

No. 611,846.

Patented Oct. 4, 1898.

A. T. SANBURY.
SEAL LOCK.

(Application filed Apr. 25, 1898.)

(No Model.)

Fig. 1.

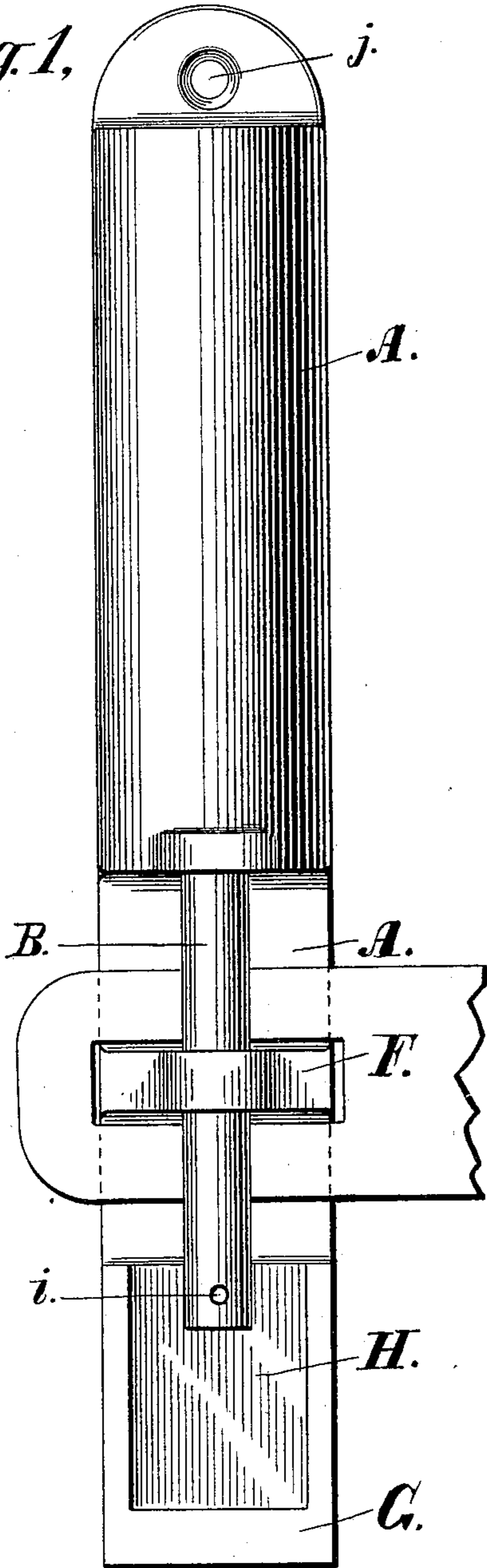


Fig. 2.

