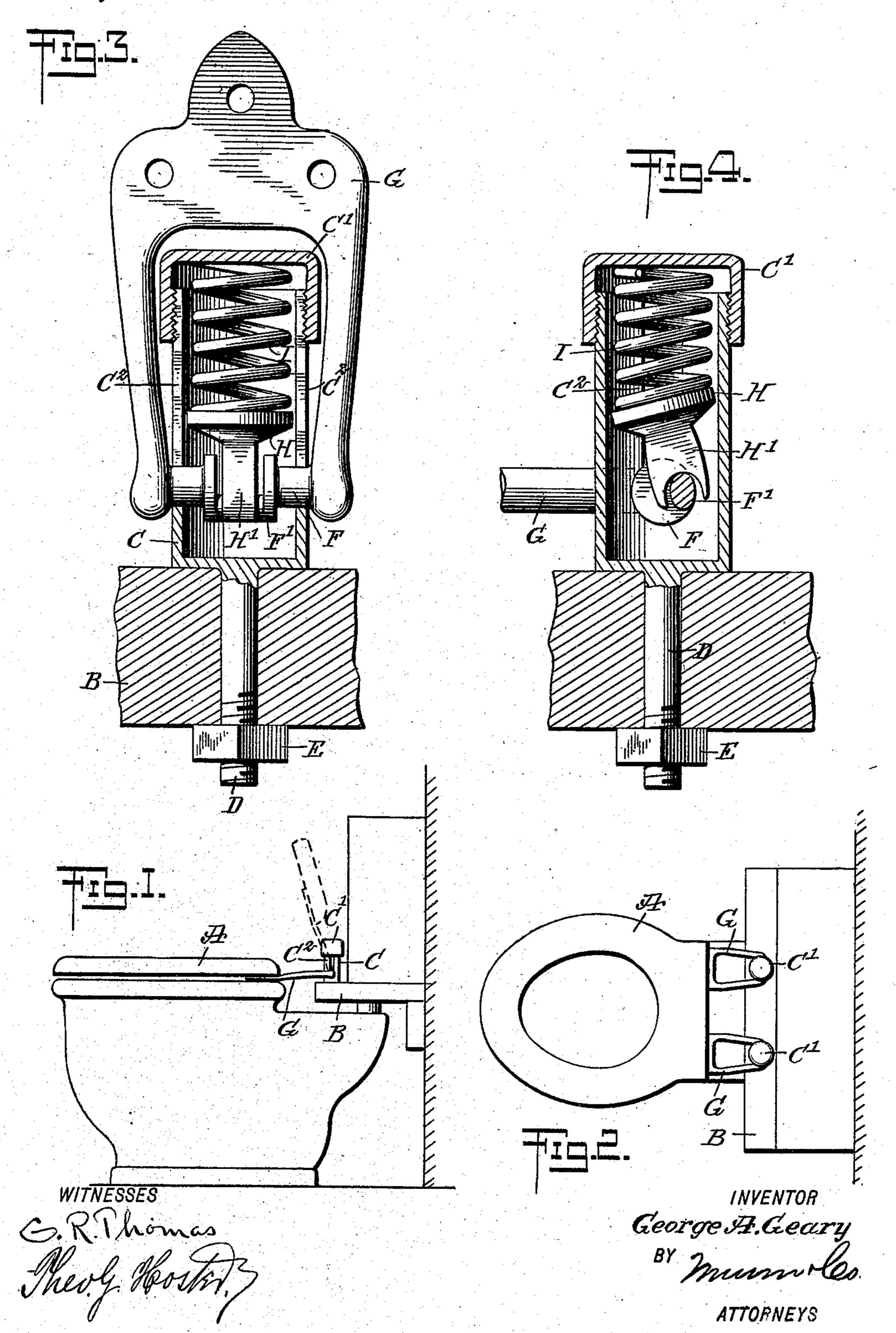
G. A. GEARY.

POST HINGE FOR WATER CLOSET SEATS, COVERS, AND THE LIKE.

APPLICATION FILED OCT. 18, 1907.

900,514.

Patented Oct. 6, 1908.



UNITED STATES PATENT OFFICE.

GEORGE A. GEARY, OF NEW YORK, N. Y., ASSIGNOR TO WILLIAM S. EMERY, OF NEW YORK, N. Y.

