

No. 890,518.

PATENTED JUNE 9, 1908.

J. KLEIDMANN.
CHAIN DOOR CHECK.
APPLICATION FILED MAY 29, 1907.

Fig. 1.

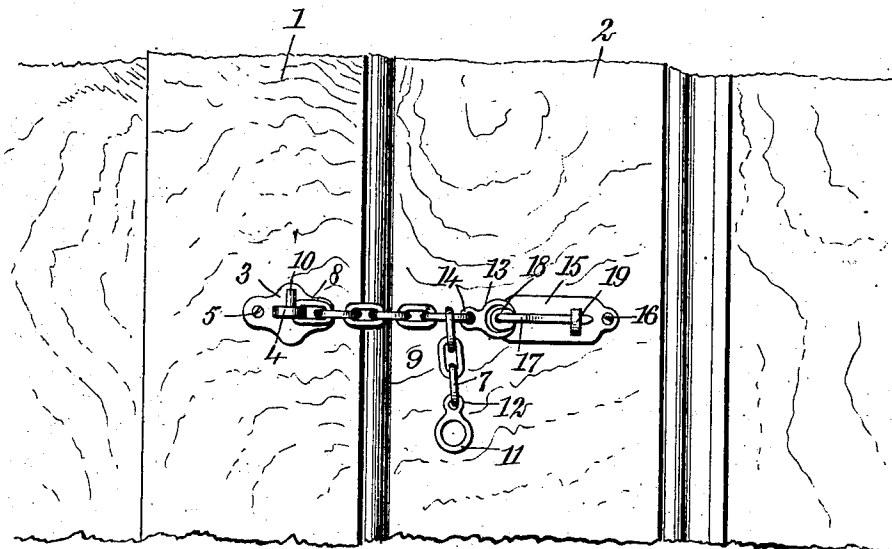


Fig. 2.

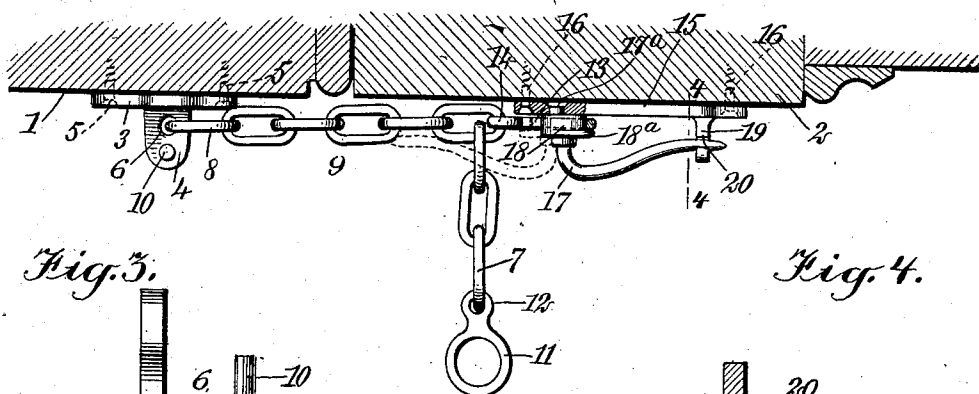


Fig. 3.

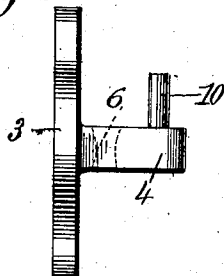


Fig. 4.

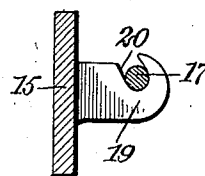
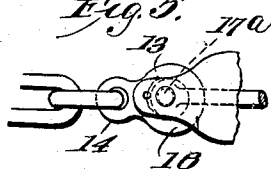


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE

JOSEPH KLEIDMANN, OF NEW YORK, N. Y., ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS,
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CHAIN DOOR-CHECK.

No. 890,518.

Specification of Letters Patent.

Patented June 9, 1908.

Application filed May 29, 1907. Serial No. 376,251.

To all whom it may concern:

Be it known that I, JOSEPH KLEIDMANN, a subject of the Czar of Russia, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Chain Door-Check, of which the following is a full, clear, and exact description.

This invention relates to chain door-checks. The object of the invention is to provide a simple, strong and durable door check, which, when in a certain position allows the door to be opened to a predetermined extent, and which, when in another position serves to lock the door to prevent the same from being opened, even slightly.

A further object of the invention is to provide a door check to be permanently attached to the door frame, and having means for removably securing the chain to the door at a plurality of points on the chain, whereby in one position of the chain, the door can be opened to a certain extent, and in another position of the chain, the door is locked.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which

Figure 1 represents a part of a door-frame and a door showing my device applied thereto; Fig. 2 is an enlarged horizontal cross-section through the door-frame and the door, showing the chain in position to lock the door; Fig. 3 is an enlarged plan view of a detail; Fig. 4 is an enlarged cross-section on the line 4—4 of Fig. 2, and Fig. 5 is a rear view of a part of the device showing certain details of construction.

