

981,522.

Patented Jan. 10, 1911.

Fig. 1.

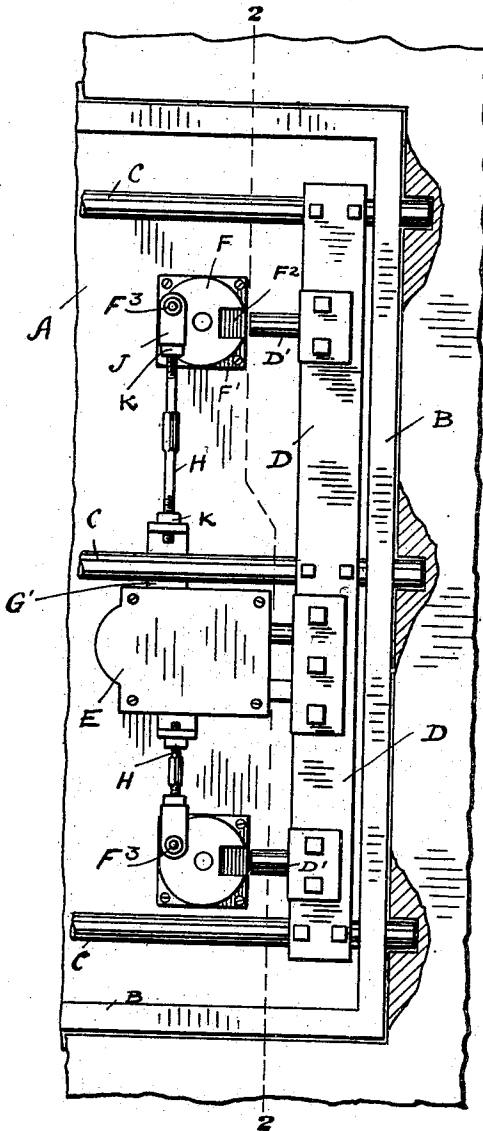


Fig. 2.

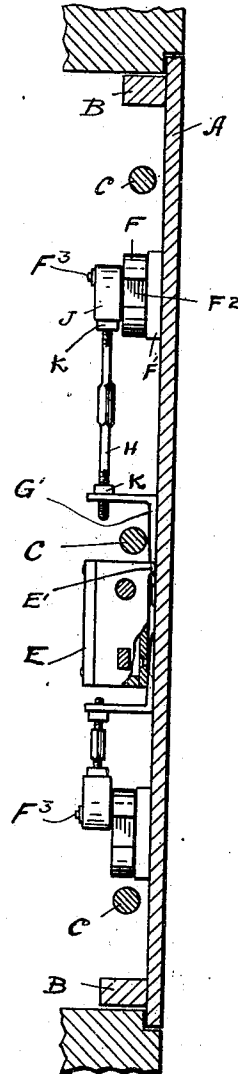
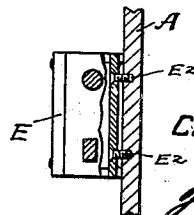


Fig. 3.



WITNESSES:

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AUXILIARY LOCKING DEVICE.

981,522.

Specification of Letters Patent.

Patented Jan. 10, 1911.

Application filed August 8, 1910. Serial No. 576,255.

To all whom it may concern:

Be it known that I, CHARLES E. BLECHSCHMIDT, a citizen of the United States, residing at Connerville, in the county of Fayette and State of Indiana, have invented certain new and useful Improvements in Auxiliary Locking Devices, of which the following is a specification.

This invention relates to improvements in vault and safe door construction, and has reference more especially to protective devices having for their purpose to hold the bolting means inoperative in case damage is caused to the locking means.

In the practice of the crime of safe-breaking a common method of burglars and safe-blowers is to mutilate or destroy the locking mechanism by such means as electricity or explosives, thereby leaving the bolting means free to be moved, whereby the opening of the door is comparatively easy.

The objects of my invention are to provide a device to be carried upon the inside of the door, and which upon mutilation or destruction being caused to the lock mechanism, will automatically and instantly engage and positively hold the bolting means against movement, the door being thereby maintained bolted and locked independently of and notwithstanding the failure of the locking mechanism proper.

The objects of my invention are accomplished by and my invention consists of the new construction, combination, and arrangement of parts described in this specification; plainly illustrated in the accompanying drawing, and defined in the appended claim.

The several parts of the device are identified by similar characters of reference applied thereto in the drawings, in which—

Figure 1, is a view of a portion of the rear side of a vault door upon which my invention is applied. Fig. 2 is a vertical transverse sectional view taken on the line 2—2 in Fig. 1. Fig. 3 is a view of the lock-case, a portion thereof being shown in section.

In this specification I have shown my invention applied to a vault door, it will be obvious however as the nature of the invention is better understood, that it is capable of practicable application to safe doors of every description which embody the sliding-bolt type of bolting means.

In the drawings A designates the body portion of the door. Carried slidingly in

suitable apertures in the flange or side portions B of the door are the bolts C fastened to the usual frame bars D. By a locking mechanism contained in the lock case E, and shifting means which may be of any standard construction and arrangement the safe may be locked and the bolts may be operated in the usual way.

