

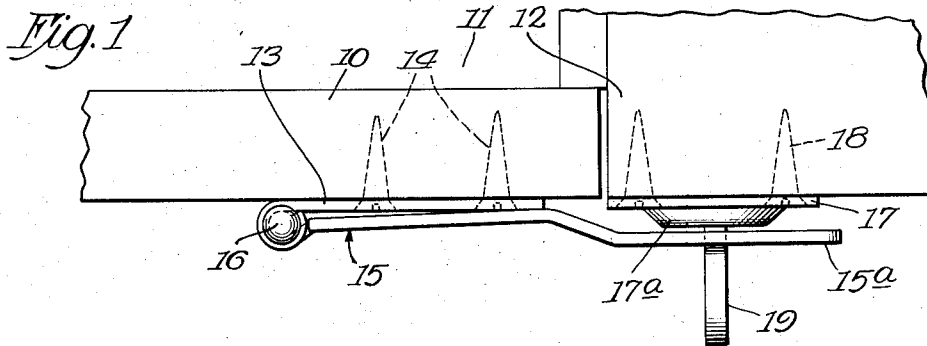
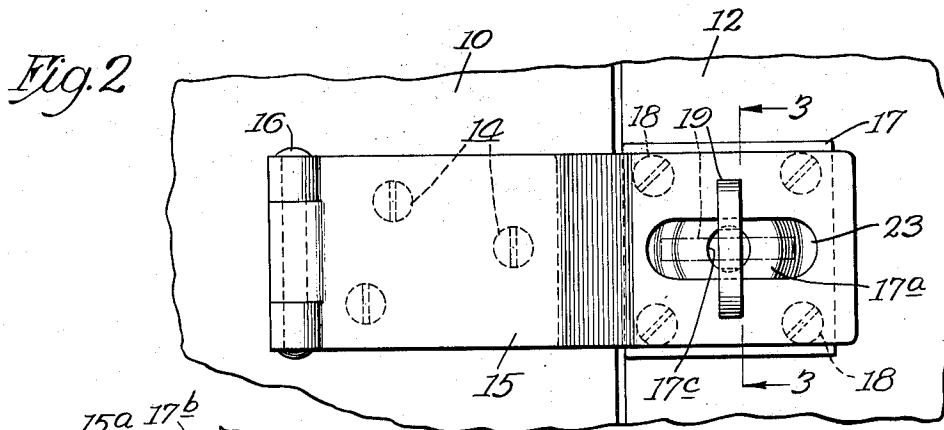
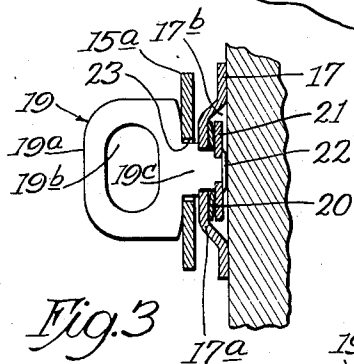
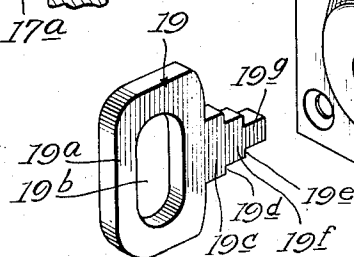
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L. A. BITTORF

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HASP TYPE FASTENER

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HASP-TYPE FASTENER

Louis A. Bittorf, Sterling, Ill., assignor to National Manufacturing Company, Sterling, Ill., a corporation of Illinois

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1 Claim. (Cl. 292—340)

My invention relates to fastener devices of the hasp-type which are particularly useful in connection with the fastening of doors and various other kinds of closure members.

One of the objects of my invention is to provide an improved hasp-type fastener which is exceedingly simple in construction, is inexpensive to manufacture, is quite strong and durable, and is fully effective as a closure fastening means over long periods of use notwithstanding wear and weather-exposure effects.

Another object is to provide a structure of the foregoing character wherein tensioning means is employed for retaining the several parts thereof in predetermined adjusted position. To this end, I employ a hinged hasp member slotted to receive a yieldably and rotatably mounted keeper member, both the hasp member and keeper member being so relatively shaped that the hasp member is placed and held under tension in the fastening position of the parts so that such parts are held in such position against accidental displacement by vibration, shocks, wind pressures and various strains and stresses that may be imposed thereupon.

A more specific object is to provide a hinged hasp member having an outwardly-offset, slotted end portion adapted to receive a yieldably-supported and rotatable keeper which is provided with camming means for placing the offset end of the hasp member under tension for maintaining the parts in engaged position against accidental displacement.

Other objects and advantages will become apparent as this description progresses and by reference to the drawing wherein,—

Figure 1 is a fragmental top edge view of a structure having my invention applied thereto;

Fig. 2 is a front elevational view of the structure shown in Fig. 1;

Fig. 3 is a section taken substantially on line 3—3 of Fig. 2; and

Fig. 4 is an enlarged assembly view of the keeper structure, the separated parts being shown in perspective.

