

No. 695,589.

Patented Mar. 18, 1902.

O. O. STORLE.
VALVE.

(Application filed July 8, 1901.)

(No Model.)

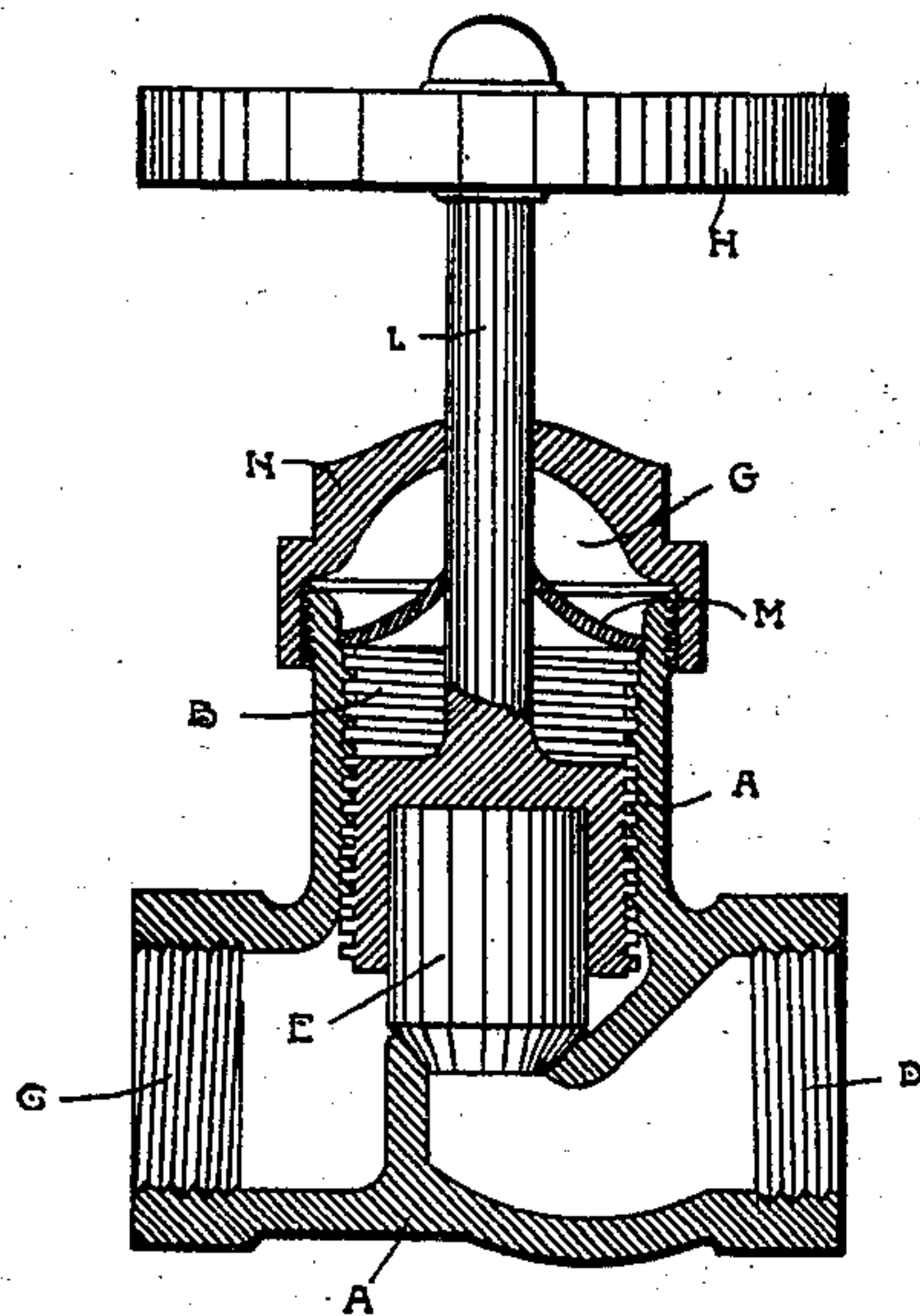