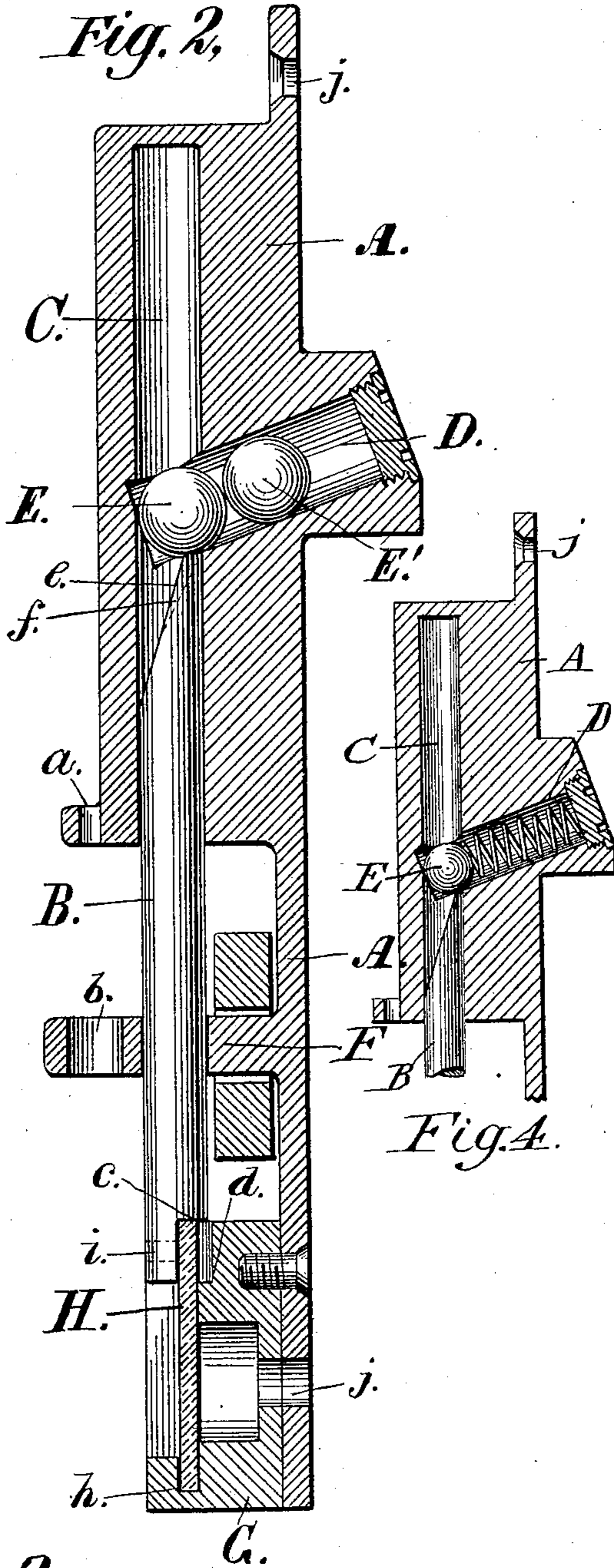
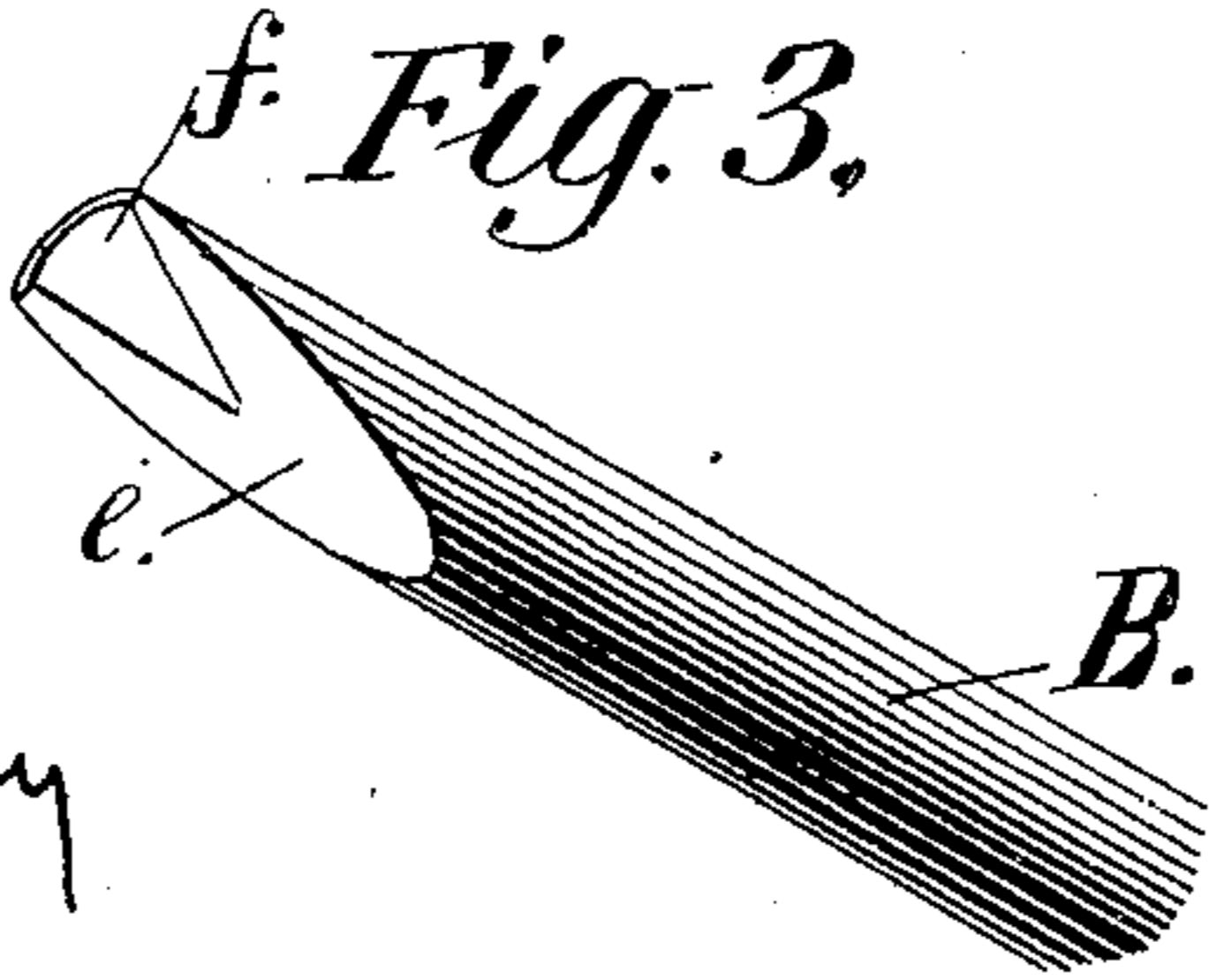


