Dec. 17, 1957 W. J. HARNEY 2,816,431

CHAIN LOCK FOR CLOSURES

Filed Jan. 4, 1957

Fig. 1.

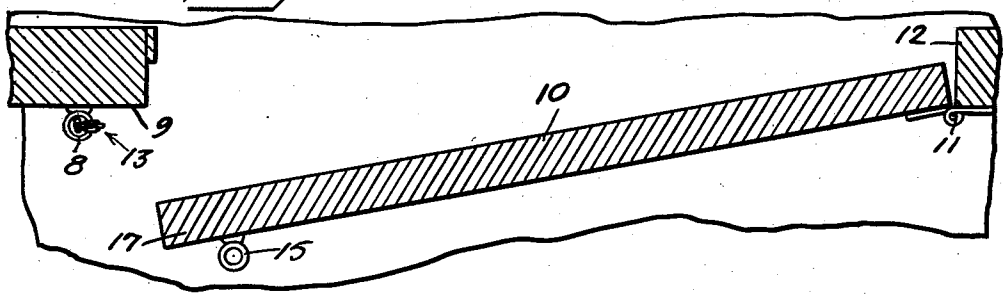


Fig. 4.

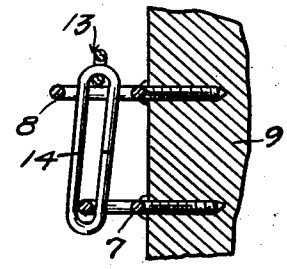
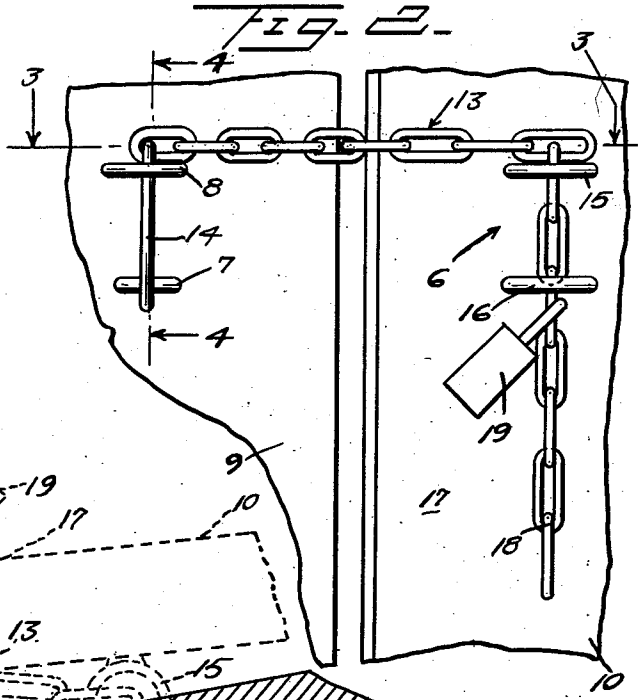


Fig. 2.



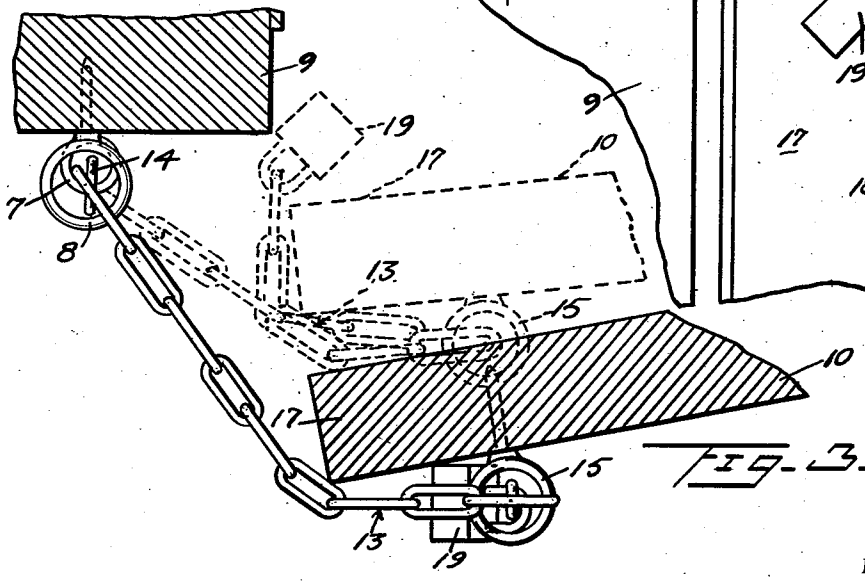


Fig. 3.

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United States Patent Office 2,816,431 Patented Dec. 17, 1957

2,816,431

CHAIN LOCK FOR CLOSURES

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Application January 4, 1957, Serial No. 632,438

4 Claims. (Cl. 70—93)

This invention relates to a novel locking unit for hinged closures such as doors and gates and has for its primary object to provide a chain lock by means of which a hinged closure may be locked and unlocked at either an inner or an outer side of the closure and which can be unlocked from either side of the closure only by an authorized person.

Another object of the invention is to provide a chain lock by means of which a hinged door or other closure may be ajar while locked but not opened sufficiently to permit a person to pass therethrough, so that the door may be left ajar for ventilation while still being locked so that a person could not pass through the door opening in either direction.

Still a further object of the invention is to provide a chain lock which may be utilized as the sole locking means for a hinged closure or as an auxiliary lock for hinged closures such as doors and which are provided with a conventional lock.

Still a further object of the invention is to provide a chain lock which may be locked in different adjusted positions to vary the extent that the locked door or closure can be opened, and which may be locked from the inside to prevent any opening of the closure.

