

Feb. 19, 1924.

1,484,557

J. H. LATHAM

COMBINED SNAP AND BUCKLE FOR HARNESS

Filed Aug. 9, 1923

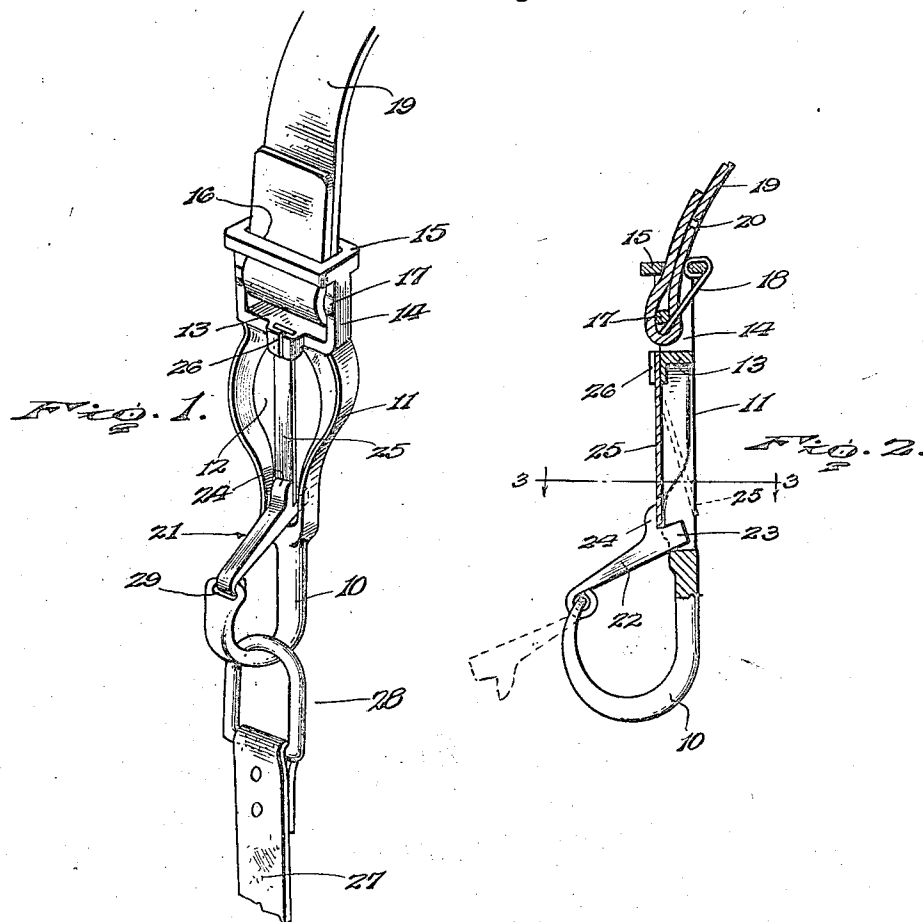
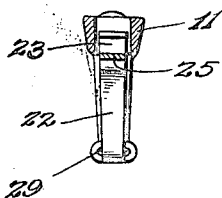


Fig. 3.



Inventor

J. H. Latham.

By

Lacy & Lacy, Attorneys

UNITED STATES PATENT OFFICE.

JOHN H. LATHAM, OF MARSHALL, MISSOURI.

COMBINED SNAP AND BUCKLE FOR HARNESS.

Application filed August 9, 1923. Serial No. 656,518.

To all whom it may concern:

Be it known that I, JOHN H. LATHAM, a citizen of the United States, residing at Marshall, in the county of Saline and State of Missouri, have invented certain new and useful Improvements in Combined Snaps and Buckles for Harness, of which the following is a specification.

My invention relates to a combined snap and buckle suitable for harnesses, and is intended to replace ordinary harness snaps which require a buckle to attach them to a strap.

In the accompanying drawings, one embodiment of the invention is illustrated; and—

Figure 1 is a perspective view of the snap buckle;

Figure 2 is a side elevation partly in section; and

Figure 3 is a section along line 3—3 of Figure 2.

The snap buckle consists of a hook 10 extending from the lower end of an elongated loop 11 having a longitudinal opening 12. The upper end of the loop terminates with a rectangular bridge piece 13 reaching transversely across the loop and provided with a pair of upwardly directed arms 14, the upper ends of which are united by a top member 15, which is somewhat wider than the arms 14 and has a rectangular opening 16 in the middle. Midway between the bridge 13 and the top member 15, the two shanks 14 are connected by a bar 17.