Fig. 4.

Fig. 3.



WITNESSES:

W. H. Haywood
James C. Reilly

INVENTOR

Albert T. Sansbury

BY

J. H. Hindon
ATTORNEY

UNITED STATES PATENT OFFICE.

ALBERT T. SANBURY, OF NEW YORK, N. Y.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 611,846, dated October 4, 1898.

Application filed April 25, 1898. Serial No. 678,724. (No model.)

To all whom it may concern:

Be it known that I, ALBERT T. SANBURY, a citizen of the United States, residing in the city, county, and State of New York, have
5 invented a new and useful Improvement in Seal-Locking Devices, of which the following is a specification.

My invention relates to that class of locks in which a frangible seal is locked by the bolt;
10 and the object of my improvement is to afford greater security and greater simplicity of construction than obtains in analogous devices.

My invention is illustrated in the accompanying drawings, in which—
15

Figure 1 is a front elevation in perspective with the seal and bolt in operative position. Fig. 2 is a sectional view of the device, and Fig. 3 is a perspective view of the upper end
20 of the locking-bolt. Fig. 4 is a sectional view of a modification of the device.

Similar letters refer to similar parts throughout the several views.

Referring to the figures, A is the lock-case, containing the rotatable sliding bolt B; its
25 sleeve or channel C; the inclined channel or runway D; one or more balls E E', and having thereon the staple F (the hasp not being shown) and the seal-seat G. The seal is designated by the letter H. A small perforated
30 lug is shown at *a*, and *b* is a perforation in the staple F, these perforations being provided to permit of the ordinary sealing by wire and a lead seal, which may be used, if
35 desired.

The lower end of the bolt B is cut substantially as shown, so as to form the shoulder *c*, and the seal-seat G is provided with a curved recess and shoulder *d*, in which the bolt B can
40 turn when the seal is not in place and which forms a bearing for the lower end of the bolt B and prevents its dropping out of the channel C. The upper end of the bolt B is beveled, as shown at *e*, and preferably is made
45 with the groove *f* in the bevel, so as to fit the periphery of the ball E, and thus facilitate the rotation of the bolt B.