Briefly stated my invention consists essentially in a movable member located adjacent and adjusted to such position relative to the bolting means, and provided of such form and function, that normally the bolting means may be moved forward and back without being affected; there being however such connections arranged between the said movable member and the lock case, that when the latter is deranged, damaged, or blown off, the movable member will automatically act to hold the bolting means immovable.

F designates a substantial metal disk of suitable diameter and thickness. This disk is mounted pivotally on the base F¹ which is secured to the body portion of the door. A projecting piece which I will designate as a stud D¹, is carried by the frame bar D and its end will register with the peripheral face of said disk F. A peripheral recess F² is provided in the said disk and the disk is adjusted to such rotative position that in the operation of unbolting the door, the stud D¹ will pass into the recess and the retractive movement of the bolting means will not have been prevented. This disk will occupy a fixed position as shown in the drawings the recess being in alinement with the stud, so as to perform the function just described. To maintain this disk in such position positively and at the same time in such manner that it may be moved rotatively in case there is inflicted a dislocation of or damage to the lock-case while the door is in the locked position, the parts arranged as shown, between the disk and the lock case have been devised. A support lug is so arranged that it is sustained in place by the lock case. This support lug consists of a metal plate bent into angular form; the lower portion of the vertical leg G¹ is tapered to reduced thickness and will be held between the body portion A of the door and the rear side of the lock case. The lock case may have on its rear side at the corners thereof small bosses E¹ so as to provide a slight space between the lock case and the body portion A. The

lock case when screwed tight against the body portion of the door by the usual screws E^2 will so grip the said vertical leg G^1 of the support lug that it will be held securely in place. Where a lock case is used that has not the bosses then a slight channel is ground or machined into the rear side of the lock case; into such channel or groove the thin end of the vertical leg G^1 is passed, before the lock case is tightened into permanent position. In event the lock case is provided with neither the channel, nor the bosses then a thin washer is used between the body plate A and the corners at the rear side of the lock case. The thin end of G^1 will be clamped tightly against the body plate A, and true alinement of the lock case will not be interfered with. A connecting member is provided which has its upper end connected pivotally to a wrist pin F^3 carried by the disk, and its lower end is adapted to be connected to the support lug. This vertical member I will designate as the support rod H. To give this device features of detail and construction whereby the invention will be entirely practicable and of maximum utility and usefulness wherever and upon whatever safes it may be used, I have provided adjustment between the support lug and the disk.

J designates a cross head, and provided in the horizontal leg of the support lug is a hole through which the lower end of the support rod may be passed. Said crosshead is journaled on the wrist pin F^3 . The ends of the support rod have right and left threads and the central portion of the rod is of angular form in cross section so that it may be easily manipulated by the hand. K and K designate lock nuts which will hold the support rod securely in its adjusted position.

From the foregoing description of the construction of my invention, the mode of its application to use and the manner in which it operates will be obvious. It is capable of being installed in combination with most any safe door of the sliding bolt type. To install same the disk base F^1 is first secured in position. The location of same may be arbitrary; the length of the stud D^1 and of the support rod H being determined to accord to the location desired for the disk. The support lug, (the lower end of the support rod resting loosely in the hole of the horizontal leg) is then fastened to place by tightening the lock case against it. The disk and the support lug having been positioned and secured, the support rod is manipulated until the disk is adjusted to position with its recess in correct alinement with the stud D^1 . The lock nuts K are then tightened and the job is

complete. The shifting of the bolts will at all times be free, and the device described will be inert under all normal use and conditions.

In event of the lock case being jarred loose from its fastenings, or of its being mutilated or blown off, or of any contingency that will loosen the secure fastening of the support lug, the support rod will drop. Such movement will cause the disk to turn. The disk in such shifted position will present such obstacle to the bolt frame that the shifting of the bolts will be impossible; notwithstanding persistent effort which may be applied at and about the lock opening.

By virtue of the fact that an auxiliary locking or holding means constructed in accordance with this invention is capable of being placed by the manufacturer at arbitrary and differing locations on the safe door, the burglar or spy who may possibly be familiar with the general construction of the safe and its locking means, will be at a hopeless disadvantage as he cannot possibly have any way of knowing in which direction to apply his further efforts to "start" the door once he has failed to move the bolts after having destroyed the lock.

As a further illustration of the way my invention may be applied, I have shown an additional auxiliary locking device, in operative position at a location below the lock case, the stud D^1 and the support rod H being of modified dimensions accordingly. It is obvious that by a further modification of the length of the stud D^1 and of the length and form and direction of alinement of the support rod, that the disk could be located at a point toward the central or rearward portion of the door.

Further advantages are that while this attachment is entirely reliable and positive in operation, it is easy to install and to adjust and is extremely simple and economical of construction.

What I claim as my invention and desire to secure by Letters Patent, is:—

An auxiliary locking means for safe doors, including a stud to be carried by the bolt frame, a disk provided with a peripheral recess and which disk is journaled on the door body, a support lug adapted to be held in position by the case of the safe lock, a wrist pin on said disk, and a support rod to connect the wrist pin and said support lug.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. BLECHSCHMIDT.

Witnesses:

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