Aug. 29, 1950 H. E. SOREF ET AL 2,520,742

HASP

Filed Aug. 10, 1946

Fig. 1

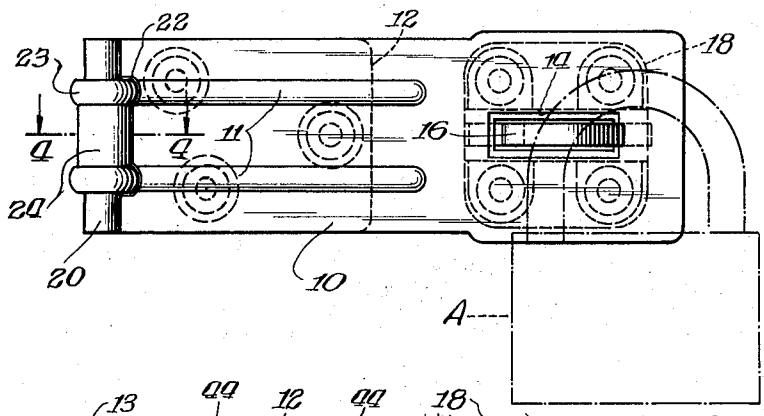


Fig. 2

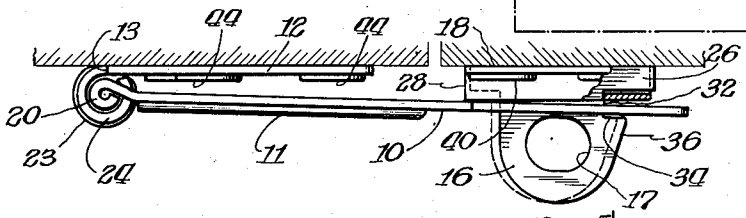


Fig. 3

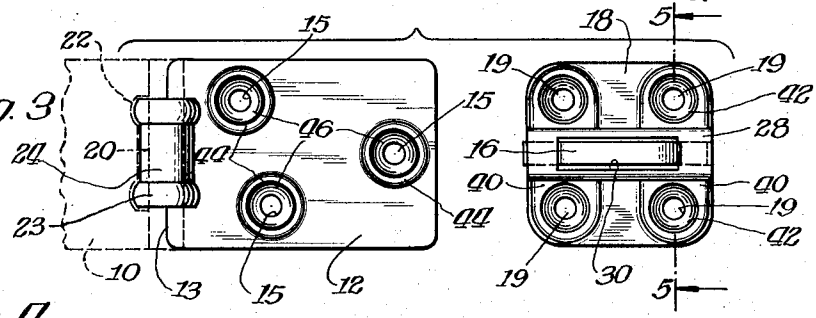


Fig. 4

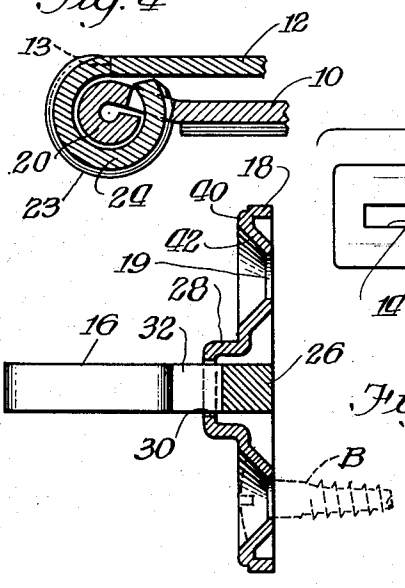


Fig. 6

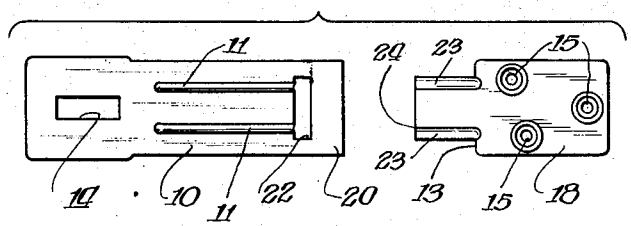


Fig. 5

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2,520,742

## HASP

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Application August 10, 1946, Serial No. 689,642

1 Claim. (Cl. 292—281)

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This invention relates to hasps designed for use with padlocks in securing closures of various types.

One object of the invention is to provide a hasp having a simplified form of hinge pivot or pintle constructed entirely from the material of the hasp itself.

Another object of the invention is to provide a hasp which affords an unusual measure of safety in that the heads of screws by which the parts are mounted are rendered substantially inaccessible when the hasp is in locked position.

It is also an object of the invention to provide a hasp of unusual strength, having embossed reinforcing features both in the hinge member and in the swinging hasp member attached thereto.

Other objects and advantages of the invention will appear from the following description taken in connection with the drawings, in which:

Fig. 1 is a front elevational view of a hasp embodying this invention, showing in broken outline a padlock employed therewith.

Fig. 2 is a top plan view of the parts shown in Fig. 1, omitting the padlock.

Fig. 3 is a face view showing the hinge member of the hasp with a fragment of the hasp member in dotted outline, and showing also the staple and its mounting plate.

Fig. 4 is a fragmentary sectional view taken as indicated at line 4—4 on Fig. 1, and on a larger scale.

Fig. 5 is a detail section taken as indicated at line 5—5 on Fig. 3, and on a larger scale.

