

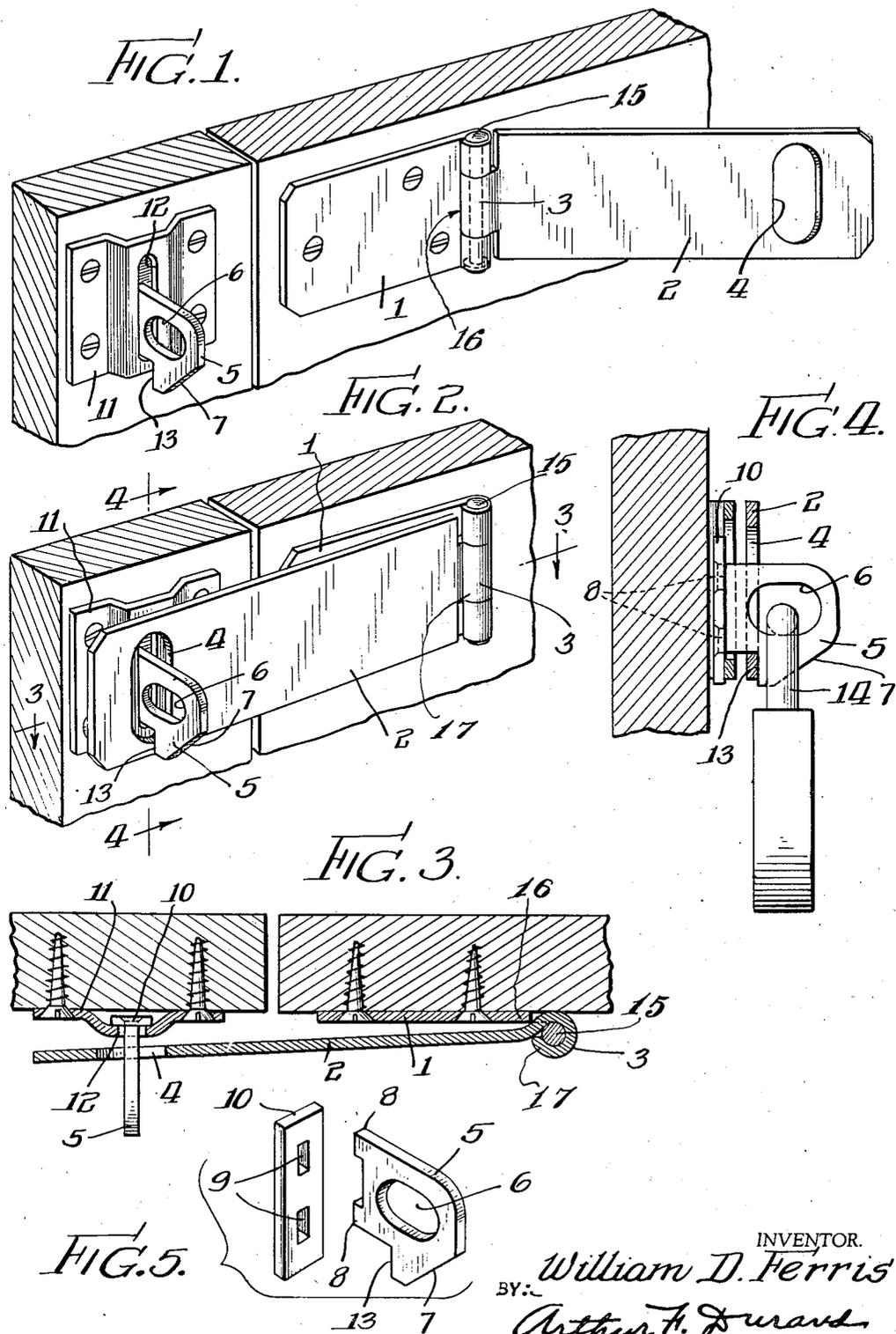
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COMBINED HASP AND LATCH

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## COMBINED HASP AND LATCH

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This invention relates to hasps for doors, and more particularly to those which are adapted to serve also as a latch, when the usual padlock is not in use.

Generally stated, the object of the invention is to provide a novel and improved construction and arrangement whereby the hasp will automatically latch, under tension, when swung and forced into latching position, so that the movable strike-piece, which forms the latch, does not need to be manually adjusted, in order to latch the door in closed position, such manual adjustment being unnecessary at such time, and only necessary when the hasp is unlatched to open the door, and so that the tension holds the strike-piece in latching position, and tends to hold the door closed.

It is also an object to provide certain novel details and features of construction tending to increase the efficiency and desirability of a combined hasp and latch of this particular character.

To the foregoing and other useful ends, the invention consists in matters hereinafter set forth and claimed and shown in the accompanying drawing, in which—

Fig. 1 is a perspective showing a combined hasp and latch embodying the principles of the invention, with the hasp in open or unlatched position.

Fig. 2 is a similar view showing the hasp in latched or closed position.

Fig. 3 is a horizontal section on line 3—3 in Fig. 2 of the drawing.

Fig. 4 is a vertical section on line 4—4 in Fig. 2 of the drawing, showing a padlock in place.

Fig. 5 is a perspective of the two portions that form the strike-piece or latch member.