POST-HINGE FOR WATER-CLOSET SEATS, COVERS, AND THE LIKE.

No. 900,514.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed October 18, 1907. Serial No. 397,969.

To all whom it may concern:

Be it known that I, George A. Geary, a citizen of the United States, and a resident of the city of New York, borough of Manhat-5 tan, in the county and State of New York, have invented a new and Improved Post-Hinge for Water-Closet Seats, Covers, and the Like, of which the following is a full,

clear, and exact description.

The object of the invention is to provide a new and improved post hinge for water closet seats, covers and like articles, and arranged to normally hold the seat or cover in a raised position, to allow of swinging the seat 15 or coverinto a closed position and to cause the seat or cover to swing automatically back into a raised or open position when released by the user of the water closet.

The invention consists of novel features 20 and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings 25 forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement as applied to a water closet and show-30 ing the seat in a closed position; Fig. 2 is a plan view of the same; Fig. 3 is an enlarged cross section of the improvement, and Fig. 4 is a sectional side elevation of the same.

As illustrated in Figs. 1 and 2, two post 35 hinges are used for connecting the water closet seat or cover A with a fixed support B, but it is evident that one such post hinge or more than two may be employed, if desired.

Each tubular post hinge is provided with a 40 tubular post C, a bolt D passing through the support B and having its nut E screwing against the under side of the support B. The upper end of the tubular post C is closed by a screw cap C' and the said post is provided 45 with diametrically arranged and vertically disposed slots C2, through which extends a crank shaft F having its outer ends rigidly connected with an arm G, screwed or otherwise fastened to the seat or cover A.

The crank arm F' of the crank shaft F extends within the post C and engages the forked end of an extension H' of a washer H, pressed on by one end of a coil spring I, arranged within the post C and abutting with

its other end against the under side of the 55 screw cap C'. Now by screwing the screw cap further in or out, the tension of the spring I may be regulated to suit the existing conditions. Now by the arrangement described, the spring-pressed washer H ex- 60 erts a sufficient pressure on the crank arm F' of the crank shaft F, to normally hold the arm G and consequently the seat or cover A in a raised position, as indicated in dotted lines in Fig. 1. Now when the operator 65 swings the seat or cover A downward, then the crank arm F' in swinging upward moves the washer H in a like direction, so that the spring I is still further compressed, and when the operator releases the seat or cover then 70 the pressure, exerted by the spring I on the washer H and by the latter on the crank arm F', causes a return turning of the crank shaft F, whereby the arm G and with it the cover or seat A is caused to swing upward.

By having the tubular post C provided with diametrically arranged or registering slots C², the crank shaft F can be readily placed in position at the time the cap C' is removed, and then the washer H and the 80 spring I can be placed in position in the tubular post C, after which the screw cap C' is screwed onto the upper end of the tubular post, to hold the several parts in place and to regulate the tension of the spring I. By 85 the arrangement described, the seat or cover is normally held in a raised position and allows the operator to conveniently swing the seat or cover down into a position of use, the seat or cover automatically returning 90 to a raised position as soon as released by

the operator. Having thus described my invention, I

claim as new and desire to secure by Letters Patent:

1. A post hinge for water closet covers, seats and like articles, comprising a tubular post, a crank shaft mounted to turn and to slide in the said tubular post and provided with an arm for attachment to the cover, 100 seat or like article, and a spring pressing the said crank arm of the said crank shaft.

2. A post hinge for water closet covers, seats and like articles, comprising a tubular post, a crank shaft mounted to turn and to 105 slide in the said tubular post and provided with an arm for attachment to the cover, seat or like article, a spring within the said

tubular post, and a washer pressed on by the said spring and having a forked extension straddling the said crank arm.

3. A post hinge for water closet covers, seats and like articles, comprising a tubular post having means for attaching the post to a fixed support, the said tubular post having registering slots and a screw cap, a crank shaft having its crank arm within the said

shaft having its crank arm within the said post and having its bearing in the said slots, an arm on the outer ends of the said crank shaft for attachment to the seat or cover, a

washer within the said post and pressing the said crank arm, and a coil spring within the said tubular post and interposed between the 15 said cap and the said washer.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

GEORGE A. GEARY.

Witnesses:

Theo. G. Hoster, Everard B. Marshall.