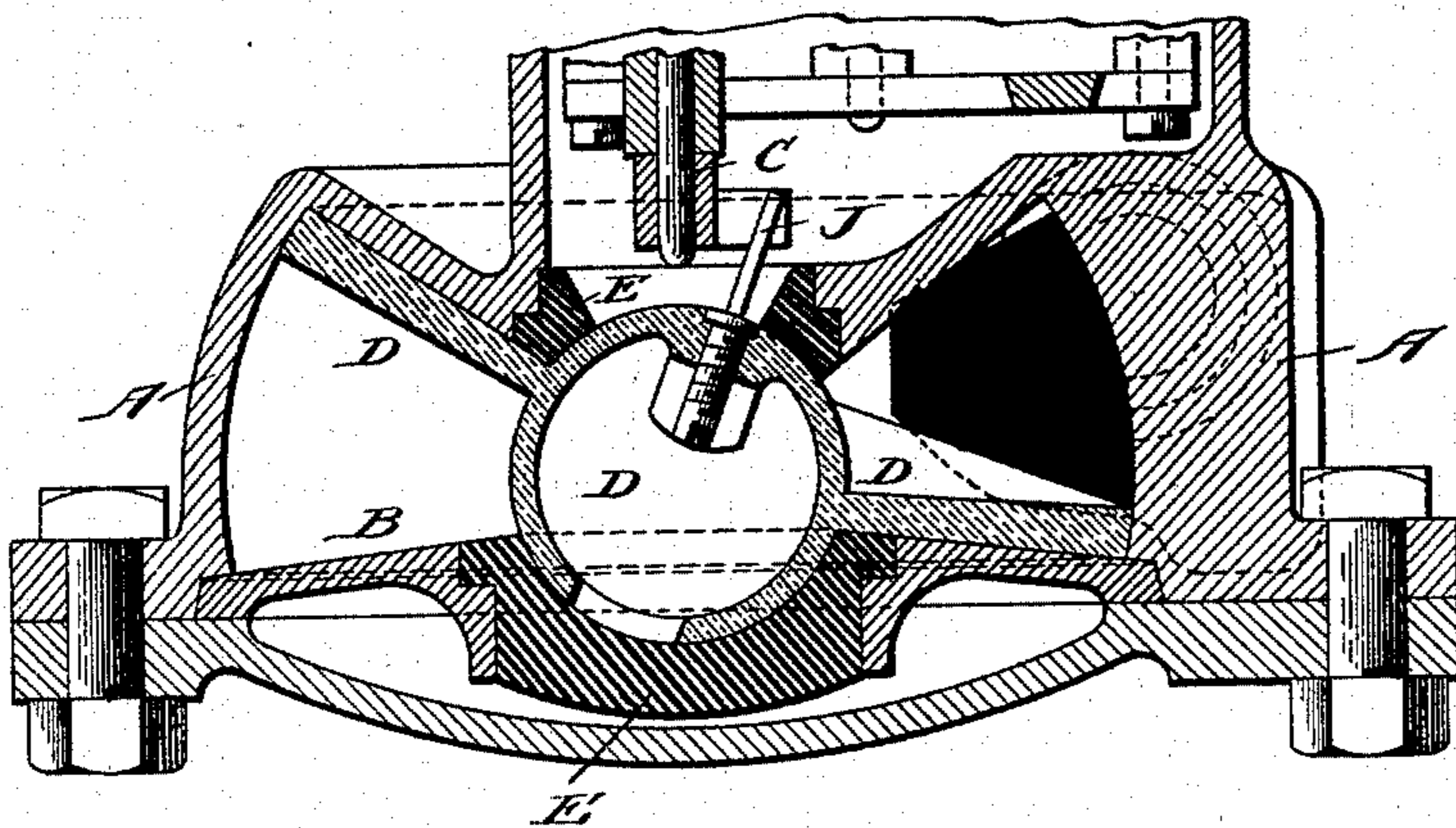


(No Model.)

L. H. NASH.  
WATER METER.

No. 527,537.

Patented Oct. 16, 1894.



Witnesses

Amey A. Johnson  
Edwin L. Bradford

Inventor  
Lewis H. Nash  
By <sup>att</sup>Johnson  
his Attorneys.

# UNITED STATES PATENT OFFICE.

LEWIS HALLOCK NASH, OF SOUTH NORWALK, CONNECTICUT, ASSIGNOR TO  
THE NATIONAL METER COMPANY, OF NEW YORK, N. Y.

## WATER-METER.

SPECIFICATION forming part of Letters Patent No. 527,537, dated October 16, 1894.

Original application filed July 23, 1891, Serial No. 400,440. Divided and this application filed November 2, 1893. Serial No. 489,832. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS HALLOCK NASH, a citizen of the United States, residing at South Norwalk, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Water-Meters, of which the following is a specification.

My present invention consists of certain novel parts and combinations of parts specifically pointed out in the claim concluding this specification.

For the purpose of informing those skilled in the art of the nature of my invention I have in the accompanying drawing shown a meter involving the same in the form which is at present preferred by me, which read in connection with the following description will enable persons skilled in the art to make and use the same; but it will be understood that my invention is not limited to the precise forms shown and that various modifications may be adopted without exceeding the scope of the claim.

The following is a description of the structure illustrated in said drawing.

A B is a meter case of well known general form. C is a shaft by which the motion of the piston is communicated to the registering mechanism. The case is made of metal and preferably of a non-corrosive material, such as bronze.

E E are the seats of the ball of the piston made of a non-metallic material, as hard rubber, lignum vitæ, vulcanized fiber, &c. I prefer to make these seats removably attached to the case so they can be replaced when damaged or worn out.

D is a nutating piston made entirely of non-corrosive metal provided with a pin J connecting it with the registering mechanism through the shaft C.

In a pending application for Letters Patent of which this is a division, filed by me July 23, 1891, bearing Serial No. 400,440, I have described, among other forms, the structure

above set forth and in such application I have broadly, but not specifically claimed such structure.

The disks of commercial nutating meter pistons heretofore have been made comparatively fragile and liable to break. By making the disk of metal I altogether avoid this difficulty. However, if both piston and case were made entirely of metal the friction and wear resulting would make the structure of little or no value as a practical water meter. As the principal friction surfaces are at the ball of the piston and its seat in the case by making the ball of metal and its seat in the case of a non-metallic material the friction and wear become very slight.

In the foregoing specification I have incidentally referred to some of the modifications which may be adopted in the practice of my invention, but I have not endeavored to specify them all, and I desire it to be distinctly understood that mention by me of some modifications is not in any way intended to exclude others not referred to but which are within the spirit and scope of my invention.

All the details illustrated and above described are not essential to the several features of my invention separately considered. This will be indicated in the concluding claim where the omission of an element or the omission of reference to the detailed features of the elements mentioned is intended to be a formal declaration of the fact that the omitted elements or features are not essential to the invention therein covered.

What I claim is—

In a water meter, the combination of a piston composed of a ball and disk, both made of metal with a case made of metal and a seat for the ball made of non-metallic material.

LEWIS HALLOCK NASH.

Witnesses:

J. EDGAR BULL,  
M. WILSON.