(No Model.)

C. A. SANDLASS.

COMPRESSION COCK.

No. 460,728. Patented Oct. 6, 1891.

FIG. 1.

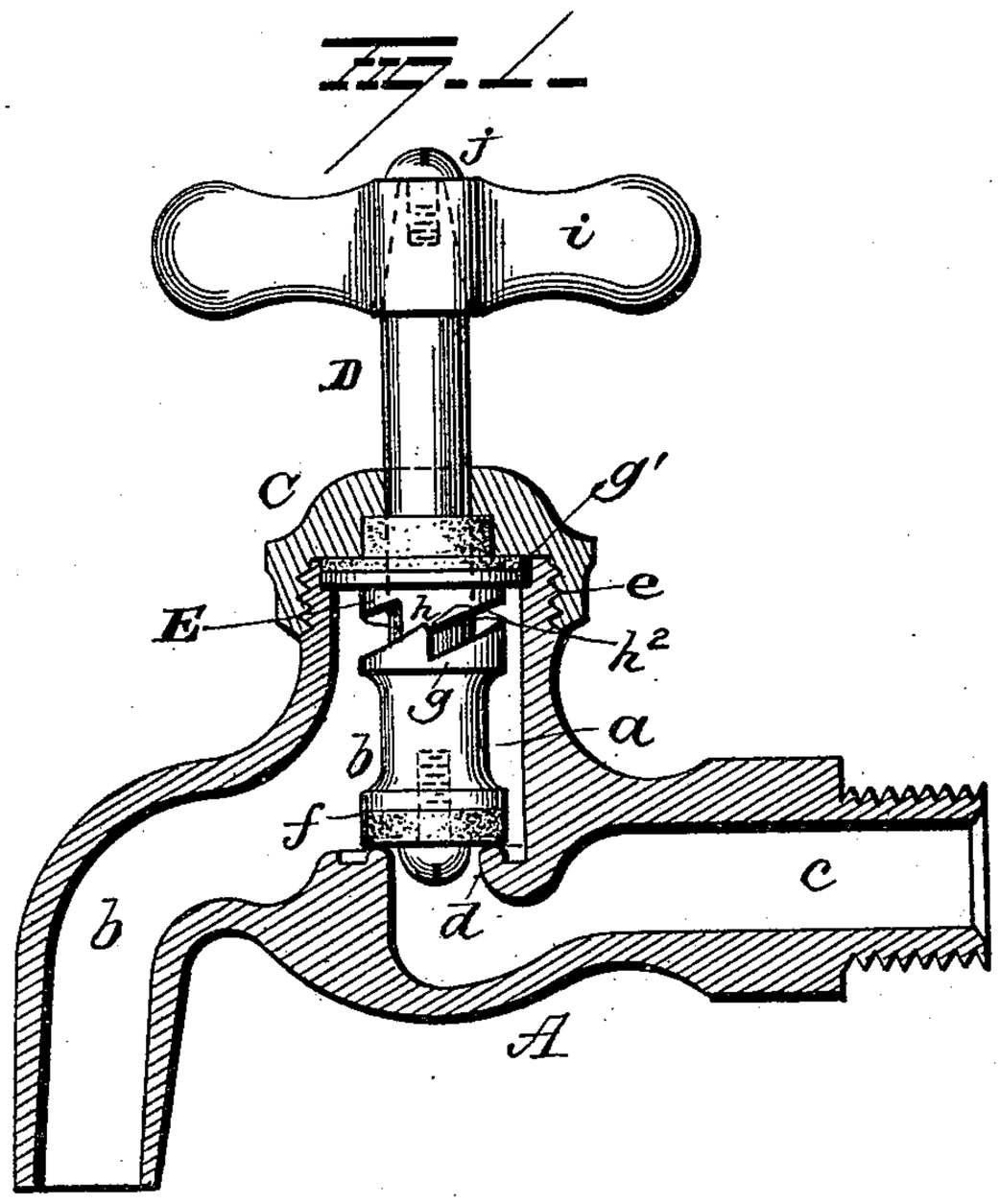
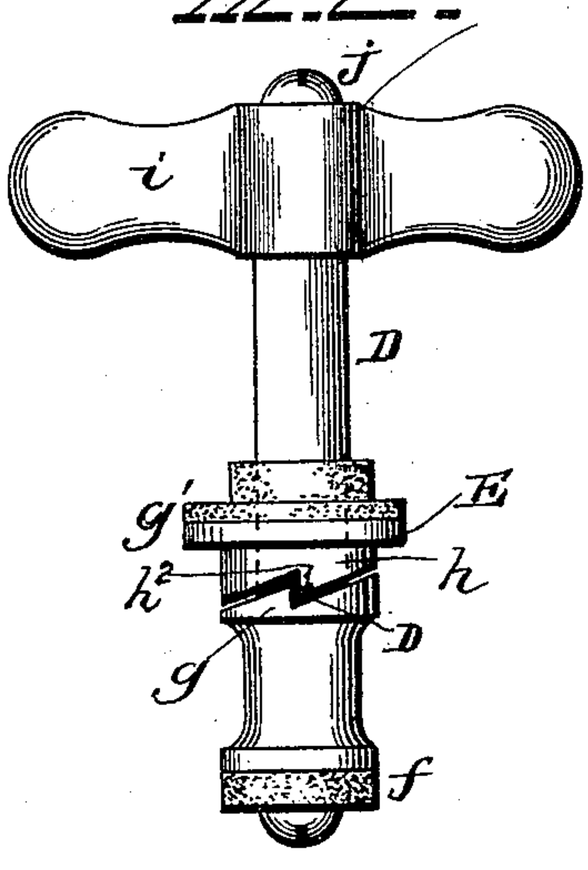


FIG. 2.