Centrally upon the rear portion of the top member 15 is hinged a depending finger 18 which reaches slightly below the bar 17 and can be swung around the top member 15. This upper portion of the device constitutes the buckle and a strap 19 taken down through the opening 16 of the top member 15, engages around the bar 17 and is returned through the opening 16. This strap, which is provided with a plurality of perforations 20, permits the finger 18 to pass through one of the same, so as to rigidly hold the strap in position in the buckle.

At the free end of the hook 10 is pivoted a dog 21 having a shank 22 of sufficient length to reach across the opening of the hook and enter with its heel 23 in the opening 12 of the loop. In upward direction from the shank 22 is provided a toe 24 which is adapted to engage on the outer side of a spring tongue 25 which is rec-

tangular in shape and secured in the bridge piece 13 by means of overlapping securing flanges 26.

It is evident from the drawing, that the dog 21 will be securely held in position, as seen in Figure 2, with the spring tongue 25 engaging in the V formed between the toe 24 and the heel 23 while the latter rests in the bottom of the opening 12 in the loop 11. This opening is narrower at the bottom so that no side play of the dog 21 is possible.

In order to assemble the strap 27 carrying a ring 28 in the snap, it is necessary to press inwardly, the spring tongue 25 to release the heel 23 of the dog 21, when the latter can be swung outwardly into the dotted position indicated in Figure 2. As the hook is now open, the ring 28 can be slipped over the dog and the end of the hook and the opening thereupon closed by pressing the dog down in front of the spring tongue 25 until the heel engages between the end of the latter and the bottom of the longitudinal opening in the loop 11.

It is evident that this device may have many uses not only on harnesses, but in connection with other straps for easy attachment and detachment of the same.

As the snap buckle consists of only four parts, the manufacturing cost thereof becomes very low. The main or body portion of the device, consisting of a hook 12, loop 11, bridge piece 13, shanks 14, and top member 15, forming one unit, may be cast or pressed out of suitable metal. The spring tongue 25 may then be inserted under the securing flanges 26 and the finger 18 bent around the rear portion of the top member 15, and finally the dog 21 inserted with its rear portion in the small eye 29 formed at the end of the hook, and the shank 22 thereupon bent to hold the dog 21 swingingly in the eye 29.

Having thus described the invention, what is claimed as new is:

1. A snap hook comprising a body member provided with a hook portion at one end and a suspension portion at the other end, and means for closing the open part of the hook portion; said means including a dog hinged at the free end of the hook portion, and a yieldable element adapted to retain said dog in closed position.

2. A combined snap and buckle comprising a body member provided with a hook portion at one end and a buckle portion at

the other end, and means for closing the open part of the hook portion; said means including a dog hinged at the free end of the hook, and a yieldable element secured in
5 the body member and adapted to engage with said dog to retain it in closed position.

3. A combined snap and buckle comprising a body member provided with a hook portion at one end and a buckle portion at
10 the other end, and means for closing the open part of the hook portion; said means including a dog hinged at the free end of the hook and a spring secured in the body member and adapted to engage with said
15 dog to retain it in closed position, said dog having a heel and a toe forming a V into which the free end of said spring is adapted to engage.

4. A combined snap and buckle comprising a body member provided with a hook
20 portion at one end and a buckle portion at the other end, and means for closing the open part of the hook portion; said means including a dog hinged at the free end of
25 the hook and a spring secured in the body member and adapted to engage with said dog to retain it in closed position, said dog

having a heel and a toe forming a V into which the free end of said spring is adapted to engage, said body member having an
30 opening adapted to receive said heel.

5. A combined snap and buckle comprising a body member provided with a hook portion at one end and a buckle portion at
35 the other end, and means for closing the open part of the hook portion; said means including a dog hinged at the free end of the hook and a spring secured in the body member and adapted to engage with said
40 dog to retain it in closed position, said dog having a heel and a toe forming a V into which the free end of said spring is adapted to engage, said body member having an opening adapted to receive said heel; said
45 buckle portion including a pair of parallel arms medially connected by a cross-bar, and a top element connecting the upper ends of said arms, said top element having a transverse slit and a hinged finger depending
50 from said top element and adapted to contact with said cross-bar.

In testimony whereof I affix my signature.

JOHN H. LATHAM. [L. s.]