Fig. 6 is a face view showing the two blanks from which the hasp and its hinge member are constructed prior to formation of the hinge connection.

The drawings show a hasp member 10 and the hinge plate 12 to which it is attached. Said hasp has a slot 14 adapted to fit over a staple 16 which is removably secured by a mounting plate 18. The hasp member 10 is hinged to the hinge plate 12, but instead of employing a separate pivot or pintle member, the material at one end of the plate 10 is curled or rolled upon itself at 20 to form the hinge pivot. The hinge plate 12 is provided with a relatively broad tongue 24 extending from one end of the plate and adapted to be curled around the pivot portion 20, as shown in Fig. 2. The hasp member 10 is formed with a rectangular aperture 22 through which the end of the tongue 24 extends when thus curled around the pivot portion 20, and in which said tongue engages as the hasp member 10 is swung about the axis of its hinged

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connection to the plate 12. Preferably, the tongue is formed with marginally disposed stiffening beads 23, and, preferably, the plate 10 is reinforced or stiffened by the formation of embossed ribs 11 extending longitudinally in the member 10 at the ends of the aperture 22, and aligned with the beads 23 of the tongue 24. The aperture 22 is shaped to fit around the beads 23.

Most hinges are designed to open by swinging one member through an angle of as much as 270 degrees, but in actual use a hasp is not required to swing through more than 180 degrees. Therefore, the hinge plate 12, instead of being cut back to provide the usual clearance at the hinge connection, extends so that its edge 13 lies substantially in a plane through the hinge axis perpendicular to the plane of the plate 12. As seen in Fig. 3, this edge 13 is aligned with the axis of the hinge so that, as seen in Fig. 2 and Fig. 6, the tongue 24 extends from this edge and is thus somewhat shorter and stiffer than it would be if the plate were formed in accordance with standard hinge practice.

The staple member 16 is formed with a base portion 26 which is slidably secured in the channel 28 pressed outwardly in the plate 18. The top wall of the channel is formed with the slot 30, and the neck or reduced portion 32 of the staple 16 is accommodated in said slot with limited endwise play. The staple is provided with a shoulder 34 which faces the plate 18 in spaced relation thereto, and which may overlap the outer face of the hasp member 10 when the slot 14 of the latter is fitted over the staple 16 in the position shown in Figs. 1 and 2. The staple 16 is formed with a sloping nose 36 adjoining the shoulder 34, so that as the hasp member 10 is swung to locking position, the end of its slot 14 will engage this sloping surface 36 and cam the staple toward one limit of its sliding movement in the plate 18, this limiting position being indicated in broken outline in Fig. 2. Then, if desired, the staple may be slid back to cause its shoulder 34 to overlap the plate 10, serving as a temporary means of retaining the plate in locking position. For many purposes this will be sufficient, but for complete securement a padlock, such as that indicated at A in Fig. 1, may have its shackle inserted through the eye 17 of the staple 16.

Figs. 1 and 2 do not show the screws by which the hinge plate 12 and the staple plate 18 are secured in place, but it will be understood that the apertures 15 of the plate 12 and the apertures 19 of the plate 18 are provided to receive

such securing screws. When the hasp member 10 is in locked position there is only a scant space between the under side of said member 10 and the outer surfaces of the plates 12 and 18; but to forestall removal of the hasp by manipulation of the securing screws, the plates 12 and 18 are formed with embossments so dimensioned that the heads of the screws are disposed entirely below the outer surfaces of such embossments, and are thus rendered inaccessible when the hasp member 10 is in locked position.

The plate 18 is formed with embossed portions 40 extending outwardly from the embossed channel 28 and each containing one of the apertures 19. At the outer ends these screw-holes 19 are countersunk at 42 to such a depth that each of them will accommodate the head of a securing screw B, as indicated in dotted outline in Fig. 5. In the hinge plate 12 the screw-holes 15 are formed in annular embossments 44 and are countersunk at 46 so that the heads of securing screws will not be exposed above the annular rims 44. The embossments 40 and 44 thus not only add material stiffness to the parts 12 and 18, but serve to protect the screws against removal when the hasp is locked. The reinforcing ribs 11 cooperate to oppose bending of the hasp member 10 in its locked position, and the extension of the plate 12 at the edge 13 stiffens the hinge tongues 24, as already explained.

While there is shown and described herein certain structure embodying and illustrating the invention, it will be understood that the invention is not limited thereto or thereby, but includes all variations, modifications and equivalents coming within the scope of the appended claim.

We claim:



In a staple construction for use with a pivotally mounted, slotted hasp member, a staple to be engaged in the slot of the hasp, and a mounting plate for the staple, said plate being provided with a generally medially disposed, upstanding, hollow rib, the upper surface of which is slotted, said staple extending through said slot, said plate being normally overlapped by the hasp when the staple is engaged in the slot of the hasp, said mounting plate having embossments extending outwardly from said rib transversely of the plate on either side of the rib and adjacent opposite ends of the plate, each of said embossments being provided with a hole for an attachment screw, the material of said plate in said embossments and surrounding said holes being countersunk substantially to the plane of the plate to form head-receiving recesses in which the heads of securing screws will lie entirely below the upper surface of the embossments whereby said screw heads will be rendered substantially inaccessible when the hasp is in locked position on the staple, said hasp member contacting said upstanding rib and completely overlapping said screws when the staple is engaged in said hasp.

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