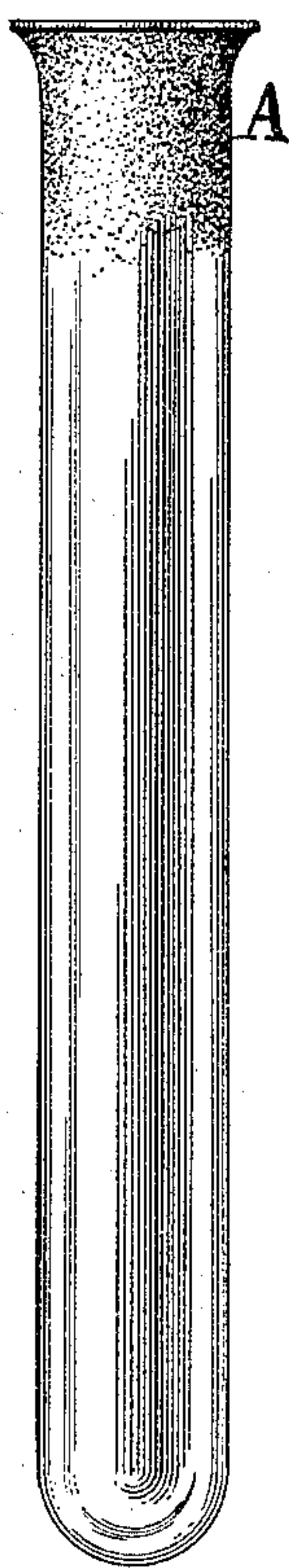


(No Model.)

J. C. WHARTON.  
TEST TUBE.

No. 431,132.

Patented July 1, 1890.



*Witnesses:*

*Wm. H. Wharton*  
*J. B. Page*

*Inventor:*

*J. C. Wharton*

# UNITED STATES PATENT OFFICE.

JOHN C. WHARTON, OF NASHVILLE, TENNESSEE.

## TEST-TUBE.

SPECIFICATION forming part of Letters Patent No. 431,132, dated July 1, 1890.

Application filed October 21, 1889. Serial No. 327,741. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN CRIDDLE WHARTON, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Test-Tubes, of which the following is a specification.

My invention relates to improvements in test-tubes, whereby a roughened surface may be given to the outer side, and, when desired, the same part of the test-tube may be stained or enameled. The roughening may be accomplished by any suitable process, such as etching with acid, grinding, or by means of the "sand-blast," &c. The enameling, when done, should precede the roughening.

The drawing shows one of my improved test-tubes roughened on the part A.

The objects of this improvement are to provide a test-tube (or test-tubes) with a roughened surface, (or surfaces,) upon which marks or writing may be made with an ordinary pencil or other suitable instrument, in order to label the test-tube easily, to denote its contents during experimental or analytical work, and to provide for the easy removal of the marks or labels after they have served their purposes; also, in certain cases to provide for greater visibility of the writing upon the tubes by enameling or staining the glass upon which the roughening process is to be performed.

This improvement is designed to furnish a useful substitute for paper labels, in not being liable to be scorched or burned, or to be effaced or obscured by the contact of acids, &c., which paper labels are incapable of withstanding, the paper labels being, moreover, more inconvenient to attach and remove when necessary.

The manner in which this improvement will affect the test-tubes is clearly shown in the accompanying drawing, which is a view in perspective, the shaded band at the upper part of the tube representing the roughened or ground surface, as well as the portion enameled when the latter object is carried out.

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

1. A test-tube having a ground or roughened external surface, for the purpose specified, substantially as set forth.

2. A test-tube having a part or the whole of its external surface enameled and roughened or ground, substantially as described.

J. C. WHARTON.

Witnesses:

RUFÉ M. FIELDS,  
F. RODER.