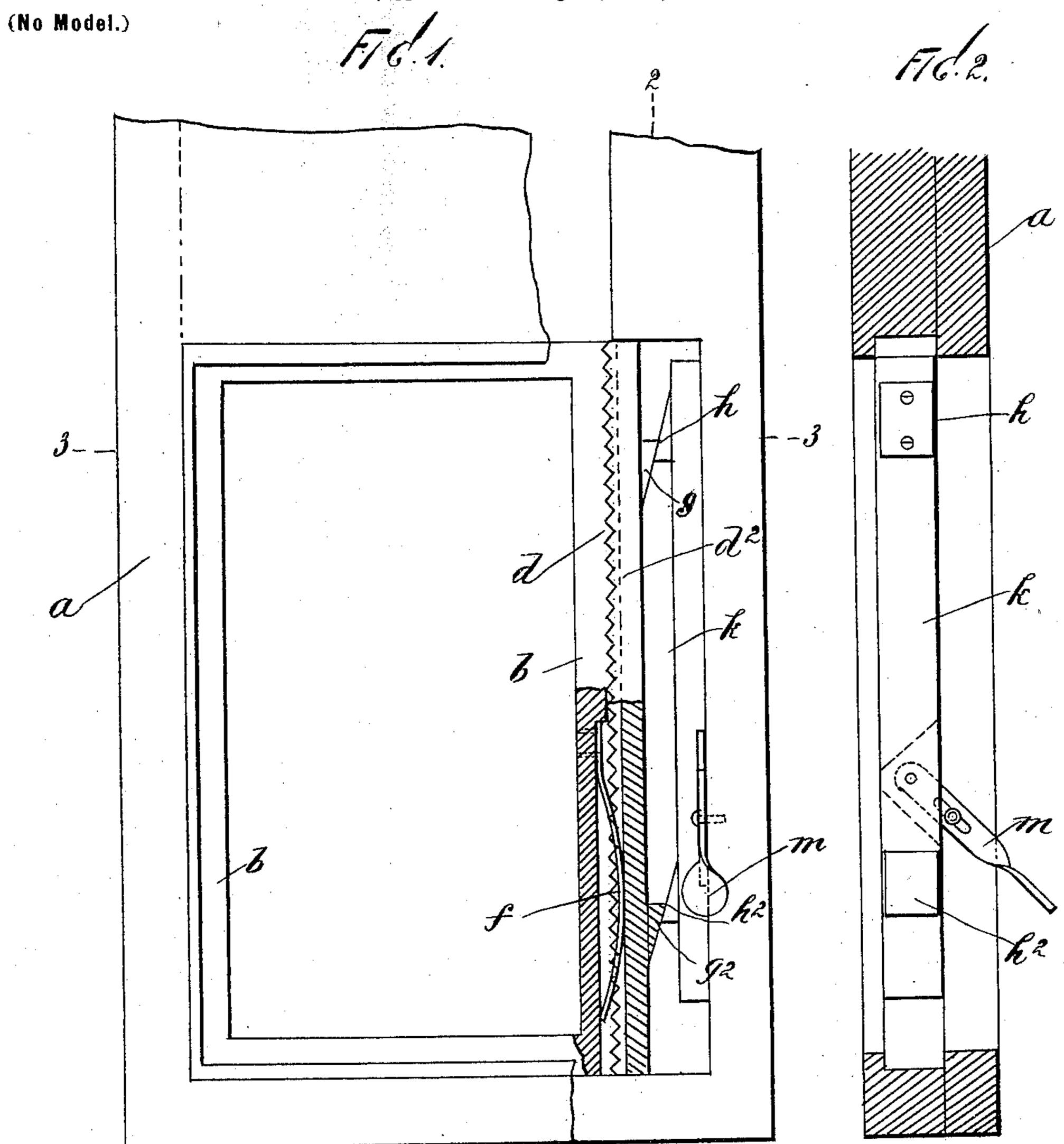
