

(No Model.)

J. E. GAITLEY.
HANDLE FOR STEAM VALVES.

No. 327,251.

Patented Sept. 29, 1885.

Fig. 1.

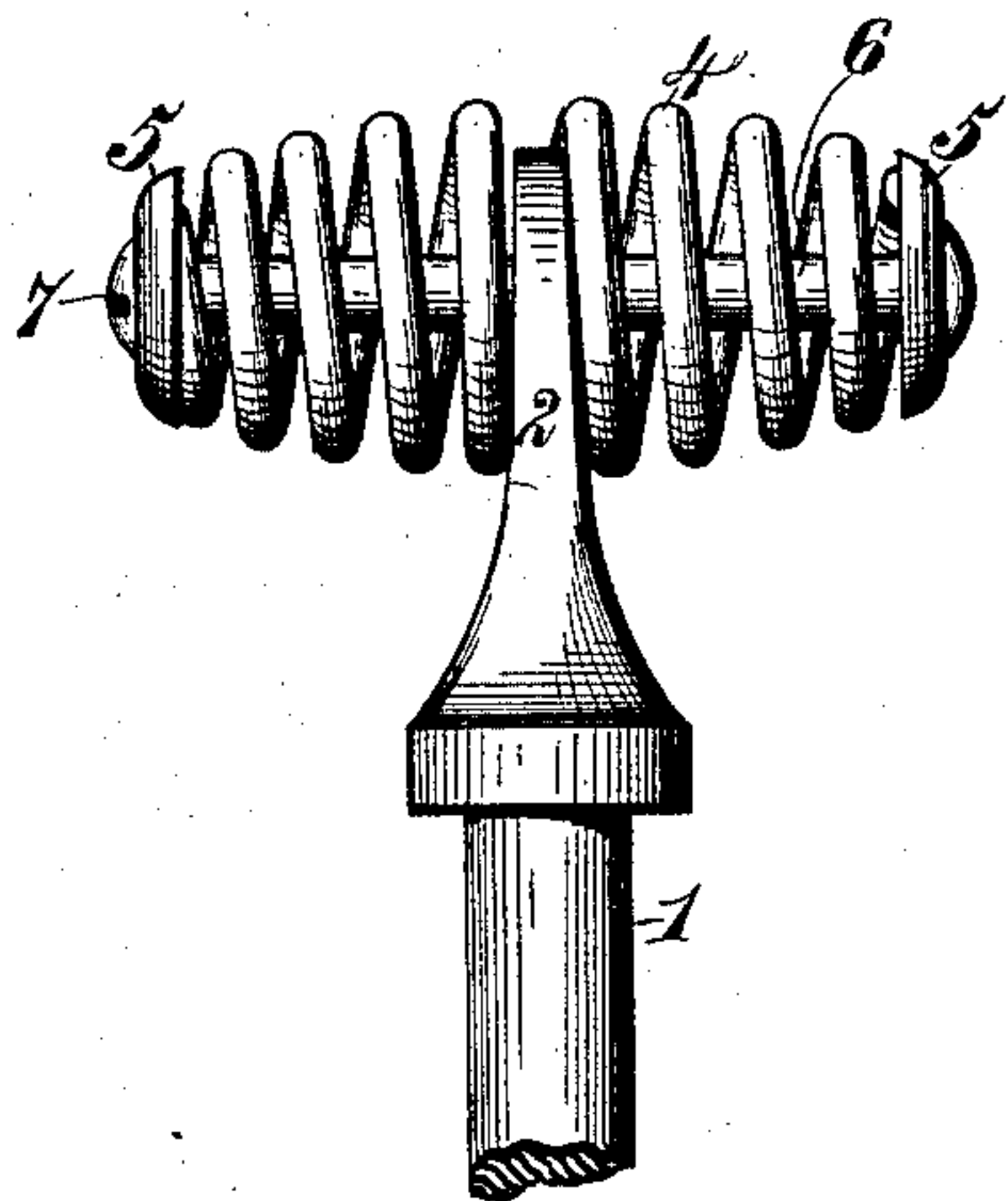
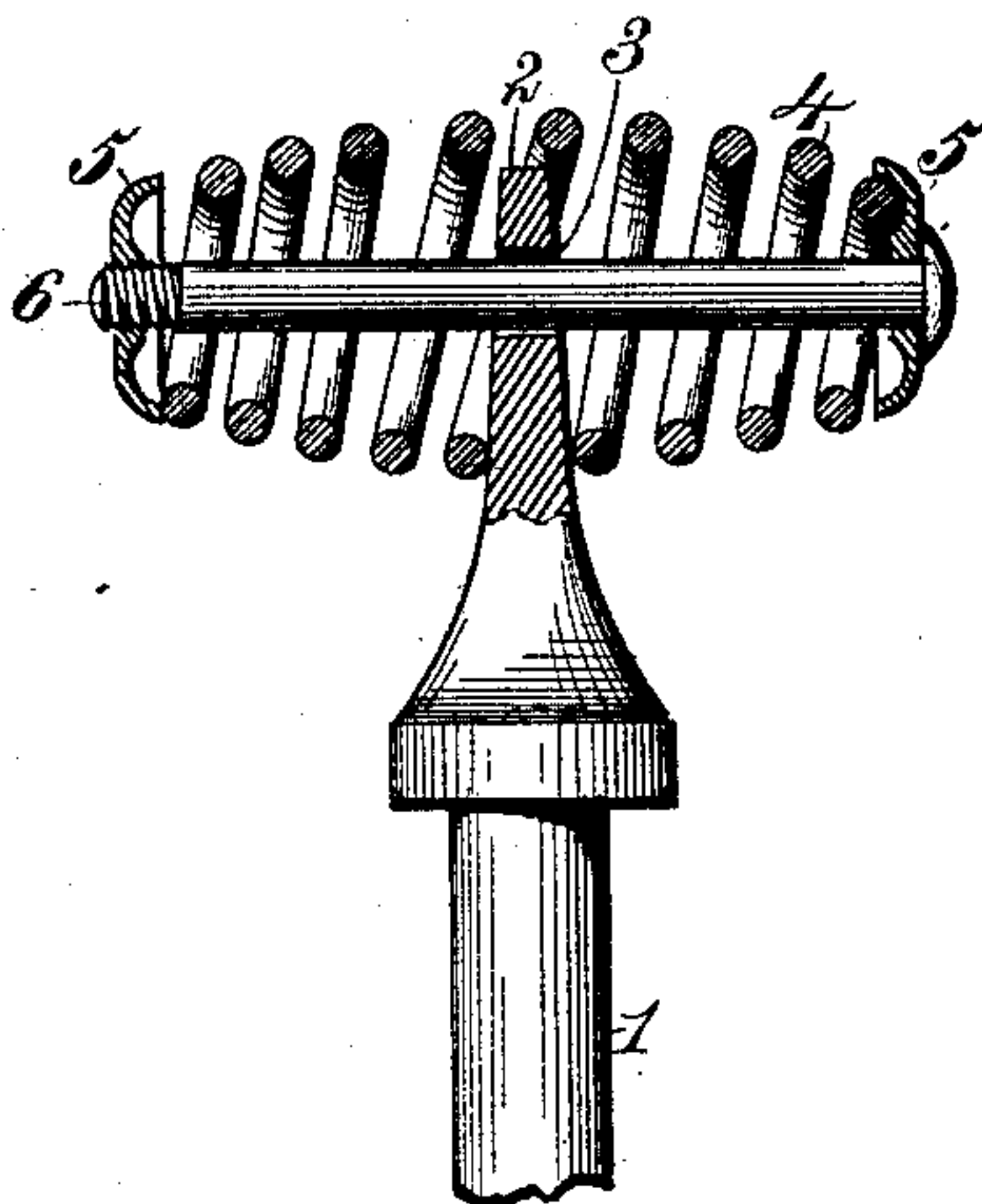


Fig. 2.



