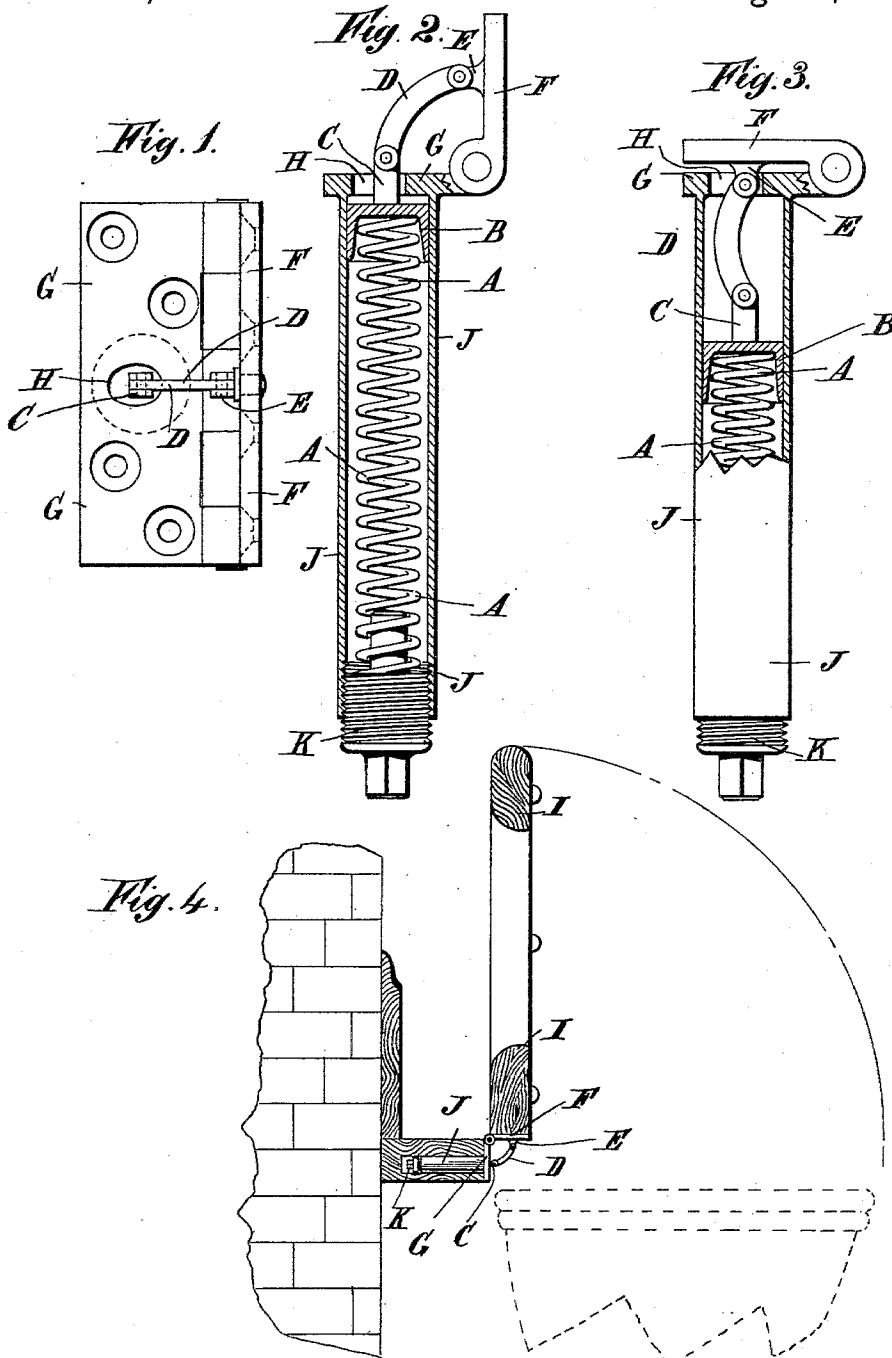


(No Model.)

F. P. RIDER & H. P. COLLIVER.
SPRING HINGE.

No. 566,621.

Patented Aug. 25, 1896.



Witnesses.
Thos. A. Green
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Frank P. Rider.
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UNITED STATES PATENT OFFICE.

FRANK PERCY RIDER AND HENRY PETER COLLIVER, OF LONDON, ENGLAND.

SPRING-HINGE.

SPECIFICATION forming part of Letters Patent No. 566,621, dated August 25, 1896.

Application filed April 2, 1896. Serial No. 585,964. (No model.) Patented in England November 22, 1895, No. 22,320.

To all whom it may concern:

Be it known that we, FRANK PERCY RIDER, residing at 181 Union Street, Southwark, and HENRY PETER COLLIVER, residing at 73 Crofton Road, Camberwell, London, England, subjects of the Queen of Great Britain, have invented certain new and useful Improvements in Spring-Hinges, (patented in Great Britain, No. 22,320, dated November 22, 1895,) of which the following is a specification.

This invention relates to a hinge and spring combined for use with seats of sanitary and other closets, to doors, casements, and window-sashes generally to lift or open same and retain them lifted or open except when pressure is applied to fold down or to close them.

The invention consists of a spring inclosed in a barrel projecting from one flap of a hinge, said spring being adjustable as to power by an end plug which can be screwed more or less into the barrel, a movable cup-shaped follower being within the barrel and bearing against the spring to localize its central thrust and reduce friction, a quadrant-pin being jointed to the cap and to the opposite flap or hinge, both flaps moving on a pintle, as with butt-hinges.

The invention is represented on the annexed drawings.

Figure 1 is a face view of hinge with one flap open and showing the pin-jointed quadrant-bar partly in the hole leading to the spring; Fig. 2, a sectional elevation of barrel with opposite hinge-flap open; Fig. 3, a part-sectional elevation of barrel with opposite hinge-flap closed; Fig. 4, a sectional elevation of closet-seat raised by the spring in barrel, this being in position in back rest for the purpose.

In order to enable those skilled in the art to make and use our invention, we will now describe the same in detail, referring to the

drawings, wherein the letter A indicates a spiral spring, B a cup-shaped follower, and C a short lug.

D indicates a segmental link pivoted to lug C at one end and at the other to lug E, projecting from inner face of half-flap F of hinge, the adjoining half G being formed with a hole H for the free passage of the quadrant D when the hinge is closed by hand to compress the spring A, the expansion of the spring A when the hinge is free being to open the seat I or the door or window, as the case may be, and to which the invention is fitted.

J is a barrel containing spring A, the tension on said spring being governed by the distance the screw-plug K is screwed in.

The invention is specially suitable for those closets in which the pan is used as a urinal and for reception of house-slops when the seat is raised, and which by the present invention is automatically lifted and retained until depressed for the usual use of the pan for personal purposes.

What we claim, and desire to secure by Letters Patent, is—

The combination in a spring-hinge, of two hinge flaps or leaves, a barrel having an inclosed spring, a follower arranged in the barrel and pressed outwardly by the spring, and a segmental link pivoted at one end to the follower and at the other end to one of the hinge flaps or leaves, substantially as and for the purposes described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

FRANK PERCY RIDER.
HENRY PETER COLLIVER.

Witnesses:

E. RIDGWAY,
ALEX. RIDGWAY.