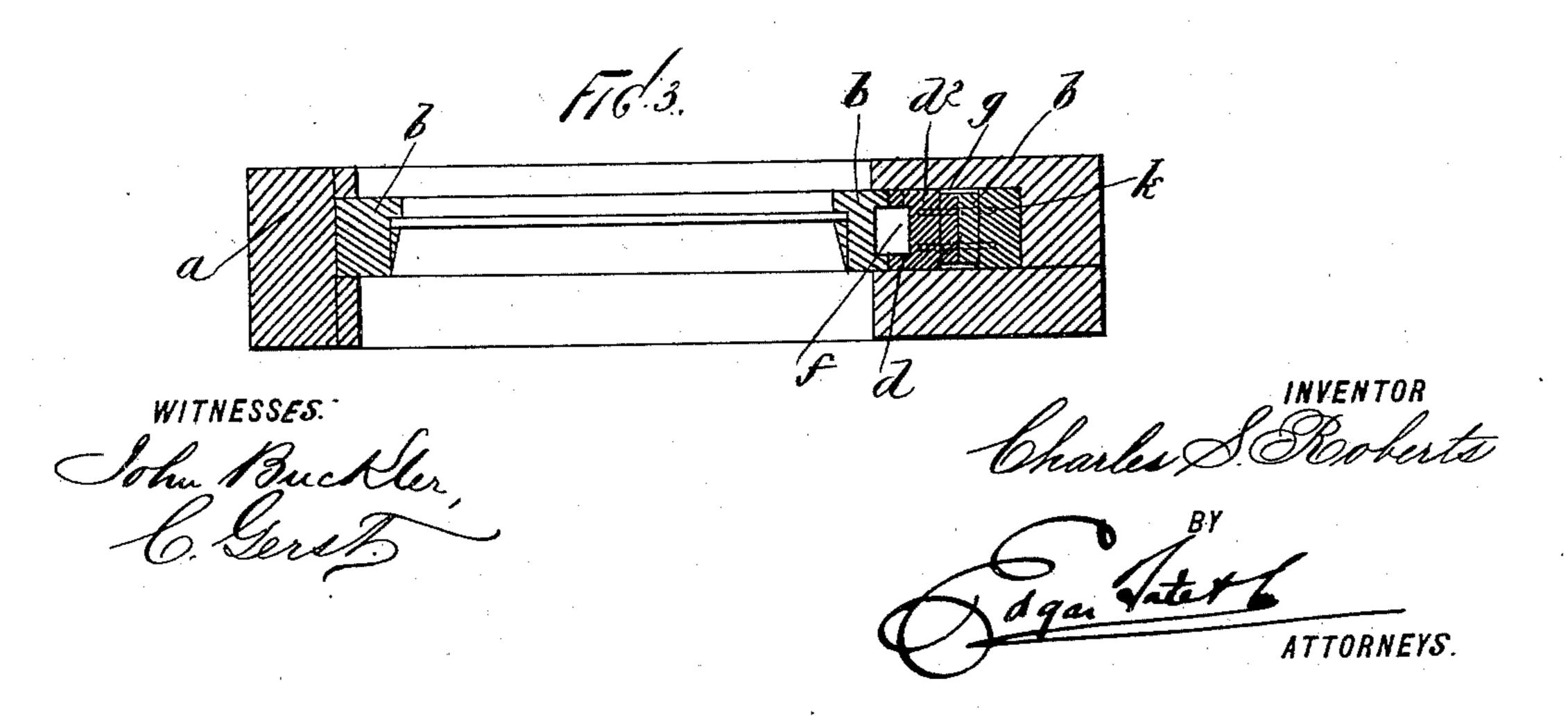
C. S. ROBERTS. SASH FASTENER.

