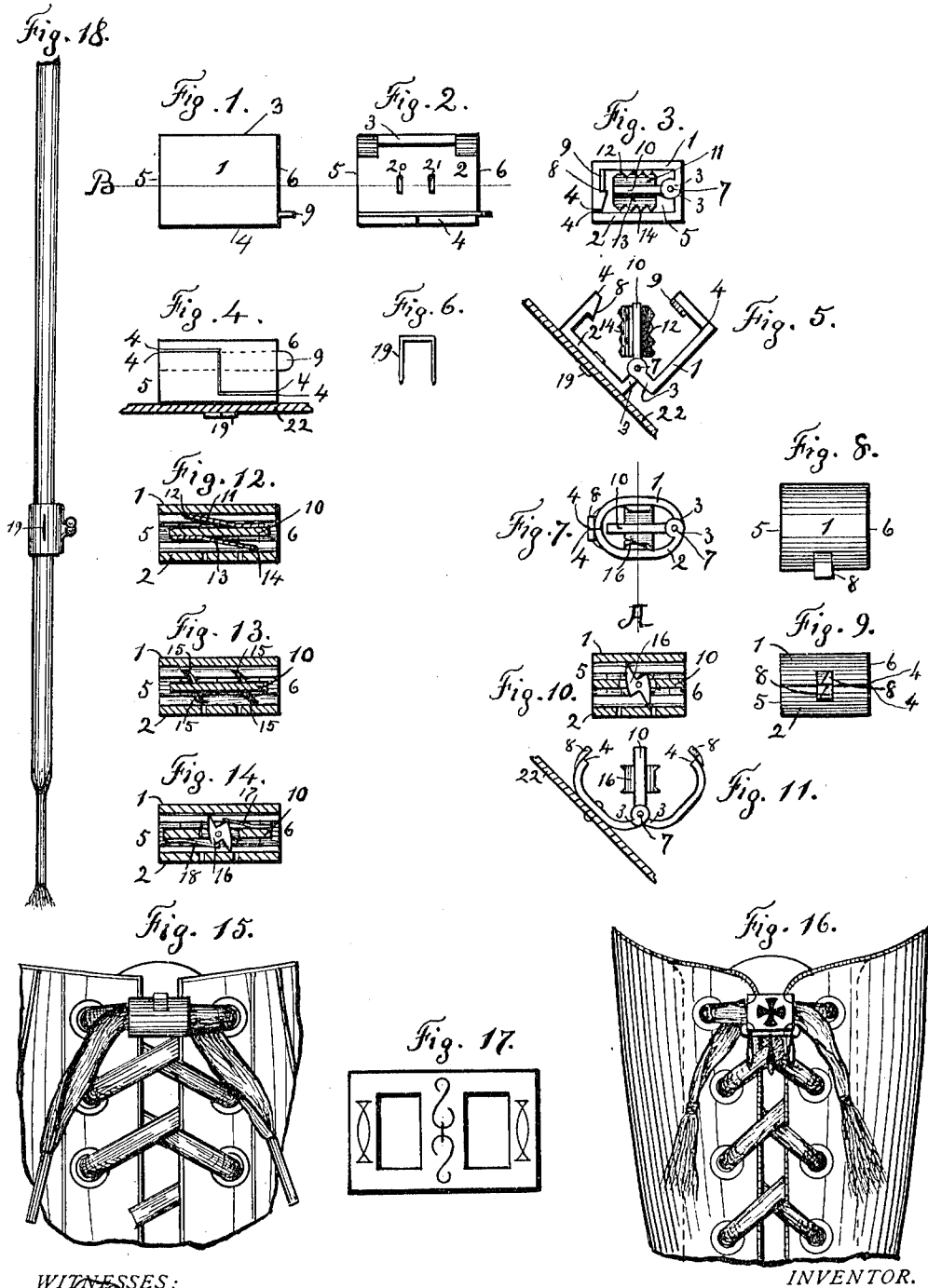


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DRAW CLASP.  
APPLICATION FILED JUNE 8, 1912.

1,064,013.

Patented June 10, 1913.



WITNESSES:

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## DRAW-CLASP.

1,064,013.

Specification of Letters Patent.

Patented June 10, 1913.

Application filed June 8, 1912. Serial No. 702,633.

*To all whom it may concern:*

Be it known that I, CHARLES E. SACKETT, a citizen of the United States, residing at Danbury, in the county of Fairfield and State of Connecticut, have invented a new and useful Improvement in Draw-Clasps, of which the following is a specification.

This invention relates to clasps especially adapted to join the opposed free ends of shoe laces, tapes, ribbons and the like, and to make an automatically controlled tension bond between them subject to release at will. It is called a draw clasp; closing the clasp first partially bonds the opposed shoe laces in position, then by exerting a drawing strain upon either or both free ends of the laces they may be gradually tightened to any degree of tension which the clasp will take up and hold automatically without any reflex action until the clasp is opened. It is believed that this subsidiary movement in a clasp is a novel invention, and an entirely new article of manufacture.

Shoe laces are now usually tied in bows or hard knots, an awkward process requiring an unpleasant bending of the body, and unless tied in hard knots which are hard to untie they are apt to become loose.