Witnesses.

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HANDLE FOR STEAM-VALVES.

SPECIFICATION forming part of Letters Patent No. 327,251, dated September 29, 1885.

Application filed December 31, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. GAITLEY, a citizen of the United States, residing at Troy, Rensselaer county, New York, have invented
5 new and useful Improvements in Handles for Steam-Valves, of which the following is a specification.

My invention relates to the construction of the stems of valves and other devices, for the
10 purpose of providing means for their convenient manipulation, to improve and simplify the same, and reduce the cost of production of these, as well as all other devices to which a grasp or handle is attached.

15 My invention consists in the several novel features of construction and combinations of parts hereinafter fully set forth, and definitely pointed out and defined in the claims, such invention being an improvement upon
20 that covered by Letters Patent of the United States, No. 304,925, granted to me the 9th of September, 1884.

Referring to the drawings forming part of this application, Figure 1 is an elevation
25 showing my invention applied to the stem of a valve packed through a ring in any suitable manner. Fig. 2 is a longitudinal section of Fig. 1 through the axis of the handle.

In the said drawings the reference-numeral
30 1 denotes the stem of a valve, a pet-cock, or other analogous device of any one of the known forms of construction. The shank or stopper portion of said stem is formed with an extended portion, 2, having a perforation,
35 3, which receives a handle having the following construction:

The numeral 4 indicates a spiral spring, which is preferably coiled in such a manner that its diameter increases from each extremity toward the center, giving to the coil a
40 substantially elliptical outline in side elevation or in section. Upon each end of the coil is placed a shell or concave disk, 5, having a central opening, which receives a bolt, 6, passing in the line of the major axis of the coil
45 through the eye or perforation 3, and receiving a screw, 7, in its opposite end, said screw being tapped into the end of the bolt or engaged therewith in any suitable manner.
50 The extended or broadened end 2 of the stem

1 lies between the two central coils of the spring, and serves to support the latter and hold it stiffly in position.

A nut may, if desired, be substituted for the screw; or the concave cap or shell 5
55 may have its opening threaded to receive the threaded end of the bolt; or the latter may pass through said cap and receive a nut which is turned down upon the disk.

This invention may be applied, in the
60 manner described, to any device in which a handle or grasp forms a necessary element—such as a turn-key or other part with which a knob or lever handle of wood or metal has heretofore been combined.
65

It will readily be understood that the shell
5 may be concaved to receive the end coil or coils of the spring, while the outer end may have a convex, square, concave, or any form,
70 as may be desired.

By the peculiar form of the spring-coil, a symmetrical body is formed for the handle or grasp, which is not only highly ornamental to any structure to which it may be
75 attached, but is strong, permanent, and convenient in use. The tension of the coil, when attached in the manner shown, is sufficient to lock the fastening screw, nut, or threaded shell in place, and by screwing such device tightly up, the central coils of the
80 spring may be pressed closely against the broadened end 2 of the stem or shank, which is inserted between them.

This invention may be produced from any suitable metal or material, and may be plated
85 or in any manner ornamented.

What I claim is—

1. A handle or grasp for valve-stems or other devices, consisting of a coil of wire, shells or disks which receive its ends, and a
90 bolt which passes through said shells in the major axis of the coil and engages with a shank or broadened part of the stem placed between the central coils of the handle, substantially as described.
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2. The combination of a spiral coil of wire having its diameter increased from each end toward the center, shells or caps concaved on their adjacent faces, which engage the ends of the coil, a bolt passing through the shells and
100

coil, and a stem having a broadened end placed between the coils and upon the bolt, substantially as described.

3. The combination, with the spiral coil 4,
5 the shells 5, the bolt 6, headed at one end and having its other end secured in engagement with one of said shells by a nut or screw, and a stem, 1, having its end between the central

coils of the spring 4, and receiving the bolt 6, substantially as described. 10

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN E. GAITLEY.

Witnesses:

JOHN S. McQUEEN,
GEORGE W. PERCY.