J. SARGENT.

Bolt for Safe, Vault and other Doors.

No. 161,283. Patented March 23, 1875.

Fig. 1.

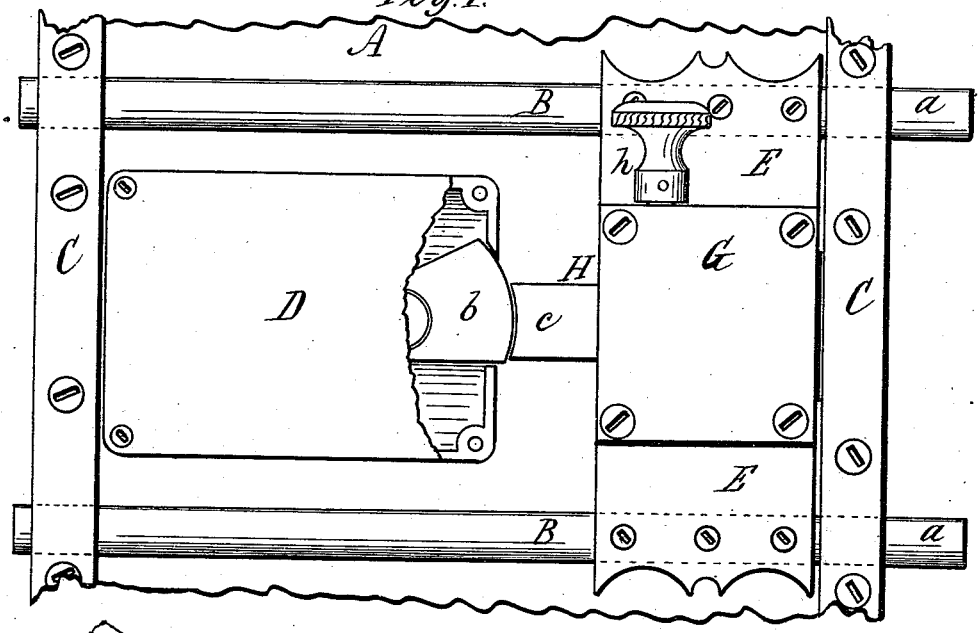


Fig. 2.

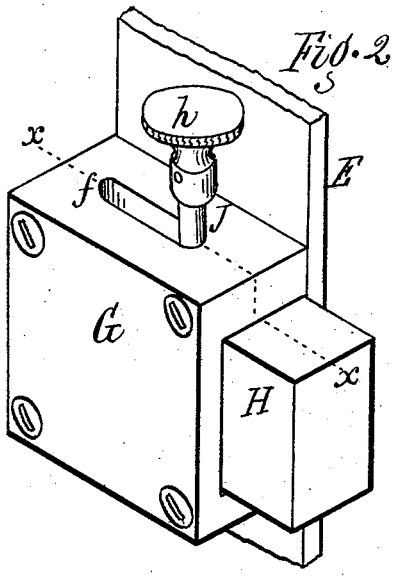


Fig. 3.

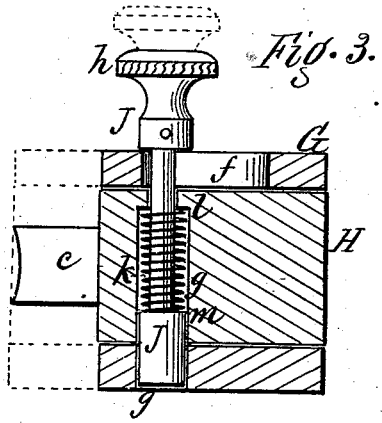
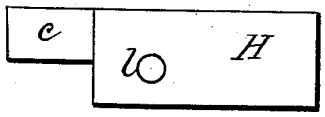


Fig. 4.



Witnesses.
Edwin B. Scott.
Louis Stahn.

Inventor.
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UNITED STATES PATENT OFFICE.

JAMES SARGENT, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN BOLTS FOR SAFE, VAULT, AND OTHER DOORS.

Specification forming part of Letters Patent No. **161,283**, dated March 23, 1875; application filed February 18, 1875.

