E. VON GUNTEN.

COMBINED DOOR CHECK AND LOCK.

APPLICATION FILED MAY 16, 1912.

1,037,377.

Patented Sept. 3, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

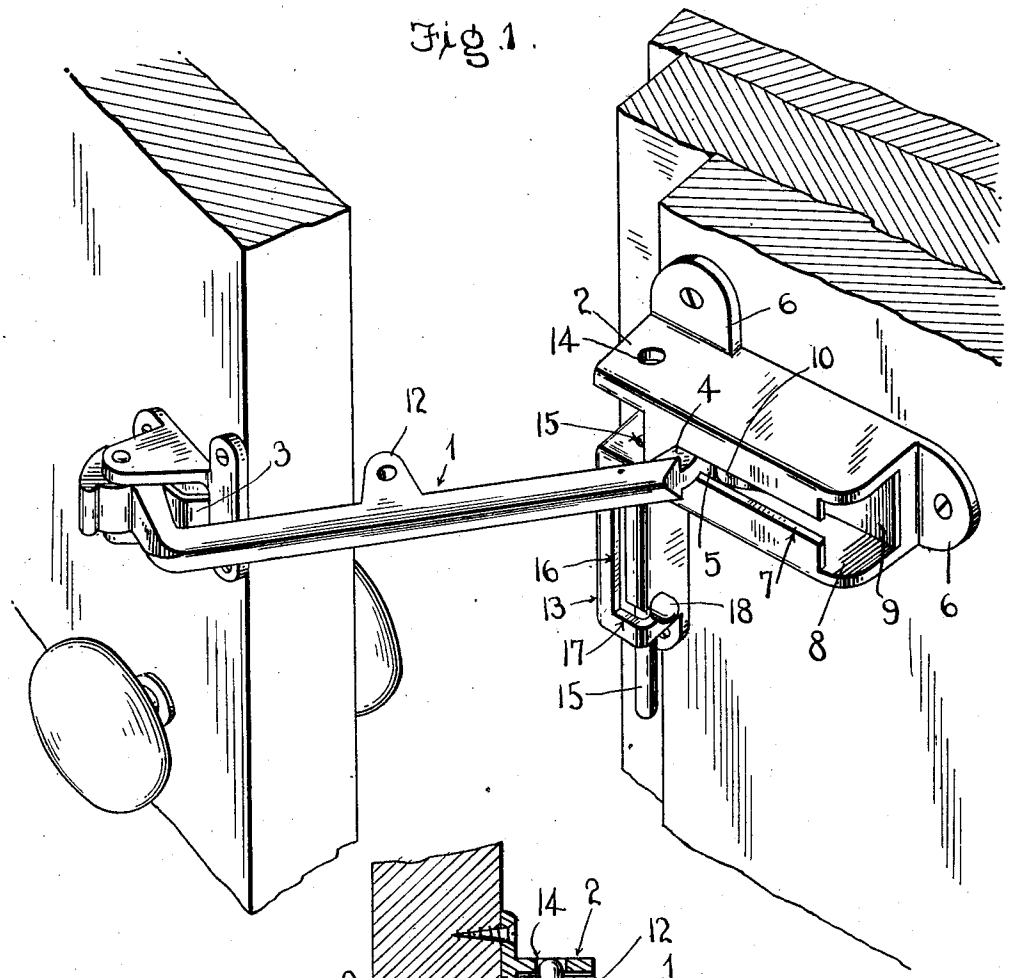
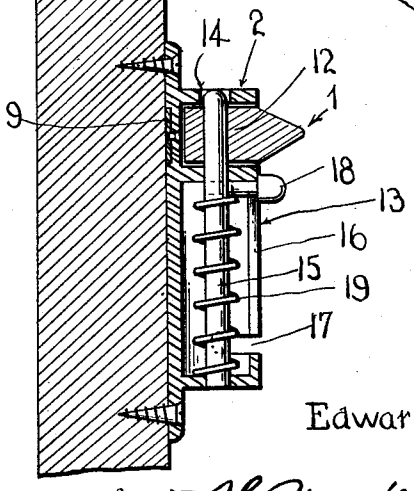


Fig. 4.



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2 SHEETS—SHEET 2.

Fig. 2.

