May 25, 1926. 1,586,061

E. D. BARTON

ROPE AND STRAP FASTENER

Filed Jan. 29, 1926

Fig. 1.

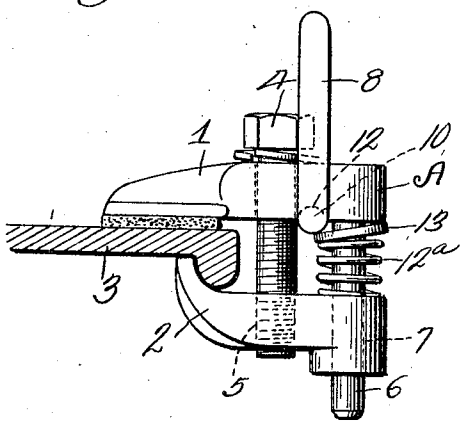



Fig. 2.

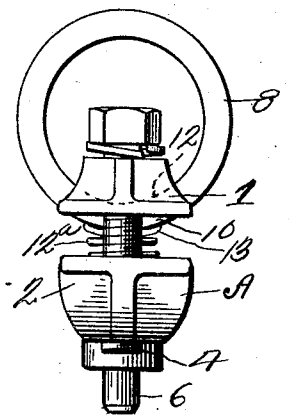



Fig. 3.

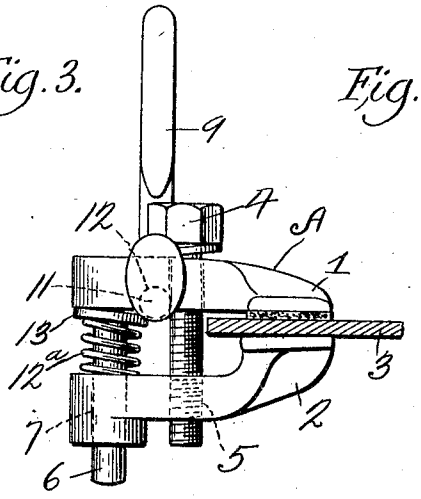
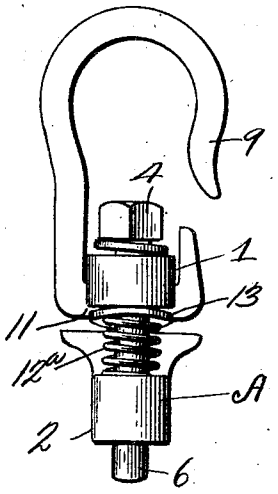



Fig. 4.




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# UNITED STATES PATENT OFFICE.

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## ROPE AND STRAP FASTENER.

Application filed January 29, 1926. Serial No. 84,684.

The invention relates to rope and strap fasteners for use in connection with running boards of automobiles, however applicable for various purposes and has for its object to provide a device of this character comprising clamping jaws which may be moved towards or away from each other by means of a bolt extending through one of the jaws and threaded through the other jaw and guided in their movement by means of a pin carried by one of the jaws and slidably mounted in an aperture of the other jaw, and around which pin an expansion pin is disposed for facilitating the movement of the jaws and which spring cooperates with a washer which engages a ring or hook which extends under one of the jaws between the bolt and pin and prevents rattling of the ring or hook as the vehicle moves over rough ground.

A further object is to not only use the expensive action of the coiled spring for forcing the jaws apart but also for holding a ring or hook against rattling. Also to provide a groove in the under side of a jaw for the reception of the lower portion of the ring or hook.

With the above and other objects in view the invention resides in the combination and arrangement of parts as hereinafter set forth, shown in the drawing, described and claimed, it being understood that changes in the precise embodiment of the invention may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawing:—

Figure 1 is a side elevation of the clamp showing the same applied to a conventional form of running board.

Figure 2 is a front elevation of the clamp.

Figure 3 is a side elevation of the clamp showing a hook instead of a ring.

Figure 4 is a rear elevation of the clamp shown in Figure 3.

