June 20, 1950 A. S. RUMMELSBURG 2,511,998

CABINET DOOR CATCH

Filed Aug. 26, 1947

Fig. 4

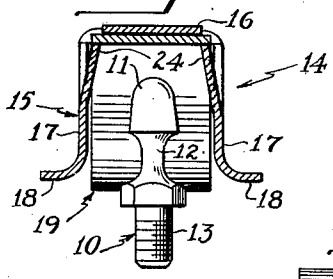


Fig. 5

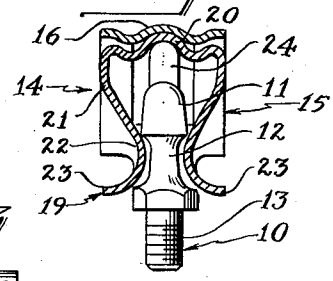


Fig. 3

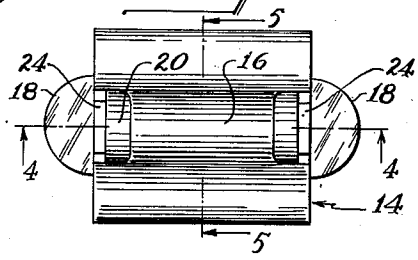


Fig. 1

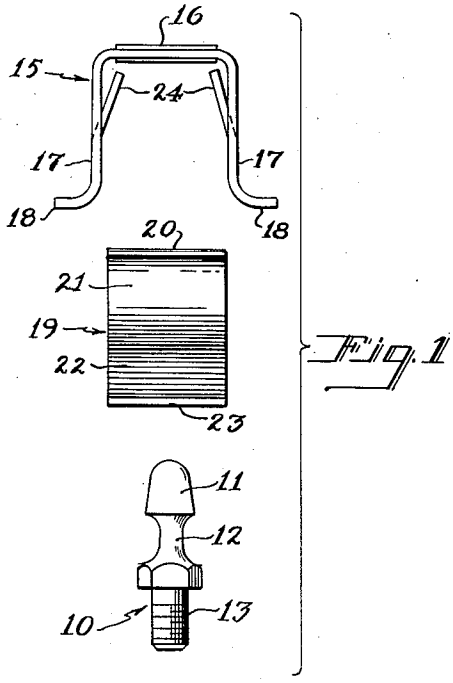
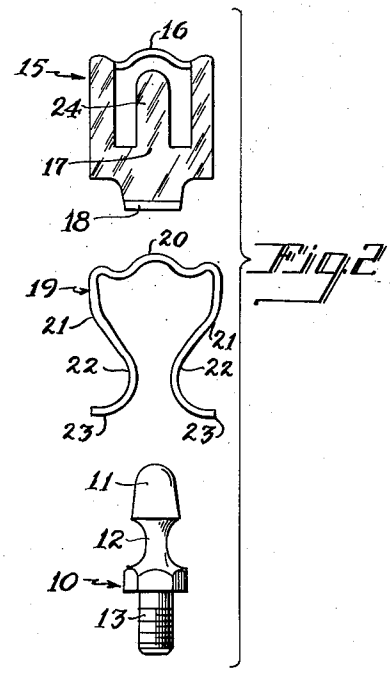


Fig. 2



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CABINET DOOR CATCH

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4 Claims. (Cl. 292—17)

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The present invention relates to a door catch, and more particularly, to a spring door catch, of the type generally used for securing the doors of metal cabinets, or the like.

Door catches of the type to which the present invention relates, as heretofore used, generally consist of a strike and a resilient strike receiving member, set, respectively, into the door and body of the cabinet. Such spring door catches as heretofore used generally consisted of an elongated strike receiving member which, because of its depth, necessarily had to be set into the wall of the cabinet, while the strike was set into the door thereof.

With the door catches as heretofore used, great accuracy in adjusting the position of the strike and its receiving spring relative to one another had to be exercised, in order to obtain an accurate alinement for effective operation. Frequently, because of inaccurate alinement of the strike relative to the receiving spring, or because of the disarrangement of the door on repeated use, which threw the strike and receiving spring out of alinement, there was great stress and strain on the door structure at the point of holding the strike, which resulted in the damage or breakage of the door at that point, as a result of which the door, which could not be repaired, had to be replaced.

It is an object of the present invention to provide door catches of the character described having a strike receiving spring of shallow depth which may be set into the door and a strike which may be set into the cabinet body, so that the strike may be readily replaced or the cabinet repaired when worn out, without the necessity of discarding any part of the cabinet.

It is another object of the present invention to provide a spring door catch of the character described which is pivoted for limited movement, so that it may readily and effectively receive and hold the strike even when the two are out of alinement, within the limits of the pivoted movement of the spring catch, thereby eliminating, to a practical extent, the necessity for accurate alinement of the strike and catch relative to one another.

It is still another object of the present invention to provide a door catch of the character described which may be easily and readily installed with a minimum consumption of time and labor.

It is a further object of the present invention to provide a door catch of the character described which is of simple construction and may be readily and easily assembled.

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It is a still further object of the present invention to provide a door catch of the character described which is strong and durable, and which is economical to produce.

The foregoing and other advantages and superiorities of the spring door catches of the present invention will become more readily apparent to those skilled in the art from the embodiment thereof shown in the accompanying drawings and from the description following. It is to be understood, however, that such embodiment is shown by way of illustration only, to make the principles and practice of the invention more readily comprehensible, and without any intent of limiting the invention to the specific details therein shown except as limited by the scope of the claims hereto appended.