Various other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawing, illustrating a presently preferred embodiment thereof, and wherein:

Figure 1 is a horizontal sectional view through a hinged closure and a part of the closure frame, showing the chain lock applied to the frame and closure and in an unlocked position;

Figure 2 is a fragmentary elevational view looking toward a portion of the inner side of the frame and closure and showing the chain lock applied thereto and in a locked position;

Figure 3 is an enlarged horizontal sectional view taken substantially along a plane as indicated by the line 3—3 of Figure 2, and

Figure 4 is a vertical sectional view, taken substantially along a plane as indicated by the line 4—4 of Figure 2.

Referring more specifically to the drawing, the chain lock in its entirety is designated generally **6** and includes a lower screw eye **7** and an upper screw eye **8** which are anchored in and project from the inner side of the door frame jamb **9** which is engaged by the free side edge of a door **10**, which is hinged at **11** to the other frame jamb **12**. The eye of the lower screw eye **7** is smaller than the eye of the upper screw eye **8**, and is disposed directly therebeneath. A chain **13** is provided at one end thereof with a link **14** which is longer than the other links of the chain. Said link **14** is engaged with and connected to the eye of the screw eye **7** and extends upwardly therefrom through the eye of the upper screw eye **8**, as clearly illustrated in Figures 2 and 4.

An upper screw eye **15** and a lower screw eye **16** are

anchored in the stile **17** of the door **10**, which is located adjacent the jamb **9**, and extend from the inner side thereof. The screw eye **16** is disposed beneath and spaced from the screw eye **15**, and said screw eyes are spaced preferably two or three inches from the adjacent edge of the door **10**, and the screw eyes **7** and **8** are preferably spaced about the same distance from the inner edge of the jamb **9**, as illustrated in the drawing. The eyes of the screw eyes **15** and **16** are of a size so that the links of the chain **13** can pass freely therethrough.

When the chain **13** does not engage the eyes **15** and **16**, the door **10** is unlocked, as seen in Figure 1, so that it can be swung to an open position or a closed position. To lock the door with the chain lock **6**, a free end portion **18** of the chain **13** is passed downwardly through the eyes of the screw eyes **15** and **16** and a padlock **19** is then engaged with a link of the chain **13** below the lower screw eye **16**. The padlock is sufficiently large so that it cannot be passed through the eye of the lower screw eye **16** and will thus function with the chain and screw eyes to effectively lock the door **10**. The padlock **19** may be applied with the door in a fully closed position so as to prevent any upward movement of the chain **13** through the screw eyes **16** and **15** and thus lock the door **10** completely closed. The padlock **19** can also be applied so that the door can be swung to a slightly open or ajar position, as seen in Figures 2 and 3. In this way the door can be locked so that it can be opened slightly for ventilation or other purposes but so that an unauthorized person could not pass inwardly or outwardly therethrough with the door locked as seen in Figures 2 and 3, but may be unlocked from either side thereof. To unlock the door from the outer side, an authorized person can reach in through the space between the jamb **9** and door stile **17** to grasp the lower free end **18** of the chain or the padlock **19** for pulling the padlock **19** outwardly through a restricted gap between the jamb and door stile **17**, as illustrated by the dotted line position of the door **10** in Figure 3. The padlock **19** can then be removed from the chain **13**, so that the door **10** can then be pushed open with the chain **13** sliding upwardly through and out of engagement with the screw eyes **16** and **15**. The padlock **19** may be of any conventional type capable of being opened either with a key or by a combination.

By utilizing two screw eyes in the jamb and also in the door, it is impossible for a person to reach through the space between the door and jamb and remove a screw eye from either the door or jamb to thus release a chain lock, as might be accomplished if the chain engaged only a single screw eye in the jamb and also in the door.

The chain lock **6** may be utilized as the sole locking means for the door **10** or may be employed as an auxiliary lock to a conventional door lock. It will also be apparent that the chain lock **6** may be used in conjunction with other types of hinged closures such as gates, and will effectively function to permit a closure to be opened to a desired extent while being maintained locked against entry or exit of a person therethrough.

Various modifications and changes are contemplated and may be resorted to, without departing from the function or scope of the invention as hereinafter defined by the apppended claims.

I claim as my invention:

1. In combination with a hinged closure and a closure frame jamb disposed to be engaged by the free edge of the closure, a chain, means for anchoring an end of the chain to one side of the jamb, an eye fastening anchored to the closure and projecting outwardly from the corresponding side thereof, the other end of the chain passing

freely through the eye fastening, and a padlock selectively connected to a link of said other chain end and supported thereby, said padlock being larger than the eye of said fastening and engageable therewith to prevent said other chain end from being drawn back through the eye fastening while the padlock is applied to the chain for locking the closure in a partially closed position such that the padlock is accessible from either side of the closure or in a fully closed position so that the padlock is accessible only from the side of the closure on which the padlock is disposed.

2. A closure lock as in claim 1, said means for anchoring the end of the chain to the jamb comprising a screw eye anchored to the jamb and connected to an end link of the chain, and a second screw eye anchored to the jamb and through the eye of which said end link extends to prevent disengagement of the screw eyes from the jamb while engaged by said chain link.

3. A closure lock as in claim 1, said eye fastening comprising a screw eye, a second screw eye secured in the closure and projecting from the same side thereof, said chain extending through both screw eyes and said padlock being engaged with the chain to prevent disengagement of the chain from either screw eye while engaged by the padlock, said chain functioning to prevent disengagement of the screw eyes from the closure while the screw eyes are engaged by the chain.

4. A closure lock, as in claim 1, said means anchoring the chain to the inner side of the jamb, and said eye fastening being disposed on the inner side of the closure, and said closure swinging inwardly and away from said jamb toward an open position.

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