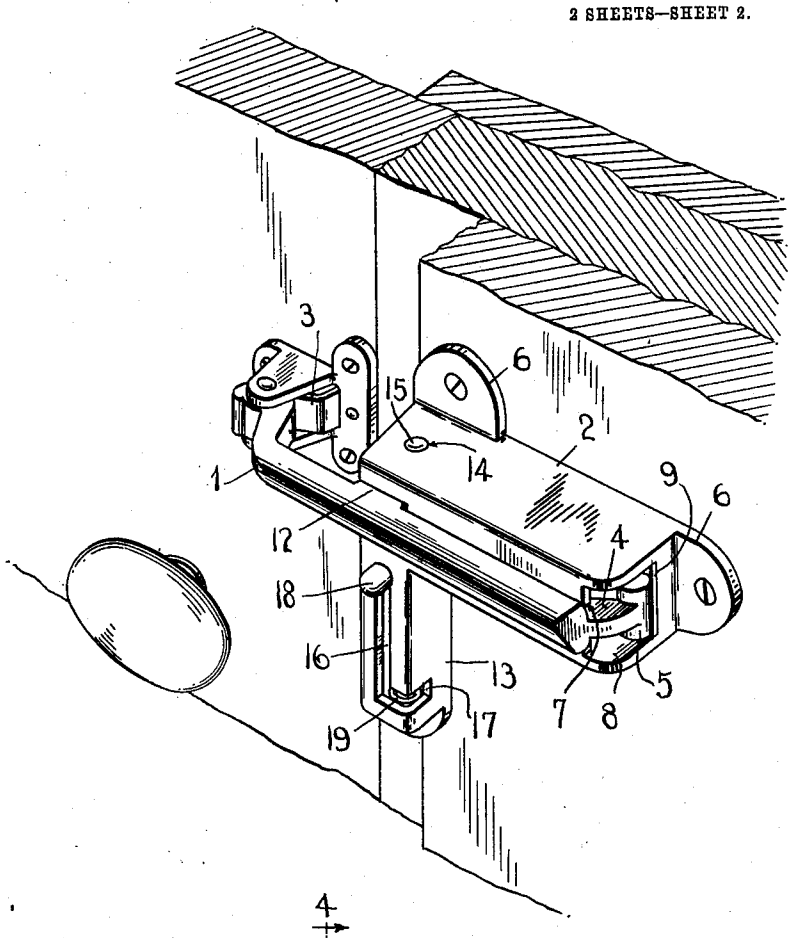
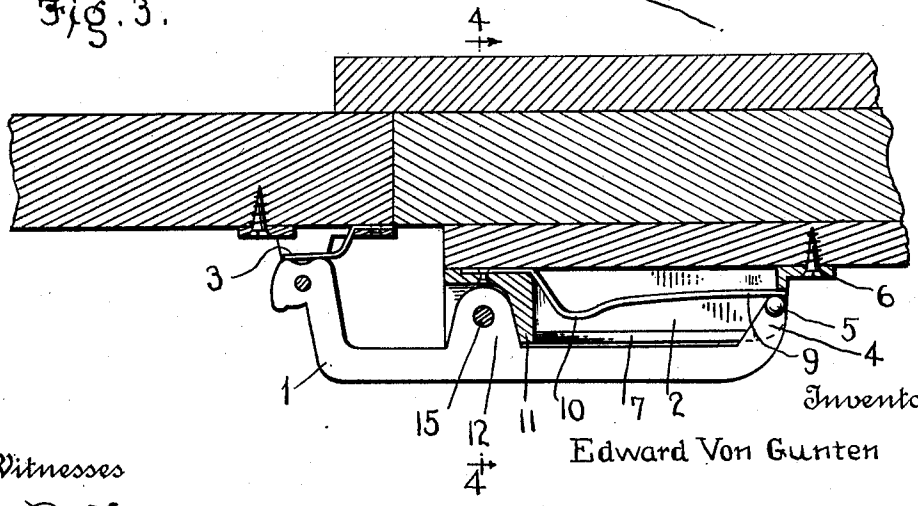


Fig. 3.



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COMBINED DOOR CHECK AND LOCK.

1,037,377. Specification of Letters Patent. Patented Sept. 3, 1912.

Application filed May 16, 1912. Serial No. 697,729.

To all whom it may concern:

Be it known that I, EDWARD VON GUNTEN, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in Combined Door Checks and Locks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a combined door check and lock.

The object of the invention is to provide a combined door check and lock which is simple in construction, cheaply manufactured, and which may be readily applied to any door, and is designed as an improvement on the door check shown in my Patent No. 1,015,222, dated January 16, 1912.

Another object is to provide a door check so constructed that any sagging of the door will be overcome by this improved check, and the door held in proper position when closed.

With these and other objects in view, the invention consists of certain novel features of construction, and the combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings: Figure 1 represents a perspective view of a portion of a door and frame illustrating the application of this invention, the check being shown in position for holding the door ajar; Fig. 2 is a similar view showing the position of the check when the door is closed; Fig. 3 is a horizontal sectional view of the device with the parts in the position shown in Fig. 2; Fig. 4 is a vertical transverse section taken on the line 4—4 of Fig. 3.

In the embodiment illustrated, a door check is preferably constructed as shown in the patent above referred to, and comprises a link or door member 1 and a keeper or frame member 2. The link 1 is preferably constructed of a metal bar having its inner end bent at a suitable angle to fit around the edge of the door when the latter is in position to be fastened by the check, as clearly shown in Fig. 1 of the drawings. The angular inner end of this link is pivotally mounted on a plate adapted to be secured to the inner side of the door in any suitable manner, and a spring 3 is secured in position to engage the inner end of said link 1 and will yieldingly hold the link in an inoperative position when swung backward, said link preferably being provided at said end with a cam head, as shown and described in the patent referred to.

