R. E. MacKELLAR.
ADJUSTABLE PORTABLE DOOR FASTENER.
APPLICATION FILED MAR. 11, 1921.

Patented June 6, 1922.

1,418,593.

Figs. 1, 2, 3, 4.

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2 SHEETS-SHEET 2.

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To all whom it may concern:

Be it known that I, Robert E. MacKellar, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented a new and useful Adjustable Portable Door Fastener, of which the following is a specification.

The object of my invention is to provide an adjustable portable fastener which a person can carry from place to place and readily apply to any door to prevent unauthorized entrance from the outside, inasmuch as the fastener cannot be forced or jimmed off the door without breaking off the casing or door; and to provide a fastener of this kind adapted to fit any of several varieties of doors. It is also an object of my invention to provide a fastener of this type which can be applied to the door without the aid of screws, bolts or other tools and which may be put on in a few seconds. I attain these and other objects of my invention by the mechanism illustrated in the accompanying drawings, in which—

Fig. 1 is a front elevation of my invention applied to a door;
Fig. 2 is a top plan of same with the door shown in horizontal section;
Fig. 3 is a side elevation of the device partly in section;
Fig. 4 is a detail perspective view of member 9;
Fig. 5 is a side elevation of a modified form of the invention, partly in section;
Fig. 6 is a top plan of the modified form of the invention with a flush door and door casing shown in horizontal section;
Fig. 7 is a section on lines 7—7 of Fig. 5;
and
Fig. 8 is a detail sectional view on line 8—8 of Fig. 6.

Like numerals designate like parts in each of the several views.

Referring to the accompanying drawings.

My invention is adapted for use either with a door which is flush with the jamb as illustrated in Fig. 6, or with a door where the jamb projects beyond the door as illustrated in Fig. 2. In either instance I designates the door and 2 the door jamb, having the usual bolt opening 3. I provide a lock bar 4 having a hook end 5 adapted to engage in the bolt opening 3 in the door jamb.

Lock bar 4 is provided with a bent outer end to which is attached a chain 7 which engages in opening 8 in the lock arm 9.

Lock arm 9 is provided with an enlarged shoulder or base 11 with which the member 9 forms an L-shaped element. The preferably grooved base or shoulder 11 may be provided with a suitable protective covering 13 of rubber, felt or the like. Lock arm 9 is provided with a slanting notched outer edge as shown in Figs. 2 and 6.

Lock bar 4 is provided with a suitable slot 15 on which is slidably mounted an adjustable slot piece 14, as shown in Fig. 3, or a slide plate 17, and overlapping portion 18, as shown in Fig. 5, which together have a corresponding function to that of member 14. Member 14 is provided with a suitable screw 16, and member 17 is provided with a suitable screw 19, the function of which is identical, namely, to secure the slide piece 14 and slide plate 17, respectively, in adjusted positions abutting against the notched edge or lock bar 9 as shown in Fig. 3 and Fig. 5.

The inner edge of lock arm 9 is provided with a suitable longitudinal extending dovetail groove 12 in which may be suitably mounted a correspondingly dovetailed block 20, as shown in Fig. 6, said block 20 being provided only when the lock is used with a type of door where the door and jamb are flush, in which case it is necessary to fill in the space between the inner edge of the lock arm and the door jamb, as shown in the form of the invention illustrated in Fig. 6.

Block 20 is provided with a protective covering 21 of felt rubber or like material on that surface of the block which abuts against the door jamb.

I may provide a soft filler of rubber or other material (not shown) to be placed in groove 12 as a protection against marring the finish of the woodwork, block arm 9 is used without block 20, said filler having the same function as the protective covering 21 shown in Fig. 6.

To apply the device the door 1 is opened and the lock bar hook 5 is inserted in the opening 3 of the lock casing plate of the conventional lock used already on the door. The lock bar 4 will then protrude past the edge of the door and far enough past the casing so that the lock arm 9 can be inserted in the slot 15 of the lock bar. The slide piece 14 (as shown in Fig. 3) or the similarly functioning slide plate 17, is moved into abutment with the notched slanting outer edge of lock arm 9 and secured.

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in engagement therewith by tightening the set screw 16 (Fig. 2) or the corresponding set screw 19 (in the modified form of the invention shown in Fig. 5).

In the case of a door that is flush with the door jamb or casing, the block 20 dovetailed correspondingly with the dovetailed groove in lock arm 9 is slid into engagement therewith, so as to abut against the door jamb or casing as shown in Fig. 6, the operation of the invention otherwise being the same as that of the form of the device shown in Figs. 1-3. Once the fastener is in the manner described the only way to remove it is to take it off from the inside as it is not exposed from the outside and cannot be removed from the outside without breaking the door or casing.

In the case of an old door the adjustable slide piece is moved further back making use of the larger portion of the slide 13 so as to permit the arm 9 to move out further, thus giving the same effect and result as is obtained on the standard door. It will be observed that the device is readily portable and can be applied to various kinds of doors providing an efficient fastener which can not be tampered with out breaking in the door itself.

What I claim is—

1. In a portable adjustable fastener of the class described, a hook end engaging in the bolt opening of the door casing, said bar having a longitudinal slot, a securing element slidably mounted in said slot, a set screw securing said element in adjusted position, an approximately L-shaped lock arm insertable through the said slide in the lock bar, said lock arm having a slanting notched outer edge with which the securing element engages, a chain connecting the lock arm with the outer edge of the lock bar, said lock bar being horizontally disposed when in position to lock the door, the aforesaid lock arm being longitudinally grooved, and means slidably mounted on the grooved portion of said lock arm for holding same in adjusted spaced relation to a door casing for use on door casings that are flush with the door, for the purposes described.

2. In a portable adjustable fastener of the class described, the combination of a lock bar having a hook shaped end adapted to engage in the conventional bolt opening of the door, an adjustable slide piece slidably mounted on said lock bar, an L-shaped lock arm having a slanting notched outer edge, said lock arm having an L-shaped shoulder abutting against the door, a block slidably mounted on the lock arm whereby the block may abut against the door casing and the L-shaped shoulder of the lock arm may abut against the door, and means for securing the adjustable slide piece in snug engagement with the notched slanting edge of the lock arm, for the purposes described.

3. In a portable adjustable fastener of the class described, the combination of a lock bar having a hook shaped end adapted to engage in the conventional bolt opening of the door, an adjustable slide piece slidably mounted on said lock bar, an L-shaped lock arm having a slanting and notched outer edge, said lock arm having an L-shaped shoulder abutting against the door, and having a dovetailed groove provided along its longitudinal inner edge, a correspondingly dovetailed block slidably engaging in said groove, whereby the block may abut against the door casing and the L-shaped shoulder of the lock arm may abut against the door, and means for securing the adjustable slide piece in snug engagement with the notched slanting bar of the lock arm substantially as and for the purpose described.

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