The invention is fully described in the following specification, and illustrated by the accompanying drawings, in which all the detail figures for the sake of clearness are exaggerated in size, but the clasp is shown in position on sections of shoe fronts, of the natural size adapted to the shoe laces shown.

The clasps may be stamped out of cheap metal, or made of gold or silver with embossed or engraved face, and hung with pendants or tassels in an ornamental manner.

In the drawings like numerals relate to like parts.

Figure 1, is a top view of the top member of a rectangular clasp. Fig. 2, is an inside view of the bottom member. Fig. 3, is a complete end view. Fig. 4, is an upper side view. Fig. 5, shows the clasp open to receive the shoe laces. Fig. 6, is a detail staple. Fig. 7, is a complete end view of an oval clasp. Fig. 8, a top view of the same. Fig. 9, a front view of the same. Fig. 10, a section through line A of Fig. 7. Fig. 11, an open view of the same ready to receive the

shoe laces. Figs. 12, 13 and 14, are sectional alternative details on line B of Figs. 1 or 2, of the mechanism for taking up tension on the shoe laces. Fig. 15, shows an oval clasp and shoe lace as applied to a front top section of a man's high shoe. Fig. 16, shows an ornamental rectangular clasp as applied to a front top section of a woman's shoe. Fig. 17, shows an oblong clasp with wing extensions adapted to wide ribbon laces and low cut shoes. Fig. 18, shows a clasp with ball snap attached to a shoe lace or hat cord.

1, and 2, are the top and bottom body plates of a clasp of the character stated; they may be round, oval, rectangular, or any suitable shape. The coinciding side edges 3, are squarely flanged or suitably curved at right angles to the longitudinal body portion of the top and bottom body plates. The flanged edges meet centrally to form an interior space and provide a longitudinal passage between the body plates. The ends 5, and 6, forming the entrance to and exit from this passage for opposed shoe laces and the like are left open in all clasps, the side edges 3, of the top and bottom plates must aline with each other and are hinged together by the hinge pivot 7. The opposite coinciding side edges 4, of the top and bottom plates must also aline with each other and with the edges 3, and are clasped together by the catch 8, and finger spring 9, or in any suitable hold-fast manner.

In the space formed between the top and bottom body plates and substantially midway of the passage is flexibly supported a longitudinal flat plate 10. This intermediate plate is preferably hinged with the body plates upon the hinge pivot 7. It is of such dimensions as to be inclosed neatly between the body plates of the clasp when closed; upon the upper side of this intermediate plate is secured a flexible device that will permit the passage of a shoe lace in one direction through the aforesaid passage when a drawing strain is exerted upon it, and will automatically prevent its withdrawal in the reverse direction; upon the lower side of the intermediate plate is secured a similar flexible device that will permit the passage of a shoe lace in the opposite direction when drawn upon, but will likewise prevent its withdrawal.

As various shapes of this device each pro-

5 ducing the same effect may be used, in the  
 sectional Figs. 12, 13, and 14, three alterna-  
 tive shapes are shown as illustrative of this  
 invention. In Fig. 12, a flat spring 11,  
 10 with serrated edge 12 (see end view Fig.  
 3), is riveted at one end to the top of the  
 intermediate plate, and is resiliently in-  
 clined upward and longitudinally in the  
 passage so that its serrated edge bears flexi-  
 15 bly against the under side of the top body  
 plate. A similar spring 13, with serrated  
 edge 14, is secured to the bottom of the in-  
 termediate plate, and resiliently inclined  
 20 downward toward the opposite end of the  
 passage so that its serrated edge bears flexi-  
 bly against the upper side of the bottom  
 body plate. It is obvious that, if shoe laces  
 were drawn through the passage above and  
 25 below the intermediate plate in contrary di-  
 rections, they would draw freely in the ten-  
 sion direction, and that any reflex action  
 would be immediately and automatically  
 stopped by the serrated edges of the flexible  
 springs, and also without disturbing the  
 30 closed clasp. In Fig. 13, a cheaper device  
 to the same end is shown. Round pointed  
 pins 15, are secured in the intermediate  
 plate at suitable points; the upper pins are  
 then curved or inclined toward one end of  
 35 the passage, the lower pins toward the op-  
 posite end of the passage; both sets of pins  
 just clear the inner faces of the top and  
 bottom clasp plates by the thickness of a  
 compressed shoe lace, this device while ef-  
 40 fective is not so flexible as the springs and  
 more apt to abrade the shoe laces. Fig. 14,  
 shows a swinging cam 16, pivoted in the  
 intermediate plate and operative above and  
 below it in contrary directions. The cam  
 45 has moderately sharp smooth edges, it is  
 held in an inclined wedgelike position by  
 the upper and lower springs 17, and 18;  
 when a shoe lace is drawn through the pas-  
 sage the wedge point is lowered to pass the  
 50 lace, but on any return movement it jams  
 the shoe lace against the inner faces of the  
 top and bottom plate and so resists reflex  
 action. In Fig. 10, this swinging cam is  
 shown without any springs, and it will so  
 55 act well, if not crowded down by too thick  
 a lace. It is again obvious, that the inter-  
 mediate plate may be left smooth above and  
 below as the sliding bed for the shoe laces,  
 and any of these devices attached to the in-  
 ner face of the top and bottom body plates  
 for the stop motion; such change merely  
 transposes the mechanism, it would pro-  
 duce the same effect, but is not so conven-  
 60 ient to manufacture.