The free outer end of the link 1 is provided with an inwardly curved keeper engaging finger 4, on the end of which are formed offset or laterally projecting studs 5 which lock into the keeper 2 when the finger 4 on the end of the link is engaged therewith. This keeper 2 preferably comprises a hollow rectangular casing provided at its ends with attaching lugs 6 adapted to receive fastening devices whereby the keeper is secured to the door frame. A longitudinally disposed slot 7 is formed in the outer face of the keeper casing and terminates at its outer end in a rectangular aperture 8.

Secured at its inner end to the inner end of the keeper is a spring link holding plate 9 which is approximately the same width as the keeper casing. This spring plate 9 has near its inner end in a stop 10 over which the end of the finger 4 and studs 5 will snap when the check is in operative position for holding the door ajar, and whereby said check will be held reliably in this position against accidental closing. This engagement of the spring stop 10 with the finger and lugs of the outer end of the link will not, however, interfere with the manual closing of the door when desired.

A partition 11 is preferably arranged transversely across the casing of the keeper 2 at a point near its rear end, said partition being preferably beveled or inclined slightly outward toward its rear end, as is shown clearly in Fig. 4, and is designed for a purpose to be described. An apertured lug 12 depends from the lower face of the link or member 1 intermediately of its ends, and when the door is in closed position said lug fits into the outer end of the keeper casing beyond the partition 11 with its front edge abutting against said partition, the lower end of said lug being preferably curved, as shown, for a purpose to be described. A bolt casing 13 extends at right angles from the keeper casing 2 at the rear end thereof and is preferably made integral with said keeper casing. This bolt casing 13 is provided at its opposite ends with bolt receiving apertures which register with an aperture 14 formed in the opposite side wall of the keeper casing. This casing 13 has a lon-

gitudinal slot 16 in its upper face and a recess 17 at its rear end which communicates with said slot and is designed to receive a stud 18 which projects laterally from the bolt 15, said stud projecting through the slot 16 and adapted to form a handle for retracting the bolt against the tension of a coiled spring 19 which is wound on said bolt and bears at one end against the outer end of the casing 13 and at its other end against said stud 18, exerting its tension to force the bolt normally inward to cause the front end thereof to extend across the keeper casing and engage the aperture 14 in the opposite side wall thereof. To withdraw the bolt from the keeper casing the stud 18 is moved rearwardly until it is opposite the recess 17, when it is turned down thereinto and the bolt thus held in retracted position.

When the door is in closed position the link or bar 1 slides forwardly in the keeper casing and the apertured lug thereon fits into the keeper casing, and when the bolt is released it is forced forwardly by the spring 19 through said apertured lug and into the aperture 14 in the keeper casing whereby the bar is reliably locked to the keeper casing 2 and the door securely held in closed position. It is of course, understood that the door may be released from the inside but not from the outside when this lock is in operation.

By constructing the partition 11 with its front face inclined downwardly and inner face to be engaged by the lug 12 when the door is closed, it will be observed that such engagement will forcibly hold the door in operative position and counteract any sagging which might possibly occur.

By means of a door check constructed in accordance with this invention it will be seen that a door may be held ajar to a slight extent for ventilation and other purposes without danger of the door being further opened from the outside or accidentally closed, and when desired the check may be used to lock the door in closed position by releasing the bolt 18 and permitting it to engage the apertured lug on the link of the check.

I claim as my invention:

1. A combined door check and lock comprising a link adapted to be pivotally attached at one end to a door and having a keeper engaging finger, a keeper adapted to be secured to the door frame in position to be engaged by said link, said keeper comprising a hollow casing with a transversely arranged partition therein, said casing being open at its top at the rear of said partition and the side walls thereof provided with registering apertures, an apertured lug depending from said link in position to fit into the open end of said casing with the aperture thereof in alinement with the aperture in the casing, and a spring pressed bolt mounted in said casing and lug to lock said link securely in connection with said keeper.

2. A combined door check and lock comprising a link adapted to be pivotally attached at one end to a door and having a keeper engaging finger, a keeper adapted to be secured to the door frame in position to be engaged by said link, said keeper comprising a hollow casing with a transversely arranged partition therein, said casing being open at its top at the rear of said partition and the side walls thereof provided with registering apertures, an apertured lug depending from said link in position to fit into the open end of said casing with the apertures thereof in alinement with the apertures in the casing, a bolt casing extending at right angles from the rear end of said keeper casing and communicating therewith, a spring pressed bolt slidably mounted in said bolt casing and adapted to pass through the aperture in said keeper casing, a stud extending laterally from said bolt, said bolt casing having a longitudinal slot in its upper face through which said stud projects, and a recess at the outer end of said slot communicating therewith and adapted to receive said stud to hold the bolt in retracted position.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

EDWARD VON GUNTEN.

Witnesses:
E. E. Otis,
L. R. Barnes.