the side dials B are attached to a lateral shaft, C, so as to be worked jointly by the same, the shaft being provided with a pendent weight, D, whose center of gravity is in line with the indicators E, so that they indicate, in the customary manner, any deviation from the horizontal on the dials. The shaft C connects, by

conical wheels a a, with a vertically-supported shaft, C', that passes through the top dial, and carries an index-hand, E', at the upper end, which hand is in line with the side indicators when they are in vertical position, but follows the motions of the side hands in exact manner, so as to instantly indicate whether the rule is in level or plumb position or not. The joint working of the index-hands facilitates the use of the implement, as the positions of the hands may be seen at a glance from the side or top without necessitating stooping down to observe the side indicators. The level and plumb is thereby more readily and conveniently used, being always in working order, and not exposed to the influence of the weather, as the spirit-level, being quick in operation and protected against dust and dirt by glass faces of the side and top dials.

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

An improved level and plumb, having weighted side indicators and a jointly-working top indicator, whose shaft is connected by bevel-gearing with the weighted shaft of the side indicators, substantially in the manner and for the purpose set forth.

THOMAS H. BURK.

Witnesses:

PAUL GOEPEL, C. SEDGWICK.