Referring to the drawing the letter A designates a clamp of the general type shown in Patent No. 1,516,489, issued to Edward D. Barton, November 25, 1924, and which clamp comprises an upper jaw 1 and a lower jaw 2 which are adapted to be horizontally disposed and be clamped on the upper and lower sides of a running board 3. Jaws 3 are forced together by means of a bolt 4, which extends through the upper jaw 1 and threaded at 5 to the lower jaw 2, therefore it will be seen when the bolt 4 is rotated in one direction the jaws 1 and 2 will be forced together, and when rotated in the opposite direction said jaws will be forced apart. Jaw 1 is provided with a guide pin 6 which is slidably mounted in apertures 7 of the lower jaw 2 and is carried by the upper jaw 1, and which pin relieves the bending strain on the bolt 4 during a clamping operation. In clamps of this character rings or hooks are used to which lines may be attached for securing a load on the running board, however there is a certain amount of slack which develops in straps and ropes which allow the ring or hook to rattle, thereby creating an objectionable noise, and to obviate this difficulty the ring 8 as shown in Figures 1 and 2 or the hook 9 as shown in Figure 4 have their lower portions 10, in the case of the ring, and 11 in the case of the hook, disposed in a transverse groove 12 in the under side of the jaw 1 between the bolt 4 and the guide pin 6. Surrounding the guide pin 6 and interposed between the jaw 2 and the jaw 1 is a coiled spring $12^a$, which coiled spring engages a washer 13, and which washer is carried by the pin 6 and with the expansive pressure of the spring $12^a$ engages the jaw 1 as well as the lower portion of the ring 8 and the hook 9, thereby holding said lower portion in the recesses 12 and prevents rattling of the ring or hook, and at the same time supplies the necessary expansive action for forcing the gripping jaws 1 and 2 apart. It will also be seen that the clamp can be left on the running board even when a strap or rope is not attached thereto and the ring or hook will not rattle or create an objectionable noise which is one of the main objections to clamps as at present constructed. It will also be seen the coiled spring 12 performs a double function, that is it forces the jaws 1 and 2 apart and at the same time prevents rattling of the parts, particularly the ring or hook.

The invention having been set forth what is claimed as new and useful is:—

1. The combination with a clamp comprising cooperating jaws, a bolt extending through said jaws and forming means whereby said jaws may be forced together, a guide pin carried by one of said jaws and extending through a guide aperture in the other jaw, an expansion spring surrounding the guide pin and forming means for

forcing the jaws apart, of a ring surrounding one of said jaws, said spring forming means cooperating with said ring between the guide pin and bolt for holding the same in close engagement with the jaw.

2. The combination with a clamp comprising cooperating jaws, a bolt for forcing said jaws together, a guide pin carried by one of the jaws and slidably mounted in the other jaw and in spaced parallel relation to the bolt, a coiled spring surrounding the guide pin, of an attaching member extending under one of the jaws, said coiled spring cooperating with the attaching member whereby said attaching member is held in close engagement with the jaw.

3. The combination with a clamp comprising cooperating jaws moved together by means of a bolt extending therethrough and guided by a guide pin carried by one of the jaws and slidably mounted in the other, a coiled spring surrounding the guide pin, of an attaching member extending under one of the jaws, said spring cooperating with said attaching member whereby it is held in close engagement with the jaw.

4. The combination with a clamp comprising cooperating jaws moved together by means of a bolt extending through the jaws and guided by a guide pin in parallel relation to the bolt and carried by one jaw and slidably mounted in the other, a coiled spring surrounding the pin and interposed between the jaws, an attaching member extending under one of the jaws and disposed in a recess therein, said coiled springs cooperating with said attaching member whereby it is held against movement in the recess.

5. The combination with a clamp comprising cooperating jaws having a bolt extending therethrough for moving the jaws in relation to each other, a guide pin in spaced relation to the bolts and slidably mounted in one of the jaws and having an expansion spring for normally forcing the jaws apart, a washer carried by said pin and with which one end of the spring cooperates, of a securing member extending under one of the jaws between the pin and bolt and in a recess in said jaw, said washer engaging said attaching member and the jaw and forming means whereby said spring will force the jaws apart and holding the attaching member in the recess.

In testimony whereof I hereunto affix my signature.

EDWARD D. BARTON.