Referring particularly to the drawing, I have illustrated a hasp structure applied to a door adapted to close an opening 11 formed by a plurality of frame members, one of which is shown at 12. The hasp fastener structure takes the form of a hinge member having a leaf 13 secured to the door adjacent its free edge by a plurality of screws or other fastening devices 14. Another leaf member 15 is connected to the leaf 13 by a pintle 16, which latter leaf is arranged to

fold over and upon the leaf 13 and it is of sufficient length to extend beyond the edge of the door and over the frame member 12.

The frame member 12 supports a keeper structure which includes a base 17 secured to the frame member by a plurality of screws or other fastening devices 18. This base is provided with a central and frusto-conical raised portion 17^a providing a similarly-shaped pocket 17^b in the underside of the base for rotatable reception and securement of a keeper member 19. More particularly, the keeper 19 takes the form of a key-like head 19^a having a slot 19^b for the reception of a locking device as will be referred to more particularly hereinafter. The keeper head is provided with a flat, step-down stem 19^c providing shoulders 19^d and 19^e. The central raised portion 17^a of the base is provided with a central, circular opening 17^c of a diameter substantially that of the keeper stem section 19^f, which opening is adapted to receive the keeper stem with its shoulder 19^d rotatably seated upon the base around the opening 17^c and its stem sections 19^f and 19^g extending into the base pocket 17^b. The portion of the stem within the pocket 17^b receives first a spring washer 20 having an opening 20^a of sufficient size to freely receive the keeper stem section 19^f, and a lock washer 21 having a rectangularly-shaped opening 21^a of substantially the dimensions of the keeper stem section 19^g so that this washer will seat against the keeper stem shoulder 19^e. With the parts thus assembled, the inner end of the keeper stem is upset as at 22 and the relationship of the parts thus described is such that, when the keeper stem is thusly upset, the spring washer 20 is compressed and the keeper is yieldingly secured with the keeper stem shoulder 19^d seated upon the top of the base under tension.

The outer or free end portion 15^a of the hasp hinge member 15 is offset outwardly from its portion adjacent the pintle 16. It will be noted that when the keeper 19 is secured in the base, a slight space is left between the underside of the keeper head and the adjacent top portion of the base. Also, the underside of the keeper head tapers upwardly and outwardly from the keeper stem to provide a cam-like surface which insures a camming action in the securement of the parts in their fastened position. The offsetting of the end 15^a of the free hasp member is such that the offset end of this member is spaced from the adjacent face of the frame member 12 a distance substantially greater than the minimum distance between the keeper head 19 and the base 17. The

offset end of the hasp member 15^a is provided with a longitudinal, elongated slot 23 which is adapted to freely receive the keeper head 19^a when the latter is rotated to position its plane along the longitudinal axis of such slot. When the hinge
 5 hasp member 15 is moved toward the keeper member and the keeper member is passed through the slot 23 and rotated crosswise of such slot, the outer tapered under edge of the keeper head first en-
 10 gages or picks up the adjacent slot-edge surface of the member 15 and, as this rotation of the keeper is continued, the tapered surface of the head depresses the offset portion of the member 15 and places the same under tension in an ob-
 15 vious manner. The hinge hasp structure is, preferably, formed of sheet metal or other suitable material which has some inherent flexibility and facilitates the action just described.

It will be obvious from the foregoing that, by
 20 yieldably mounting the keeper, and by flexing the end of the member 15 toward the frame member 12 as the keeper is rotated to its fastening position, the coactive result is the holding of the keeper in its fastening position under tension so
 25 that, if the structure is subjected to various vibrations, shocks, etc., it will not gradually move or creep into a position wherein the hasp member 15 will become loosened and freed from the keeper. Furthermore, it is quite desirable, when the keeper
 30 is moved to an unfastening position and the hasp member removed therefrom, that the keeper remain in this position ready for reception of the same in the slot 23 when it is again desired to fasten or move the parts to the position of
 35 Figs. 1 and 2. This arrangement insures the foregoing features regardless whether the closure structure is mounted in a vertical or other plane. In the event that it is desired to lock the closure in its fastened position, any suitable form of

lock may be passed through the keeper head slot 19^b as will be readily understood. It will also be noted that with the particular arrangement of parts which I employ, the fastening devices 14
 5 and 18 are concealed and rendered inaccessible when the structure is in its fastened position, thereby guarding against opening of the door or closure 10 by an unauthorized person when a lock is applied to the keeper 19. The yieldable
 10 mounting for the keeper and its tensioned engagement with the hinge hasp member further insures proper fastening over long periods of use, notwithstanding wear and ordinary weather depreciating effects.

While I have shown and described only one
 15 form of structure embodying my invention, it is to be understood that other changes in details and arrangements of parts may be made without departing from the spirit and scope of my invention as defined by the claim which follows: 20

I claim:

Structure of the class described which com-
 25 prises a keeper structure engageable with one of a pair of hingedly connected members for fastening purposes which includes a base member hav-
 30 ing an opening therein and a pocket in its under side, a keeper member having a head and a stem thereon adapted to pass through said opening into said pocket, said stem having a shoulder adapted to rotatably seat said stem upon said
 35 base with said head spaced from the latter, a washer mounted upon said stem within said pocket, said stem having another shoulder against which said washer is seated, and spring means in said pocket confined between said washer and
 said base for yieldably holding said keeper mem-
 ber in any position to which it may be rotated.

LOUIS A. BITTORF.