(Application filed Aug. 25, 1897.)





UNITED STATES PATENT OFFICE.

CHARLES S. ROBERTS, OF NEW HAVEN, CONNECTICUT.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 612,869, dated October 25, 1898.

Application filed August 25, 1897. Serial No. 649,509. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. ROBERTS, a citizen of the United States, residing at New Haven, in the county of New Haven and State 5 of Connecticut, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and 10 use the same.

This invention relates to sash-fasteners, and particularly to that class of fasteners adapted for use in railway-cars or similar ve-

hicles.

The object of my invention is to provide a fastener of the above-described class which can be maintained at any desired position, which will not be susceptible to atmospheric changes, and which can be readily operated 20 at all times.

A further object of the invention is to provide a cheap, durable, and efficient sash-fastener which is simple in construction and arrangement and, as before stated, one which

25 will not readily get out of order.

The invention consists in the novel features of construction hereinafter set forth and described, and more particularly pointed out in

the claim hereto appended.

Referring to the drawings, Figure 1 is a view of a window equipped with my improved fastener, said window being broken away and showing my fastener in position, said fastener being partly in section. Fig. 2 is a side view 35 of said window-frame, and Fig. 3 is a section on the line 3 3 of Fig. 1.

Like letters of reference designate like

parts throughout the several views.

In the accompanying drawings, a denotes a 40 window-frame of ordinary construction, and b a sash of the window. This sash, at one side thereof, is equipped with a rack, as d, which is adapted to engage with a rack d^2 , which is mounted in the frame of the window. The 45 rack d is provided at some point of its length with an elliptical spring f, which is designed to operate against a plane dividing the teeth of the rack d^2 . The rack d^2 is provided with wedges g g^2 , which are adapted to coöperate 50 with similar wedges $h h^2$ on a sliding rod k. m denotes a lever fulcrumed on the window-

frame, Fig. 2, and pivoted at its nether end to the sliding rod k.

The rack d^2 may be provided with a cordslot, as on the ordinary window, and with- 55 out interfering with the operation of my im-

proved fastener.

The operation of my improved fastener is as follows: The lever m being raised so as to engage the wedges g and h and g^2 and h^2 , respection tively, the spring f operates to disengage the teeth of the racks d and d^2 and leave the window free to be raised or lowered, as the case may be. The tension on this spring is preferably made sufficiently great to disengage 65 these teeth, notwithstanding the swelling that may have been occasioned by rainy weather or a sudden change in the atmospheric condition. When the window has been raised or lowered to the desired extent, it 70 may be securely retained in this position by depressing the free end of the lever m, thus operating the wedges g and h and g^2 and h^2 and engaging the teeth of the racks d and d^2 , only sufficient strain being necessary to depress 75 the spring f.

By the above-described means I provide a window or sash fastener which is cheap in construction, simple in arrangement, and which will prove equally efficient in all kinds 80

of weather.

The dangers attendant upon the breaking of the fastener of the ordinary car-window are obviated, as it can be clearly seen that the breaking of any one of the teeth of the 85 rack d and d^2 will be of no great importance, as the racks throughout their entire extent engage with each other, retaining the window not by a single fastener but by a number.

It is not my intention to limit my inven- 90 tion to the precise construction herein shown and described, as it is obvious that there may be changes of many minor details without departing from the spirit of my invention.

Having described my invention, what I 95 claim as new, and desire to have protected

by Letters Patent, is—

In a sash-fastener, a sash having a rack along one side thereof, a longitudinally-immovable and laterally-movable rack mounted 100 in the window-frame and provided with a central groove or plane, wedges on said rack, a

spring carried by the sash and traveling in said groove or plane to hold said racks normally out of engagement, a vertically-movable rod, wedges thereon engaging said firstmentioned wedges, and means for moving said bar to force the racks into locking engagement or to release the same substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 24th day of August, 1897.

CHARLES S. ROBERTS.

Witnesses:

C. Gerst,

M. A. KNOWLES.