To all whom it may concern:

Be it known that I, JAMES SARGENT, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Bolts for Safe, Vault, and other Doors; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of a portion of a safe-door with my improvement applied thereto. Fig. 2 is a perspective view of the intermediate bolt or slide and its casing. Fig. 3 is a section in line *x x*, Fig. 2. Fig. 4 is a plan view of the intermediate bolt or slide removed from the socket.

My improvement relates to a device interposed between the safe-bolts and the lock of a safe, vault, or other door, for the purpose of allowing the safe-bolts to be retracted or drawn back to shut the door when the lock is locked.

The invention consists, essentially, in the combination, with the safe bolts and lock, of a socket or bearing attached fast to the safe-bolts, a bolt or slide resting within said socket, and a fastening or locking device, so arranged relatively to the socket and bolt as to allow one to slide over the other, as is necessary in retracting the safe-bolts, or to fasten them together, as is necessary in locking the safe-bolts in their sockets in the jamb.

A represents a section of a safe or vault door. B B are the safe-bolts, arranged in the usual way, and running in bearings C C of the door. The ends *a a* strike into the jamb for the purpose of locking the safe or vault door. D is the lock, which may be of any of the known kinds, and *b* is its bolt. E is a tie piece or bar, attached to the safe-bolts and moving with them. G is a socket or bearing fixed to the tie-piece, and H is the intermediate bolt or slide which rests therein. This bolt may rest in an inclosed socket or mortise of the part G, or be otherwise connected therewith, so that the socket may slide over the bolt in a longitudinal direction. The inner end *c* of this bolt rests against the lock-bolt *b*, while its outer end rests against the bearing C, or any other fixed part of the door. When the lock is locked this intermediate bolt is stationary between the lock-bolt and the bearing C, but the socket G can slide over it in retracting or throwing the safe-bolts back. The safe-bolts can therefore be drawn back to enable the door to shut into the jamb even if the lock is locked, the action being accomplished by simply sliding the socket G back upon the bolt H, as shown in Fig. 2. Then, when the door is shut, the safe-bolts may be thrown out again, thereby shooting the ends *a a* into the sockets and fastening the door. To retain the safe-bolts in this last-named position I use a fastening of a suitable kind, which locks the socket G and bolt H together, and prevents the withdrawal of the safe-bolts. The safe or vault can then be opened only by unlocking the lock D, which removes the lock-bolt *b*, and allows the bolt H to move back bodily with the socket G and the safe-bolts B B. A simple pin, slide, or other device would answer to connect the socket and intermediate bolt, as above described, but I prefer the following arrangement: *f* is a longitudinal slot cut in the upper part of the socket G, and *g* is a hole cut vertically through the bolt H and the bottom of the socket. In this hole and slot rests a locking-pin J, with a knob, *h*, extending above the socket, so as to be easily operated by hand. The pin is forced down so that its lower end rests in the hole in the socket by means of a spring, *k*, that bears between the shoulders *l m* of the bolt and pin. When the socket is thrown forward upon the bolt, so as to lock the safe-bolts, this pin coincides with the hole *g* in the bottom of the socket, and locks the parts automatically; but when the pin is raised and the socket is slid back upon the bolt, the lower end of the pin rides upon the inner surface or bottom of the socket, and no impediment is presented to the sliding movement. The slot *f* is made of sufficient length to allow the throw of the socket in one direction or the other.

This invention is applicable to doors having any kind of lock thereon. It enables the safe-bolts to be drawn back to shut the door without unlocking the lock. Otherwise, owing to the projection of the safe-bolts, the lock would have to be unlocked to allow the door to be shut. It is particularly applicable to chro-

nometer or clock locks, in which the lock is beyond the control of the operator, and the bolt *b* is opened only at a determined hour. This invention enables the safe or vault to be locked at any time, independently of the clock-lock.

I am aware that a guard-piece hinged upon the end of a sliding bolt has been used in connection with a time-lock to disconnect the bolt from the works, to enable the clock to be wound. Such I do not claim.

What I claim as new is—

The combination, with the safe-bolts B B and lock D, of a socket or bearing, G, attached to the safe-bolts, a bolt or slide, H, connected with said socket or bearing, and a locking device for engaging said socket and bolt when the safe-bolts are thrown out.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES SARGENT.

Witnesses:
R. F. OSGOOD,
E. B. SCOTT.