Apr. 10, 1923. 1,451,356

R. M. YEMNIKER

FASTENING DEVICE

Filed May 28, 1920

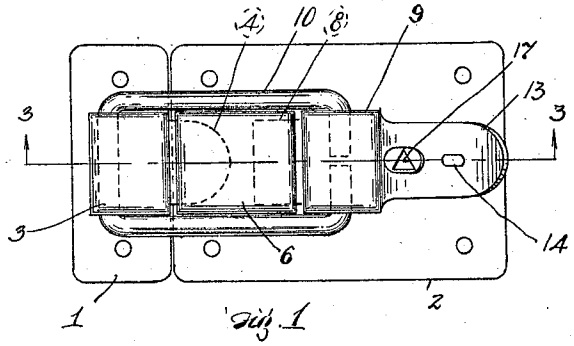


Fig. 1

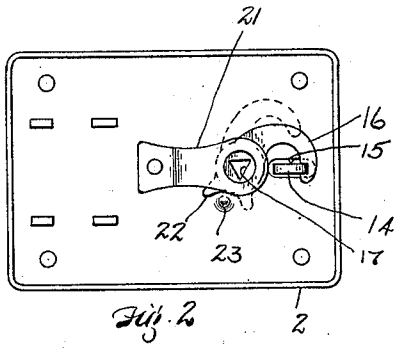


Fig. 2

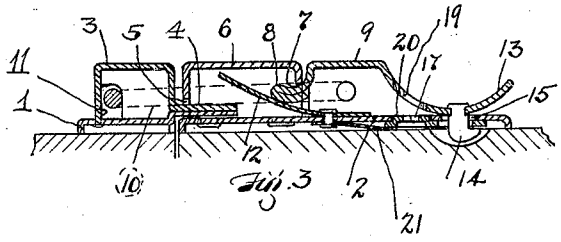


Fig. 3

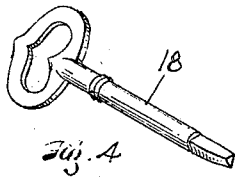


Fig. 4

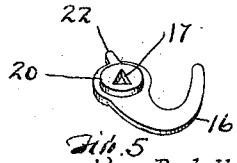


Fig. 5

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UNITED STATES PATENT OFFICE.

RUDOLPH M. YEMNIKER, OF CLEVELAND, OHIO, ASSIGNOR TO THE LANGENAU MANUFACTURING COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

FASTENING DEVICE.

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To all whom it may concern:

Be it known that I, RUDOLPH M. YEMNIKER, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Fastening Devices, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

The present improvements relate more particularly to locks or hasps of the sort used on trunks, suit cases and the like, characterized by having a hasp in the form of a link pivotally attached to one part of such trunk or other article, and adapted to engage with a fixed member or projection on the other part, whereby said parts may be drawn and more or less securely fastened together. The object of the present invention is to provide, in connection with a special design of fastening device of the general type referred to, special locking means for securing the parts in their interengaging positions.

To the accomplishment of the foregoing or related ends, the invention, then, consists of the means hereinafter fully described and particularly pointed out in the claim, the annexed drawing and the following description illustrating but one of the several mechanical forms in which the principle of the invention may be embodied.

In said annexed drawing:—

Fig. 1 is a front elevation or plan view of a fastening device embodying one form of my present improvements, said device being shown in its closed or locking position; Fig. 2 is a bottom plan view of one member of said device; Fig. 3 is a longitudinal central section of the device, the plane of the section being indicated by the line 3—3, Fig. 1; Fig. 4 is a perspective view of a typical key suitable for use with the device; and Fig. 5 is a similar view of the supplemental locking element.

Referring to Figs. 1 and 3, the device will be seen to comprise two base plates 1 and 2, which are respectively designed to be secured in abutting relation to the main body and the cover or lid of a trunk, suit case, or other similar article. Rigidly attached to said plate 1 is a projection 3, shown as a hollow boss, that is provided with an integral tongue 4 so disposed as to project across the line separating the two plates when in operative relation, and to enter a recess 5 formed in a complementary projection 6 rigidly attached to plate 2. The opposite end of said projection 6, which, like projection 3 on plate 1, is in the form of a hollow boss, is provided with a somewhat larger recess 7 to receive the tongue 8 of a member 9 pivotally mounted on the outer or free end of a link 10, the other end of which is pivotally secured in a transverse opening 11 in the projection 3 on plate 1. A curved leaf spring 12 on plate 2 projects inwardly through aperture 7 so as to be engaged by the tongue 8 when the parts of the device are brought together into locking position as shown in Figs. 1 and 3, and by pressing outwardly against such tongue assists in aligning the parts as well as in preventing unnecessary rattling.

This spring also has the effect to tilt member 9 about the corresponding end of the link 10 so as to hold its outer end 13, which is fastened to the handle, against plate 2. In other words, such spring tends to retain the parts of the device in locking position. However, to insure against unintentional release of said member 9, with consequent separation of the two plates 1 and 2 of the device, I mount a notched stud 14 on such handled end of said member, said stud being adapted to project through an aperture 15 in plate 2, and to be engaged with a hook-like locking element 16 that is pivotally secured to the under side of said plate. To actuate said element, it is formed with an axial key-receiving recess 17, the key 18 (see Fig. 4) having its operative end shaped to fit such recess, which is shown as triangular in form, but of course may be of any shape desired. Since the handled end 13 of member 9 overlies the portion of the plate to which said locking element 16 is secured, an aperture 19 is provided in such end, through which the key may be inserted into engagement with such recess 17, the element 16 having a hub 20 rotatably fitting in the corresponding opening in the plate and being held in place by a flat finger 21 attached to the under side of the latter, as best shown in Fig. 2.

The locking element 16 is also provided with a projecting lug 22, and a rounded projection 23 is formed on the under side of

plate 1 in the path of such lug so that said projection 22 has to be sprung thereover in either opening or closing said locking element.

The mode of operation of my improved fastening device as a whole will be readily apparent from the foregoing description of its component parts and their individual operation. The device constitutes a very simple and effective fastener, irrespective of the supplemental locking means provided, consisting of the pivotal element 16 and key 18 for operating same. The addition of the latter constitutes of the device an efficient lock, preventing not only accidental separation of the parts of the device, but also unauthorized tampering.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by the following claim or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:—

In a fastening device of the character described, the combination of two plates designed to be secured in abutting relation on the parts to be fastened together; a link pivotally attached to one of said plates; a lever member pivotally attached to the free end of said link and having a fulcrum end adapted to engage with said other plate; and a leaf spring acting on said fulcrum end serving to align said parts during the latching operation and to hold said parts in locking position.

Signed by me, this 26 day of May, 1920.

RUDOLPH M. YEMNIKER.