FIG. 1

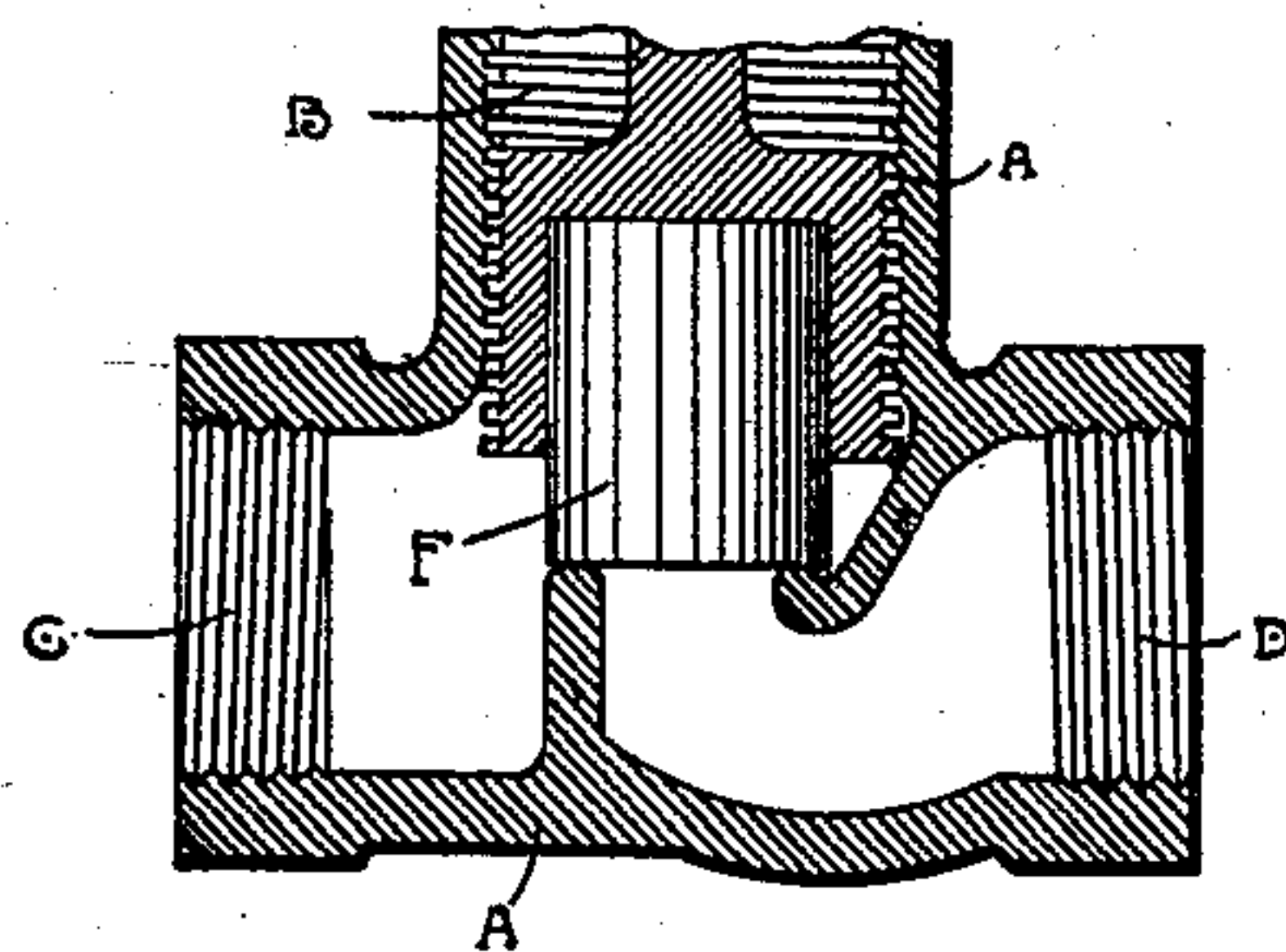


FIG. 2

WITNESSES

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OLE O. STORLE, OF TACOMA, WASHINGTON.

