

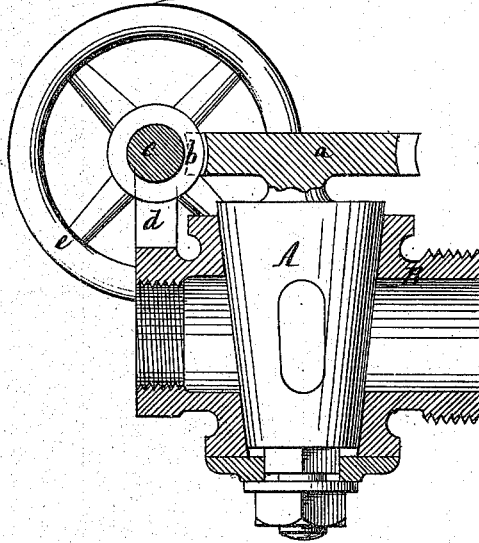
*W. Haas,*

*Stop Coat.*

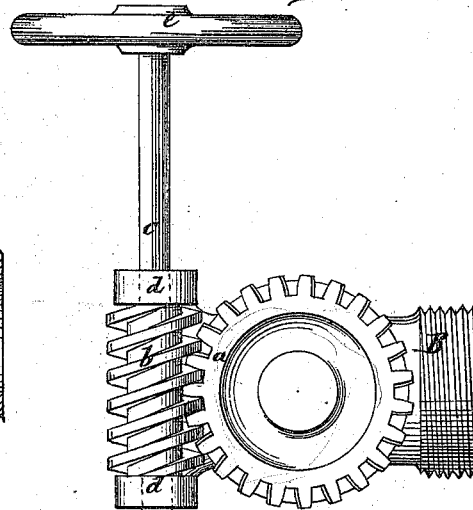
*No. 112450.*

*Patented Mar. 7, 1871.*

*Fig. 1.*



*Fig. 2.*



*Witnesses.*  
*E. F. Hastenhuber*  
*G. Wahlers*

*Inventor.*  
*William Haas*  
*per*  
*Van Santvoord & Hauff*  
*Attors*

# United States Patent Office.

WILLIAM HAAS, OF NEW YORK, N. Y.

Letters Patent No. 112,450, dated March 7, 1871.

## IMPROVEMENT IN STOP-COCKS AND VALVES.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern :*

Be it known that I, WILLIAM HAAS, of the city, county, and State of New York, have invented a new and useful Improvement in Stop-Cocks and Valves; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a vertical section of this invention as applied to a stop-cock.

Figure 2 is a plan or top view of the same.

Similar letters indicate corresponding parts.

This invention relates to stop-cocks, and consists of a certain arrangement of parts, as will hereinafter be more fully set forth.

In the drawing—

The letter A designates the plug or stop-cock, which is fitted into the shell B in the usual manner.

To said plug is secured a worm-wheel, *a*, which gears in a worm, *b*, mounted or formed on a spindle, *c*, which has its bearings in lugs *d* cast with or otherwise firmly connected to the shell B.

On the end of the spindle *c* is secured a hand-wheel, *e*, which serves to rotate the same, and, as the spindle is turned, a slow but powerful motion is imparted to the plug A, so that said plug can be opened or closed with comparative ease, even if it works very hard, or if it is liable to stick.

In order to be able to turn plug A, or to move the valve C toward or from its seat with sufficient speed, the worm *b* may be made with a double or triple thread, and the thread on the valve-spindle E may also be double or triple. These changes, however, would not change the operation of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

The plug A of the stop-cock, fitted into the shell B and carrying the worm *a*, arranged and operating in connection with the worm *b* upon the spindle C, which has its bearings in the lugs *d* of the shell B, as herein shown and described.

WM. HAAS.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.