As thus illustrated, the invention comprises a hasp composed of a relatively short section 1 and a relatively long section 2, in the form of flat plates, with a hinge 3 provided between them. The section 1 may be fastened by screws to the door, or to the building, depending upon which way it is desired to use the device. The relatively long section 2 of the hasp is flat and straight and is provided with a vertical slot 4 adjacent the end thereof.

The latch member or strike-piece is composed of the outer portion 5 that has an opening 6 for a padlock and has a bevel 7 to engage the lower edge of the slot 4, when the hasp is pushed into latching position. The inner end of the portion 5 has two projections 8 that are inserted through the holes 9 of the plate 10, and then riveted over, so that the portions 5 and 10 become rigidly connected together. A plate 11 is bent to provide a raised portion having a vertical slot 12 in which

the portion 5 is adapted to slide up and down, thus forming a guide for the up-and-down movement of the latch member. The plate 11 is adapted to be fastened by screws to the door or to the building, as may be desired.

Thus, when the plate or hasp section 2 is swung around into the position shown in Fig. 2 of the drawing, the lower edge of the slot 4 will engage the bevel 7 and push the latch member 5 and its base 10 upward, until the hook or nose 13 of the portion 5 extends down outside the plate 2, to hold the latter in latched position. Preferably, the knuckles of the hinge 3 are so formed that the flat plate or hasp section 2 is under some tension when it is in latching position, as shown in Figs. 2 and 3 of the drawing. As this hasp section 2 is of goodly length, it can be practically of any desired thickness, for its full length, without interfering with the slight bending thereof which is necessary to hold it under tension while in latching position. This obviates the necessity, for example, of providing the section 2 with an intermediate section of reduced thickness, in order to obtain the desired flexibility, for when the latter is spread over the entire length of the hasp plate, it follows that it can be of full thickness throughout its length, as only slight flexibility is required to force it into latching position, as shown in Figs. 2 and 3 of the drawing.

Thus, the hasp may perform the ordinary function of locking the door, by means of an ordinary padlock 14 inserted through the hole 6 previously mentioned, as shown in Fig. 4 of the drawing. However, when the padlock is not in use, the hasp is adapted to be employed as an ordinary latch, for latching and unlatching the door. No manual adjustment of the latch-piece 5 is necessary when the hasp section 2 is forced into latching position, as the latch member 5 and 10 is pushed upward, and it is then allowed to drop downward by gravity into latching position. Of course, when the device is unlatched to open the door, the portion 5 is then manually raised until the lower end of the hook or nose 13 is above the lower edge of the slot 4, so that the hasp section 2 may then swing outwardly, and permit the door to be opened.

Thus, a swinging hasp-plate is provided with a vertical slot, instead of a horizontal slot, in order to obtain an automatic latching action, when the padlock is not used, for latching the door in closed position, the latch-piece 5 having vertical reciprocation in the said slot.

It will be seen that the knuckle of the plate 2, as shown more clearly in Fig. 3 of the drawing,

extends inwardly and around and back of the pintle 15 of the hinge, and then outwardly and around until the end of the metal meets the body of the plate. With this formation, therefore, the  
 5 plate 2, where it terminates in the said hinge, engages the edge 16 of the plate 1, so that said edge forms a fulcrum against which the plate 2 bears, with the result that a considerable leverage is exerted, so that flexing or bending of the plate  
 10 2 is comparatively easy in order to force it into position to engage the retaining edge 13 of the latch-piece, so that the latter will hold the hasp plate 2 under tension. This results in an outward pull on the latch-piece 5, which may be  
 15 called a strike-piece, and this tension tends to keep the door tightly closed when the hasp is in latching position, and tends to prevent rattling and accidental unlatching of the hasp. Normally, as shown in Fig. 3, when the hasp is in  
 20 latching position the plate 2 is spaced a distance from the raised portion of the plate 11, and the plate 2 is at an angle to the plate 1, instead of being parallel therewith.

Furthermore, it will be seen that the knuckle 3  
 25 is formed by a reduced end portion of the plate 2 that extends around and behind the pintle 15 and then in front of the latter until its end 17 practically engages its base, so that the latter is in position to engage the fulcrum 16 shown and  
 30 described.

What I claim as my invention is:

1. A combined hasp and latch device, comprising a bracket plate, a swinging hasp plate, a hinge between the ends of said plates, and means forming a stop at said hinge, to limit the swinging motion of the hasp plate, so that in latching position the hasp plate is slightly flexed and under tension, said stop permitting flexing throughout the entire length of the hasp plate, said hinge comprising a pair of spaced knuckles integral with said first mentioned bracket plate, with said stop formed by an edge extending between the knuckles, and said hasp plate having a single knuckle disposed between said spaced knuckles, with said edge engaging the inner side  
 15 of said single knuckle.

2. A structure as specified in claim 1, comprising a pintle for said hinge, said single knuckle being formed by an end portion of said hasp plate that extends inwardly back of said pintle, in the latching position of the device, and then around  
 20 in front until its end terminates at its base portion.

3. A structure as specified in claim 1, said edge being in the plane of the flat outer surface of said bracket plate, and the point of engagement of the hasp plate with said edge being in a plane parallel with but spaced a distance from the plane of the flat inner surface of the hasp plate.

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