VALVE.

SPECIFICATION forming part of Letters Patent No. 695,589, dated March 18, 1902.

Application filed July 8, 1901. Serial No. 67,501. (No model.)

To all whom it may concern:

Be it known that I, OLE O. STORLE, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, (my post-office address being Tacoma, Wash-
5 ington,) have invented certain new and useful Improvements in Valves, of which the following is a specification.

My invention pertains to valves that are
10 used to control the flow of steam, air, gases, liquids, &c., through pipes and faucets.

The objects of my invention are, first, to provide a valve gate or disk that will fit closely, not get loose, and will be as durable
15 as the body of the valve, and, second, to provide an improved packing-chamber for the valve-shaft. I attain these objects by means of the device illustrated in the accompanying drawings, in which—

20 Figure 1 is a sectional drawing through the center of my invention, showing the construction of the improved disk and packing-chamber. Fig. 2 is a partial section of my invention, showing a flat-faced disk in the valve.

25 Similar letters refer to similar parts in each figure.

My invention comprises a valve-body A of a form similar to other valves and has interior screw-threads cut the full length of the
30 neck thereof, as seen at B in Fig. 1. Threads are also cut into the right and left ends of the valve, as seen at C and D, in order that the pipes may be connected therewith. My valve is also designed to be used in cocks and bibs
35 or other fixtures.

The novelty of my invention is in the wood disk or gate E, Fig. 1, and as seen at F, Fig. 2, and in the packing-chamber G. The valve is operated by means of the hand-wheel H
40 and the shaft L. The lower end of shaft L is enlarged into a cylindrical-shaped screw K, cut to run in the threads B of the neck of the valve. In the open end of the cylindrical screw K is tightly fitted the wood conical-
45 shaped gate or disk E or the same flat-faced, as seen at F. The disk being of wood will readily fit tightly in or on the gate-opening. From the fact that wood and metal wearing on each other produces a minimum waste
50 from friction, the valve-gate thus made will prove a durable valve. The wood disk being always exposed to the moisture will not shrink or become loose in the valve, but always re-

main tight within the cylindrical screw, whether the valve be open or closed. 55

In making my invention I purpose treating the wood disk with oil or other substance as a preserver and as a lubricator.

The packing-chamber G comprises a bell-shaped collar M and a nut-cap N. The collar
60 M is made with a central opening to fit on the shaft L and its outer edge to rest on a seat turned in the neck of the valve above the interior screw B. The nut-cap N is so shaped on its interior as to form with the collar M a
65 packing-chamber that will cause the packing placed therein to pack tightly against the neck of the valve and the shaft L, thus making an absolutely tight valve-inclosure.

My valve is designed for straight lines of
70 pipes screwed into the same at C and D or for faucets, cocks, bibs, and other fixtures in which valves are used.

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

1. An improvement in valves comprising a wooden gate or disk set within a cylindrical operating-screw, a bell-shaped collar above
80 said screw, said collar fitted to the neck of the valve and a cap-nut on the neck of the valve forming a packing-chamber with said bell-shaped collar substantially as described and shown.

2. A suitably-constructed valve having a
85 wooden disk or gate mounted in the valve-screw, and the neck of said valve having a packing-chamber constructed by means of a bell-shaped collar within and a nut-cap over the neck of said valve as shown and described. 90

3. In combination with the valve-casing and valve-seat, the casing having an interiorly-threaded neck, a valve stem or shaft having at its lower end a hollow cylindrical-shaped screw whose threads engage the
95 threads in the neck of the valve-casing, and a block of wood lying partially within and partially without the hollow cylindrical-shaped screw and tightly secured within the same so as to rotate with the screw and turn upon the
100 seat, substantially as described.

OLE O. STORLE.

Witnesses:

ARTHUR REMINGTON,
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