

No. 649,460.

Patented May 15, 1900.

B. L. JORDAN.

SNAP HOOK.

(Application filed May 13, 1898.)

(No Model.)

FIG. 1.

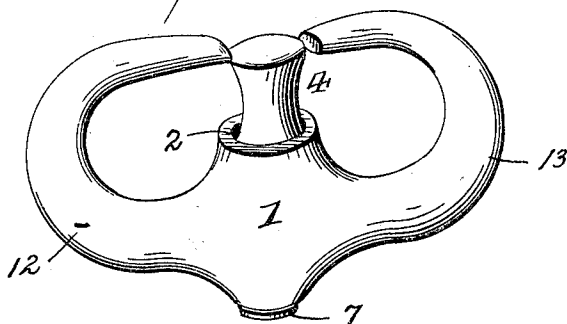


FIG. 2.

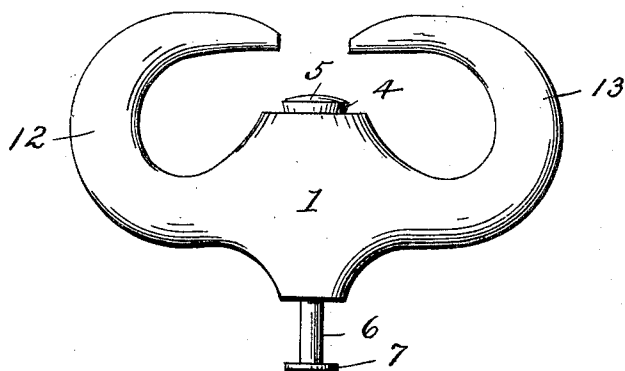
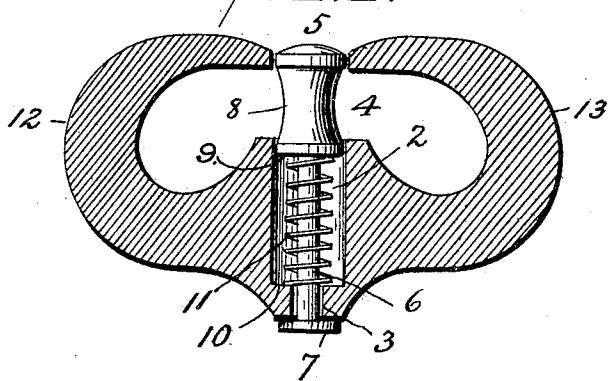


FIG. 3.



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UNITED STATES PATENT OFFICE.

BENJAMIN L. JORDAN, OF MERCERSBURG, PENNSYLVANIA.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 649,460, dated May 15, 1900.

Application filed May 13, 1898. Serial No. 680,611. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN L. JORDAN, a citizen of the United States, residing at Mercersburg, in the county of Franklin and State of Pennsylvania, have invented certain new and useful Improvements in Open Rings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to open rings; and it consists, essentially, of a double device of this character or one having opposite engaging members extending inwardly from and above a central support, in which a spring-actuated locking-tongue is movably mounted and adapted to close the opening between the inner terminating ends of the said opposite members.

The invention further consists of the details of construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

One object of the invention is to provide an open ring adapted to be quickly connected to adjacent devices, such as a single or double tree, and wherein the pulling strain will be brought to bear on opposite members having similar resistance to breakage and so positioned relatively to a movable closing-tongue that an accidental disengagement will be prevented and injury or obstruction to the free operation of the locking-tongue avoided.

A further object of the invention is to facilitate connecting separate devices in a quick and satisfactory manner and to hold them when connected in a positive manner by means of a simple and effective arrangement of parts of a strong and durable nature, easily and readily applied, and comparatively inexpensive.

In the accompanying drawings, Figure 1 is a perspective view of the improved open ring, showing the tongue in closing position. Fig. 2 is an elevation of the improved ring, showing the tongue open. Fig. 3 is a central longitudinal vertical section of the improved device.