65 Figs. 15, 16 and 17, show the clasp of  
 normal size and appearance on the fronts  
 of shoes for men and women. It will be  
 found more convenient to attach the clasp  
 centrally by its bottom leaf to the tongue  
 of the shoe; for this purpose the flat staple

19, is shown in Fig. 6, and the slots 20 and  
 21, in the bottom plate of Fig. 2, the staple  
 is passed through the slots and the tongue  
 leather 22, and bent fast as shown in Figs.  
 4 and 5. In Fig. 11, round holes are used  
 and a round wire staple. The clasp may be  
 attached to the tongue of the shoe between  
 any pair of eyelets at which it is desired to  
 terminate the lacing.

The action of the device is very simple. If  
 the clasp is attached to the tongue leather,  
 it is opened by pressing the spring catch,  
 the shoe being laced up to the tying point;  
 the free ends of the laces are laid in the  
 clasp, one each side of the intermediate  
 plate and in contrary directions; the clasp  
 is then snapped shut, and the shoe laces  
 drawn to any comfortable tension where  
 they will remain held until the clasp is  
 opened to take off the shoes. If the clasp  
 is unattached to the shoe it is held open in  
 position, the laces are laid through it, and  
 the clasp shut, the laces are then drawn tight  
 as desired. If the clasp is loose, to keep it in  
 exact central position the tension should be  
 evenly drawn in both directions on both laces  
 at once, as is usual in tying shoes. If shoe  
 laces are too long they can be cut off as close  
 to the clasp as desired, and tied tightly with  
 a few turns of similar colored thread, allow-  
 95 ing about an inch to fringe out into a tassel.

The clasp is well adapted also to secure  
 the free ends of any two opposed cords that  
 are regularly tied in about the same position  
 such as U. S. army hat cords. In such cases  
 as shown in Fig. 18, one leaf of the clasp is  
 secured to one of the free ends of the cord  
 by a light wire staple 19, (as shown in Fig.  
 6), in its usual tying position, the staple  
 presents its movement or loss when the clasp  
 is open. When about to secure the two ends  
 together, the other free end of the cord is  
 passed through the vacant side of the clasp  
 in a contrary direction, the clasp is then  
 closed, and any desired tension may be ex-  
 110 erted on the drawing cord which the clasp  
 will automatically take up and hold until  
 it is opened to release the cords.

Having thus described my invention, what  
 I claim and desire to secure by Letters Pat-  
 115 ent is:

1. In a draw clasp, the combination of  
 two body plates hinged and clasped together  
 to form a space between them open at the  
 ends providing a passage between them, an  
 120 intermediate plate arranged midway be-  
 tween said body plates pivotally supported  
 at their hinged side, sharp projections af-  
 fixed to the upper side of said intermediate  
 plate inclined toward one open end of said  
 125 passage, and bearing flexibly at their sharp  
 ends against the under side of one of the  
 body plates, corresponding sharp projec-  
 tions affixed to the other side of said inter-  
 mediate plate inclined toward the opposite

open end of said passage and bearing flexi-  
bly at their sharp ends against the under  
side of the other body plate, said projections  
being arranged in reverse relation to each  
5 other.

2. In a draw clasp, the combination of  
two body plates hinged together at one edge  
and with a separable clasp connection at  
the other edge, the plates being formed to  
10 provide a space therebetween, said space  
being open at the ends providing a passage  
through said clasp parallel with said body  
plates and their hinge pivot, a swinging in-  
termediate plate arranged between said  
15 body plates pivotally supported at their  
hinge side and parallel with them, said in-  
termediate plate dividing said passage into  
two compartments through which may be  
drawn cords, tapes, shoe laces, ribbons and  
20 the like, in separated and contrary direc-  
tions, and longitudinal flexible members ar-  
ranged in said compartments, one end of  
said members bearing against said clasp  
body plates, the other end against said in-  
25 termediate plate, one end of said longitudi-

nal members being fixed, the other end be-  
ing detached flexible and pointed.

3. In a draw clasp, the combination of  
two body plates hinged together at one edge  
and with a separable clasp connection at 30  
the other edge, the plates being formed to  
provide a space between them, a swinging  
intermediate plate arranged in said space  
parallel with said body plates and pivotally  
supported between them, said intermediate 35  
plate dividing said space into two compart-  
ments, means arranged in said compart-  
ments to automatically engage and compress  
any materials passing through either of  
them independently or together, and means 40  
arranged on one of said clasp body plates  
for attaching said clasps to any fixed object.

In testimony whereof I, CHARLES E.  
SACKETT, have signed my name to this speci-  
fication in the presence of two subscribing 45  
witnesses, this sixth day of June 1912.

CHARLES E. SACKETT.

Witnesses:

JAMES P. WILSON,  
A. H. WACHENFELD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."