

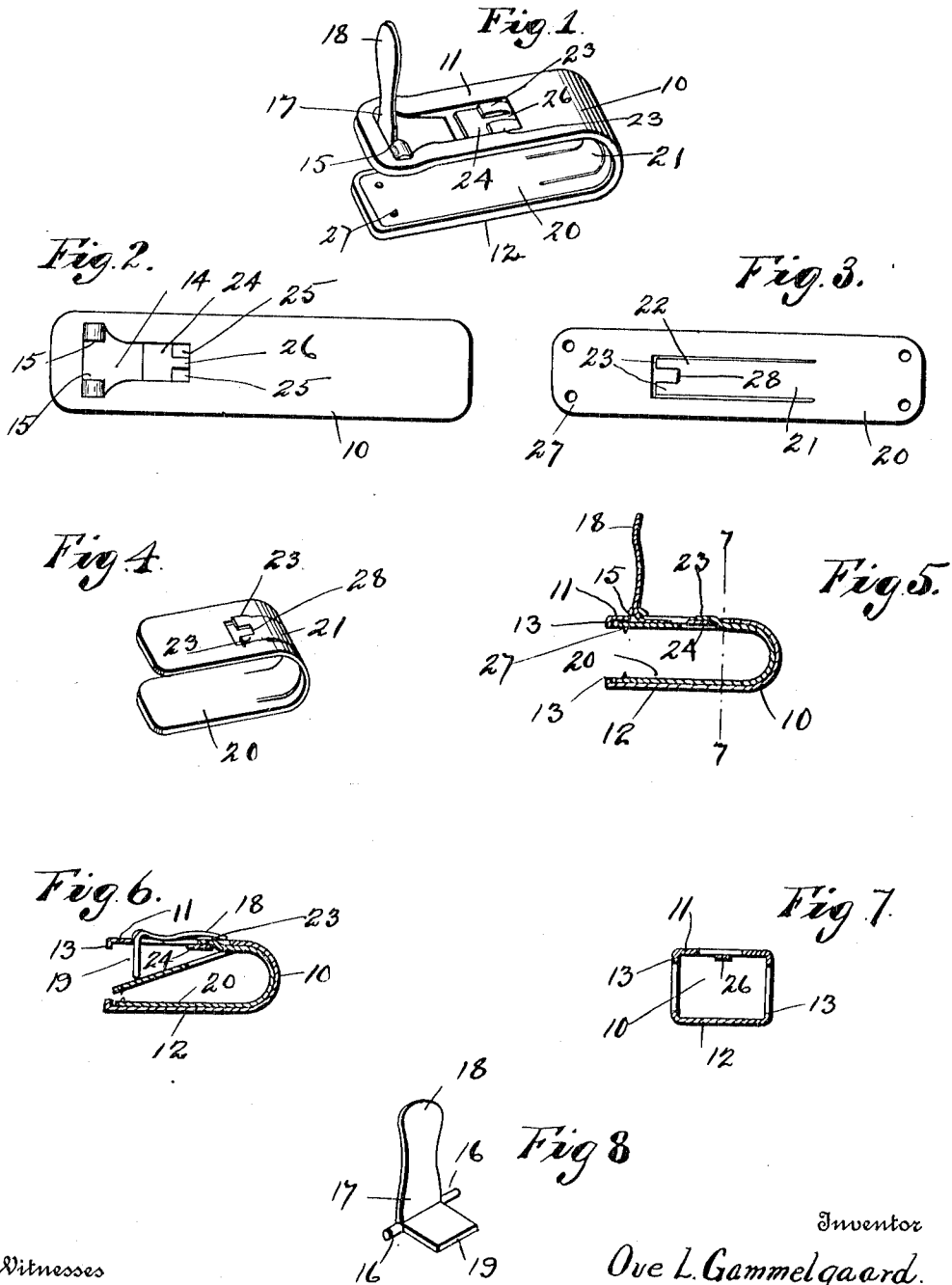
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CLASP.

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1,080,336.