Before proceeding to a more detailed explanation of my invention, it should be understood that it is customary to use door chains to permit the door to be opened to a certain extent only, preventing the complete opening of the door. The purpose of these chains is to permit a person within to investigate an occurrence at the other side of the door, without necessitating the opening of the door wide enough to permit entrance therethrough. The chain of my invention serves this purpose and at the same time can

be used to lock the door so that it cannot be opened even slightly. To accomplish this double purpose, I provide means for removably securing the chain to the door at the end of the chain and at a point intermediate of the length of the chain. The holding means upon the door operate to draw the chain taut when the latter is engaged with the holding means at the intermediate point, so that the chain itself serves as a locking means. The door chain may be made of any suitable metal. It is not necessary to employ a chain proper, as any strong flexible member serves the purpose; for instance, a short piece of wire rope.

Referring more particularly to the drawings, 1 represents a door frame and 2 the door. I provide a plate 3 having near the center an integral lateral projection 4, and secured rigidly in position upon the door-frame by means of screws 5 arranged in suitable openings in the plate. The projection 4 has therethrough an opening 6. The opening 6 is tapered outwardly at the ends, and located in the same is the end link 8 of the chain 9. By tapering the ends of the opening through the projection 4, the chain can swing more freely in the projection. The latter, further, has a stud or pin 10 upon which the free end of the chain may be hung when the chain is not in use. At the free end, the chain 9 has an annular eye 11, presenting a second eye 12 by means of which it is mounted to the chain at the end link 7 of the latter. The eye 11 is preferably formed from sheet metal, and the eye opening therethrough is substantially circular. A second similar eye 13 having an extension 14 is mounted at a link intermediate the ends of the chain.

I provide a holding bracket 15 secured rigidly in position upon the door by means of screws 16 arranged in suitable openings in the plate. An arm 17 is pivotally mounted by means of a stud 17^a in an opening formed therefor in the bracket plate 15 and extending through the latter. The arm 17 at a point adjacent to the outer face of the bracket plate has an integral cam 18 comprising substantially a circular disk eccentric with the stud 17^a. At the outer edge of the disk is formed a flange 18^a preferably eccentric with the circular disk. This flange has its mechanism extending beyond the disk at the point of greatest eccentricity of the lat-

ter. Beyond the cam, the arm 17 is laterally disposed and is so formed that it can be easily grasped in the hand for manual operation. The stud 17^a at the outer extremity 5 is provided with a tapered head. The latter is countersunk in the opening through the bracket plate which is suitably formed to receive the head. The head holds the arm in position with respect to the bracket plate 10 while permitting its rotation in a plane substantially parallel to the bracket plate. The latter has an integral extension 19 provided with a recess 20 inclined toward the plate. The recess serves to engage the arm 17 near 15 the end thereof to hold it against accidental displacement. The arm normally does not engage the recess until forced slightly to one side. In this way the arm constitutes a spring whereby it is held more firmly in the 20 recess.

When the eye 11 of the chain is in engagement with the holding arm, the door can be opened to a certain extent, as is usually the case with door-chains of ordinary types. 25 When it is desired to lock the door, the eye 13 is engaged with the arm, which is pivotally operated toward the door-frame to permit the eye to be slipped thereupon. When the eye is arranged upon the cam 18 the arm is 30 swung into engagement with the recess 20 of the extension 19. The throw of the cam is in the direction of the extension 19 and by swinging the arm in this direction, the chain, between the eye 13 and the point of attachment to the door frame, is drawn quite taut, 35 the tautly stretched chain securely attached to the door-frame constituting locking means to prevent the opening of the door, even slightly. The flange 18^a of the eccentric on 40 the arm serves to hold the eye in position thereupon.

Having thus described my invention I claim as new, and desire to secure by Letters Patent:—

45 1. A device of the class described, comprising a chain adapted to be permanently attached to the door-frame and having a

plurality of holding eyes, and a holding bracket adapted to be permanently secured to the door and having a pivoted arm for 50 engaging said eyes, said arm being provided with a cam adapted to be operated to engage one of said eyes, whereby said chain is drawn taut when said arm is swung about its pivotal point. 55

2. A device of the class described, comprising a chain adapted to be attached to the door-frame and having a holding eye at the end thereof, and a second holding eye intermediate of the length of said chain, and a 60 holding bracket having a pivoted arm provided with a cam adapted to engage said holding eyes, said bracket having an extension with a recess adapted to engage said arm to hold the same in position, said arm being 65 swung laterally when in engagement with said recess, said cam having a throw in the direction of said extension, whereby said chain is drawn taut when said arm is swung about its pivotal point toward said extension. 70

3. A device of the class described, comprising a chain adapted to be attached to the door-frame and having a holding eye at the end thereof and a second holding eye intermediate of the length of said chain, and a 75 holding bracket having a pivoted arm provided with a cam adapted to engage said holding eyes, said bracket having an extension with a recess adapted to engage said arm to hold the same in position, the throw of 80 said cam being in a direction away from the point of attachment of said chain to the door-frame, said recess being arranged intermediate of said bracket and said arm, said cam having a flange at the outer edge to hold 85 said eyes in position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH KLEIDMANN.

Witnesses:

JOHN K. BRACHVOGEL,
JOHN P. DAVIS.