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UNITED STATES PATENT OFFICE.

CHARLES A. SANDLASS, OF BALTIMORE, MARYLAND.

COMPRESSION-COCK.

SPECIFICATION forming part of Letters Patent No. 460,728, dated October 6, 1891.

Application filed January 26, 1891. Serial No. 379,061. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. SANDLASS, a citizen of Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Compression-Cocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in cocks and faucets, and more particularly to that class known in the art as "compression-cocks," its object being to produce a cock or faucet which shall be simple in construction, comprising a small number of parts, and one by means of which a full flow of water can be made to flow through it by a slight turn of the valve.

A further object is to produce a cock or faucet which shall be cheap to manufacture, and one in which the use of springs will be entirely avoided and which shall be effectual in the performance of its functions.

With these objects in view the invention consists in the combination, with the barrel, of a cock or faucet having a valve-seat therein, of a valve adapted to normally bear on said seat to close the cock, cams on the stem of said valve, a disk adapted to bear against the cap or head of the barrel, and cams on said disk adapted to be engaged by the cams on the valve-stem; and the invention also consists in the novel construction and combination and arrangement of parts, as hereinafter set forth, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of a cock or faucet embodying my invention. Fig. 2 is a detached view of the valve and attached parts.

A represents a cock or spigot comprising a barrel or chamber *a*, an outlet-spigot *b*, and a stem *c*. In the bottom of the barrel or chamber *a* is a valve-seat *d*, and communicating with said barrel or chamber at its bottom is the stem or inlet *c*, and communicating with said barrel or chamber above the bottom thereof is the outlet or spigot *b*. The barrel *a* is provided exteriorly at its upper end with screw-threads *e*, on which an interiorly screw-threaded cap C is adapted to fit, said cap being provided centrally with a perforation, through which a valve-stem D is adapted to freely pass. The valve-stem D extends through the barrel or chamber *a*, and is provided on its lower end with a washer *f*, adapted to normally bear on the valve-seat *d* and thus close the flow of water through the cock. Immediately above the valve thus formed the stem is preferably contracted somewhat, as shown in Fig. 2, and at the upper end of said contracted portion cam-flanges *g* (preferably two) are produced. Mounted loosely on the valve-stem above the cams *g* is a disk E, between which and the cap C a washer *g'* is located. On the under face of the disk E are cams *h*, adapted to mesh with the cams *g* when the valve is open, said cams *h* being provided at their larger ends with notches h^2, adapted to receive the larger ends of the cam *g* when the valve is closed, as more fully explained further on. The upper end of the valve-stem D is preferably made conical, with flat faces, and is adapted to receive a handle *i*, said stem passing entirely through the handle and provided with a screw-threaded perforation or socket to receive a retaining-screw *j*.

The parts being constructed and placed in position as above described, when the valve is closed or bearing on the valve-seat *d* the larger portions of the cams *g h* will be bearing upon each other, the larger ends of the cams *g* resting in the notches h^2 in the larger ends of the cams *h*. With the parts in this position it will be seen that the raising of the valve or the rotation of the valve-stem will be impossible, and therefore the cock or faucet will be maintained firmly closed. If it be desired to open the cock to permit the flow of water through it, the stem D will be turned slightly, so as to cause the faces of the cams *g h* to bear on each other, whereupon the pressure of the water against the valve will force the same away from its seat *d*, the stem being permitted to rise by the cams *g* riding on the cams *h*. When it is desired to again close the cock, it is simply necessary to turn the stem D, whereupon the engagement of the cams *g h* will force the valve upon its seat and the parts will assume their normal positions, as first described.

Slight changes might be made in the details of construction of my invention without de-

parting from the spirit thereof or limiting its scope. Hence I do not wish to limit myself to the precise details of construction herein set forth; but,

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

In a compression-cock, the combination, with a faucet-shaped barrel having a cylindrical chamber formed thereon and a seat at the lower end of the said chamber, of a valve-stem provided with a valve located in the cylindrical chamber and adapted to be opened by the outward flow of liquid through the barrel, said valve having cams formed at its upper end around the stem, and a cam-disk at the upper end of the cylindrical chamber, provided with depending cams corresponding and co-operating with the cams on the valve, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES A. SANDLASS.

Witnesses:
ALBERT S. EBERMAN,
THOS. KELL BRADFORD.