(No Model.)

C. HOLLWEG.

CLASPING BUCKLE.

No. 485,544. Patented Nov. 1, 1892.

Fig. 1.

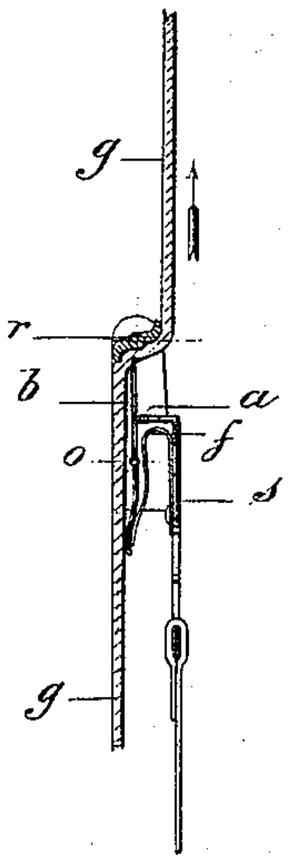


Fig. 2.

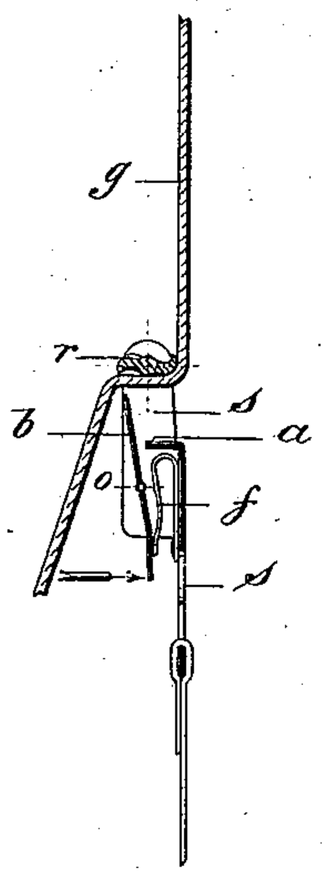


Fig. 3.

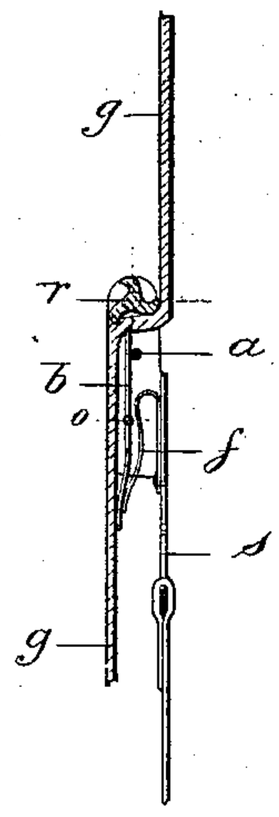


Fig. 4.

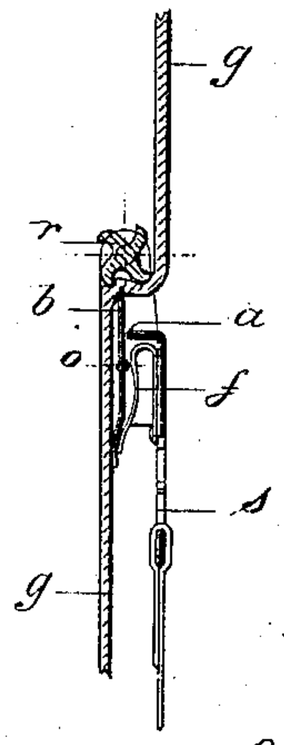


Fig. 5.

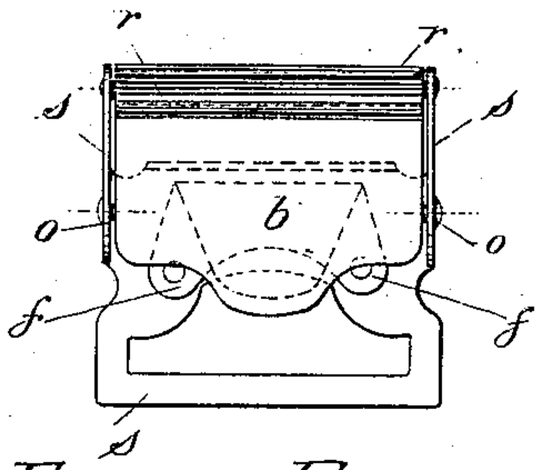


Fig. 6.

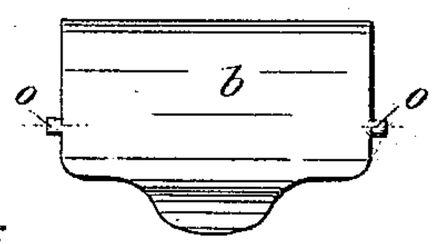


Fig. 7.

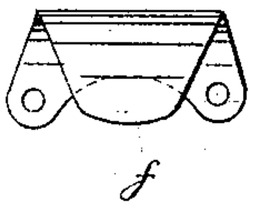


Fig. 9.