In the drawings:

Fig. 1 is a blown view of the strike and of the component parts of the strike receiving member of the present invention;

Fig. 2 is a similar view of the same taken at right angles to the view of Fig. 1;

Fig. 3 is a bottom plan view of the strike and assembled strike receiving member, shown in interlocked position;

Fig. 4 is a longitudinal section taken on line 4—4 of Fig. 3; and

Fig. 5 is a vertical sectional view taken on line 5—5 of Fig. 3.

Referring more specifically to the accompanying drawings, the door catch of the present invention consists of a strike, generally designated as 10, which may be of conventional form, having the head portion, 11, the neck, 12, and the threaded stem, 13, adapted to pass through the body of the cabinet wall and be engaged by a retaining nut.

The strike receiving member of the catch, generally designated as 14, may comprise two elements. One of said elements comprises a housing, 15, which is of general U-shape, having a preferably corrugated base, 16, and side arms, 17, which have outwardly offset ears or tabs, 18, by which the housing, 15, may be secured to the body of the cabinet door into which the housing, 15, may be set, in a conventional manner not thought necessary to be specifically illustrated.

The second element of the strike receiving member, 14, is a spring element, 19, which is likewise of U-shape and is adapted to be disposed within the housing, 15, with its base, 20, at right angles to the arms 17, of the housing, 15. The base 20 may likewise be corrugated, for increased strength and resilience, but in a direction

at right angles to the corrugations in the base, 16, so that the two sets of corrugations may mesh when the spring element, 19, is arranged within the housing 15.

The side arms, 21, of the spring element, 19, may be inwardly curved adjacent their ends, as at 22, to engage the neck, 12, of the strike, 10, and their ends, 23, may be outwardly flared, for the purpose of receiving and guiding the head, 11, of the strike, 10, into the spring element, 19, in the conventional manner.

To assemble and maintain the spring element, 19, within the housing, 15, and to permit a limited tilting or pivotal movement of the spring, 19, within the housing, 15, there are provided on the side arms, 17, of the housing, 15, struck out lugs, 24, which may be inwardly bent, to engage the bottom or base, 20, of the spring element, 19, to prevent its withdrawal from the housing, 15. The ends of the lugs, 24, may be relatively pointed so that their area of contact with the base, 20, may be limited, to permit slight tilting of the spring element, 19, within the housing, 15. The amount of tilting may be controlled by the distance of the ends of the lugs, 24, from the base, 20.

This completes the description of one preferred embodiment of the door catches of the present invention. It will be readily apparent that such catches may be made of shallow depth, thereby permitting the reversal of the presently prevailing system of installation, to place the strike receiver in the door; that the catches of the present invention do not require accurate alinement but may permit disalinement within certain limits, both in a vertical or horizontal direction, by reason of the width of the device and of the limited tiltability of the spring element of the strike receiver; that they may be easily and economically manufactured and easily assembled and that they may be installed with greater ease and economy than heretofore possible.

It will also be apparent that many modifications and variations in the door catches of present invention may be made by any one skilled in the art, in accordance with the principles thereof hereinabove set forth, without the use of any inventive ingenuity. I desire, therefore, to be protected for any and all such modifications and variations that may be made within the spirit of the present invention and the scope of the claims hereto appended.

What I claim is:

1. A door catch of the character described, comprising, in combination with a strike adapted to be set into the wall of a cabinet or the like, of a strike receiving member consisting of a U-shaped housing element of a height approximately equal to its width and adapted to be set into the door of a cabinet or the like, said housing element having a base and side walls extending from said base, said base being corrugated parallel to said side walls, and a strike engaging spring element of substantially U-shape having a base and side walls including inwardly curved strike retaining portions, said base of the strike receiving element being corrugated parallel to the arms thereof, said spring element disposed within the

said housing element with its base disposed transversely of the base of the housing element with their corrugations fitting into one another, and inwardly bent struck out lugs on each side wall of the said housing element engaging the inner face of the base of the said spring element to retain the said spring element within the said housing element and to limit its tilting movement therewithin.

2. A door catch of the character described, comprising, in combination, with a strike adapted to be set into the wall of a cabinet or the like, of a strike receiving member consisting of a U-shaped housing element of a height approximately equal to its width and adapted to be set into the door of a cabinet or the like, said housing element having a corrugated base and side walls extending from two sides thereof, and a strike engaging spring element of substantially U-shape having a corrugated base and side walls including inwardly curving strike retaining portions, the bases of said housing element and spring element being oppositely corrugated with respect to their side walls, said spring element disposed within said housing element with their bases disposed transversely of one another so that their corrugations fit within one another, and an inwardly bent stuck out lug on each side wall of the said housing element engaging the inner face of the base of the said spring element to retain the said spring element within the said housing element and to limit its tilting movement therewithin.

3. In a strike receiver of a door catch of the character described, a U-shaped housing element having a corrugated base and side walls of a height substantially equal to the length of the said base, each of said side walls having a finger struck out therefrom terminating short of the said base and pressed inwardly thereover, and a substantially U-shaped spring element having a corrugated base and side walls, said spring element base and said housing element base being corrugated in opposed directions with respect to their side walls, said spring element disposed within the said housing element with its base transversely disposed with respect to the housing element base and its corrugations fitting into the corrugations of the housing element base and the inner face of its base engaged by the ends of the said fingers to thereby be retained within the said housing element and its movement therein limited by the base surfaces.

4. The catch receiver of claim 3, wherein the base of the said housing element is corrugated perpendicularly to the side walls thereof and the base of the said spring element is corrugated parallel to the side walls thereof.

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