The balls E E' are larger than the diameter of the channel C, in order to prevent their
50 passage through this channel in either direction, while the runway D is made slightly

larger than the balls E E' to allow a free passage for the balls therein.

The operation of my device is as follows: Referring to Fig. 2, which shows the bolt in
55 its locked position, it will be seen that the bolt is locked against an upward movement by its engagement with the ball E, which is too large to be forced up through the channel C and which projects over the beveled
60 end of the bolt B and retains such position by gravity. The lower end of the bolt B is secured against downward movement by the seal H, the upper end of which impinges against the shoulder *c*, and the lower end of
65 which rests in the bottom chamber *h*, formed in the seal-seat G. The seal H should be thick enough to prevent the bolt B from being rotated.

In order to unlock the device, the seal H
70 (which may be made of glass, clay, or any other suitable frangible material) is broken, and the bolt B is then given a half-turn, thus reversing the position of the beveled end and bringing it over and under the opposite side
75 of the ball E to that shown in its engagement in Fig. 2. The bolt B is then raised by the hand of the operator, and in rising pushes the balls E E' to one side and up the runway D until a clear passage is afforded for the bolt
80 up the channel C until the lower end of the bolt is clear of the staple F and hasp. (Not shown.)

I prefer to construct the bolt B with an aperture *i* in its lower end. This aperture is
85 to enable a person to look through and see whether the seal is intact behind the bolt, or whether it has been broken before insertion in such manner that the bolt can be reached without apparently disturbing the seal.
90

j j are recesses for the insertion of bolts or screws to permit of the attachment of the lock-case to the wall of the car or room to which the lock is attached.

The balls E E' may be made of glass, marble, metal, or any other suitable material. If
95 desired, only one ball need be used, although I prefer to use two or more, as the probability of their displacement by a jar or blow is thereby much decreased. In the latter case
100 a shock or jar may displace the last ball E' of the series, but the first ball E will retain

its position. A spring, if desired, may be used in place of the ball E', as shown in Fig. 4. So, also, the groove in the beveled end of the bolt B may be omitted, but I prefer to use
5 the groove. Again, the lower end of the bolt B may be differently shaped from the form shown in the drawings, and its manner of engagement with the seal H may be varied without departing from the spirit of my invention.
10 Thus a transverse groove may be formed therein adapted to receive and retain the upper end of the seal H and rest thereon, thus omitting the groove and shoulder *d* in the seal-seat, though in this case the bolt must
15 be given sufficient length to rest upon the bottom of the seal-seat when the seal is not in place without releasing the bolt from its channel C.

Various other modifications will suggest
20 themselves to the skilled mechanic.

Having thus described my invention, what I claim is—

1. In a seal-locking device, the combination
25 of a lock and hasp, the former having a rotatable sliding bolt beveled at one end, held in its locked position by a frangible seal at one

end, and at the other end by a ball actuated to impinge against the beveled end of the bolt, substantially as described.

2. In a seal-locking device, the combination
30 of a lock and hasp, the former having a rotatable sliding bolt beveled at its upper end and held in its locked position by a frangible seal at one end, and at the other end by a ball actuated by gravity to impinge against
35 the beveled end of the bolt, substantially as described.

3. In a seal-locking device, the combination
40 of a lock and hasp, the former having a rotatable sliding bolt beveled at its upper end and held in its locked position by a frangible seal at the lower end, and at the upper end by one or more balls rolling in an inclined runway and actuated by gravity to cause the
45 end ball to roll over upon the end of the bolt and lock it in position, substantially as described.

ALBERT T. SANSBURY.

Witnesses:

J. E. HINDON HYDE,
JAMES C. REILLY.