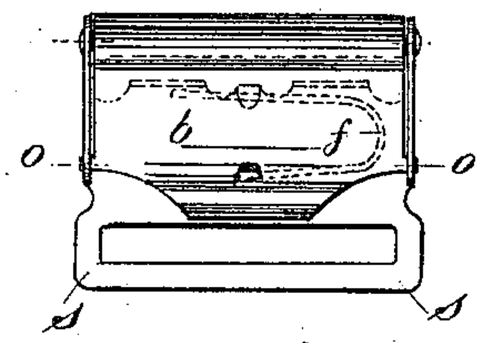
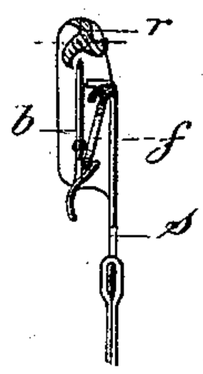


Fig. 8.



Witnesses:

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Rudolph Fricke.

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UNITED STATES PATENT OFFICE.

CARL HOLLWEG, OF BARMEN, GERMANY.

CLASPING-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 485,544, dated November 1, 1892.

Application filed August 11, 1892. Serial No. 442,746. (No model.)

To all whom it may concern:

Be it known that I, CARL HOLLWEG, a subject of the King of Prussia, residing at Barmen, Kingdom of Prussia, (Province of Rhenish Prussia,) Germany, have invented certain new and useful Improvements in Clasping-Buckles, of which the following is a specification.

This invention relates to an improvement in buckles for suspenders, belts, and the like, also serviceable as a clamp for the straps or cords of blinds, shades, and the like; and the invention consists in the novel features pointed out in the following specification and claim and illustrated in the annexed drawings, in which—

Figure 1 shows a sectional side elevation of the buckle or clamp closed. Fig. 2 is a view similar to Fig. 1, the clamp or buckle being open, or in the releasing position. Fig. 3 is a sectional side elevation of a modification. Fig. 4 is a sectional side elevation of another modification. Fig. 5 is a front elevation of the clamp or buckle. Fig. 6 is a detail view of the clamping-leaf. Fig. 7 is a detail view of a spring. Fig. 8 is a sectional side elevation of another modification. Fig. 9 is a front elevation of Fig. 8.

The buckle or clamp consists of the frame *s*, in which is journaled a roller *r*, having wings and provided with a clamping leaf or arm *b* and a spring *f*. The belt *g* is passed between the winged roller and the upper edge of the clamping leaf or tongue, Fig. 2, and is then pinched or clamped, as seen in Fig. 1, as soon as a pull takes place in the direction of the arrow, Fig. 1, since then the front wing of the roller moves toward the edge of the clamping-leaf and presses the belt firmly onto the latter. In consequence of the action of the pull of the belt on the roller the belt is held tighter the stronger the strain or pull to which it is exposed. The clamping-leaf *b* forms a two-armed lever and swings or fulcrums on the bearings or studs *o o*. If the lower lever-arm, on which acts the spring *f*, is pushed back in the direction of the arrow in Fig. 2, the upper lever-arm or clamping-edge moves forward, the winged roller is slightly turned, and the hold on the belt is broken, so that the latter can be freely moved back and forth through the buckle as long as the clamping-leaf is held in the described position. On releasing the clamping-leaf and on the slightest pull upon the belt *g* the parts at once assume the position shown in Fig. 1 to securely hold the belt, the clamping-leaf bracing or striking against a stud or brace *a*. In Figs. 1 and 2 the brace or stud *a* is formed by bending the rear wall of the buckle-frame. In Fig. 3 a separate rod or piece *a* is inserted to form the brace. The roller *r* may have any suitable number of wings, Fig. 1 showing two wings, Fig. 3 showing three wings, and Fig. 4 showing four wings. The number of wings has of course no effect on the manner of operation.

The manipulation of the buckle is extremely simple. To free the belt, it only requires a slight pressure on the lower part of the clamping-leaf. The clamping of the buckle occurs at once automatically as soon as the clamping-leaf and the inserted end of the belt are let go—a peculiarity of the buckle which is of great advantage when applied to suspenders, belts, and the like. Since the belt is supported along its entire width by the edge of the clamping-leaf, the belt obtains a secure hold. The clamping-edge of the leaf can also be somewhat sharpened. The hold on the belt is heightened by curving or forming the wings of roller *r* so that they to a certain degree surround or grasp the belt. The wear of the belt is very slight, as it is not pierced or punctured, as in the case of buckles, where pointed tongues, hooks, or prongs are applied. Instead of a leaf-spring, as in Fig. 5, a bent steel-wire spring, as shown in Fig. 8, can be applied, such spring being secured with one branch to a claw or fastening on the rear wall of the buckle-housing, the other branch of the spring being similarly secured to the clamping leaf or tongue.

What I claim as new, and desire to secure by Letters Patent, is—

A buckle consisting of a frame, a rotatable roller journaled in the frame and provided with a series of wings, a swinging clamping leaf or arm pivoted intermediate its upper and lower ends to the frame and having its upper end arranged to clamp a belt against the winged roller, a spring acting upon the

lower end of the leaf or arm to throw its upper end into clamping position, and a brace secured to the frame at a point above the pivot of the leaf or arm, so that the upper end portion of the latter strikes said brace when a belt is clamped against the roller, substantially as described.

In witness whereof I hereunto set my hand in presence of two witnesses.

CARL HOLLWEG.

Witnesses:
WM. ESSENWEIN,
RUDOLPH FRICKE.