Referring to the drawings, wherein similar numerals are employed to indicate the corresponding parts in the several views, the nu-

meral 1 designates a central or main support, which has an opening 2 extending almost entirely therethrough and forming a chamber, from which an aperture 3 leads outwardly at one end. Movably mounted in the said chamber is a closing-tongue 4, comprising an enlarged head 5, with a shank 6 extending through the said aperture 3 and having a limiting-washer 7 secured on the outer end thereof. The diameter of the chamber 2 is slightly greater than the cross-sectional extent of the larger portions of the head 5, said larger portions being oppositely situated and having a concaved reduced connecting portion 8 between them. At the point where the shank 6 meets the head 5 a shoulder 9 is necessarily formed in view of the difference of diameter of the two parts, and where the aperture 3 leads out from the chamber 2 another shoulder 10 is provided. Between the said shoulders 9 and 10 and surrounding the shank 6 is a coil-spring 11, which normally holds the head 5 projected outwardly from the chamber 2 and in closing position.

The head 5 is made of greater length than the distance between the inner end of the central support 1 and outer surfaces of the terminals of the hook members 12 and 13, so that the outer end of the tongue will normally occupy and close the space between said terminals and so that the shoulders or enlarged portions at the ends of the concaved surface 8 will be located at points where the connecting member cannot come in contact therewith and strain or move the tongue.

Extending outwardly from the support 1 are opposite hook members 12 and 13, which have their ends intumed equally and located at their terminations in line with opposite portions of the chamber 2. The said hook members 12 and 13 each contribute to the formation of a double open ring, and the closing-tongue 4 has the outer end thereof normally located between the intumed ends thereof. The terminations of the intumed ends of the said hook members approach very closely to the outer end of the closing-tongue and just allow the said tongue to clear the same in its operation. By this construction the tongue is adapted to be initially inserted through the space between the terminals of the hook members and to be withdrawn there-

through when it is found necessary or desirable to repair, replace, or clean the parts. This admits of the use of a ring made of hard metal, as no bending of said terminals is required in applying and removing the tongue.

In operation the closing-tongue 4 is pressed inwardly into the chamber 2, as shown by Fig. 2, when making a connection with one or more devices, and afterward said tongue is permitted to move in its normal position and close the space between the inner terminating ends of the hook members 12 and 13. It will be seen that when the open ring is applied to adjacent parts, such as a single and double tree or other articles to be connected, the attaching devices are held in engagement with the opposite hook members 12 and 13 and that the concaved reduced connecting portion 8 of the head 5 of the closing-tongue will cause such attaching devices to ride off therefrom without forcing the closing-tongue inward, which might cause disconnection, or outwardly with consequent strain on the several parts. It will also be observed that the pulling strain is entirely relieved or removed from the closing-tongue 4, and the latter does not become injured and is always in condition for quick operation in making an attachment or detachment of the ring as an entirety, either in whole or in part.

The improved open ring can also be used in connecting parts of harness or for other purposes and will be found very convenient for general usage.

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

1. A double snap-hook having longitudinally-alined hooks with their bills incurved or reversely disposed and spaced apart and a tongue freely movable between the terminals of the bills and normally limited in its outward movement, substantially as described.

2. A double snap-hook having longitudinally-alined hooks with their bills incurved or reversely disposed and spaced apart and a tongue freely movable between the termi-

nals of the bills and normally limited in its outward movement and having lateral bearing at its inner and outer ends, substantially as specified.

3. In a double snap-hook having a central portion and oppositely-disposed hooks, a spring-actuated tongue movable freely between the bills and across the space of the hooks and obtaining a lateral support at both ends, the outer end coming between the terminals of the said bills, and means applied to the projecting end of the shank of the tongue to limit the outward movement of the latter and provide a finger-grip, substantially as described.

4. The herein-specified snap-hook consisting of a central portion having a vertical chamber and an aperture at the outer end of the chamber, oppositely-disposed hooks having their bills spaced apart and in longitudinal alinement, a tongue slidable within the chamber and between the terminals of the bills and normally having its end portions confined, respectively, within the inner end of said chamber and between the terminals of the bills, and having its middle portion reduced and made concave, said tongue being removable and insertible into the chamber between the terminals of the bills and having a shank passing through the aperture at the outer end of said chamber, a washer applied to the projecting end of the shank and constituting a stop to limit the outward movement of the tongue and a finger-grip to be grasped when it is desired to withdraw the said tongue, and a spring surrounding the shank and confined between the shoulder thereof and a shoulder of the chamber, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

BENJAMIN L. JORDAN.

Witnesses:

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