Patented Dec. 2, 1913.



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# UNITED STATES PATENT OFFICE.

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## CLASP.

1,080,336.

Specification of Letters Patent.

Patented Dec. 2, 1913.

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*To all whom it may concern:*

Be it known that I, OVE L. GAMMELGAARD, a citizen of the United States, and resident of Attleboro, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Clasps, of which the following is a specification.

This invention relates to clasps of the class having a jaw adapted to be moved to closed position and locked by the movement of an operating lever, and the object of this invention is to provide a practical and simplified construction whereby the spring jaw plate is provided with a long yieldable integral tongue that extends forwardly from the bend to engage openings in the arm of the frame to permit a free movement of one of the arms of said plate and yet positively retain the plate in position in the frame.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described and particularly pointed out in the appended claims.

Of the accompanying drawings: Figure 1— is a perspective view of the device showing the jaws in open position. Fig. 2— is a plan view of the frame member in extended position as punched from sheet stock and ready to be bent into the U-shape. Fig. 3— is a plan view of the spring plate as cut or punched from sheet stock and ready to be fitted into its frame and bent into U-shape. Fig. 4— is a perspective view showing a detail of the spring tongue bent into a U-shape. Fig. 5— is a sectional side elevation showing the offset portion of the free end of the spring tongue inserted into the opening in the frame. Fig. 6— is a sectional side elevation partially in section showing one of the spring jaws of the clasp in depressed position. Fig. 7— is a section of the frame on line 7—7 of Fig. 5. Fig. 8— is a perspective view of the locking lever.

Referring to the drawings 10 designates the frame or body portion of the clasp preferably constructed of a single piece of metal bent into U-shape thereby forming an open-mouth frame with two substantially parallel members 11 and 12. This frame is preferably provided with an inwardly turned flange 13 all around its outer edge which flange serves the double purpose, of stiffening or strengthening the frame, and also

to form a slight recess in the inner surface 55 of the body of the frame for the purpose of receiving and assisting in retaining the spring loop plate therein. The member 11 of this frame has a hole 14 punched therein for the reception of a portion of the locking lever presently described and recesses 15—15 are also formed on the underside of this member by forcing the stock outward for the purpose of receiving the laterally projecting trunnions 16 on said lock lever. At the rear of this opening 14 the stock at 24 is depressed below the plane of the outer surface and said depressed portion is provided with two openings 25 with the bar 26 between. This lock lever 17 is provided with an operating handle 18 and the opposite end 19 is bent downward at substantially a right angle to said handle for the purpose of engaging the back of the spring plate for operating the same and the trunnions 16—16 project transversely from the body of the lever substantially at the bend.

The jaw plate 20 of the clasp is preferably blanked out of thin resilient sheet stock of a length and width to fit into the recessed portion of the inner side of the frame. The middle portion of this plate is cut in the manner illustrated in Fig. 3 forming a long resilient tongue 21 whose free end 22 is bifurcated or forked providing two branches 23. These forked ends are raised or set outward from the plane of the balance of the tongue so as to be readily passed through the holes 25—25 in the frame. The forked branches straddling the bar 25 to provide a stop for the tongue. By cutting this tongue from the middle of the plate renders the latter very resilient making that portion elastic and easy to bend. Little teeth 27 are formed by punching the stock outward from each end of the spring plate to form teeth for the purpose of biting and engaging the goods to which the clasp is attached.

In the construction and assembling of the parts of my improved clasp the frame portion is so formed as to be struck complete, with all of the recesses and openings therein, and the inwardly turned flange all around its outer edge, by a single operation. Also the spring plate is so constructed that it may be completely formed in a single operation, thus the tongue is cut or slit from the body

of the plate and the forked ends formed and raised by one downward motion of the forming tool.

In assembling the parts, first the operating lever is positioned with its trunnions 16 in the bearings 15, the extended spring plate is then laid inside of the extended frame, the forked ends of the spring tongue are passed through the little eyes 25 in the frame, and then the frame and the plate are bent into a U-shape and the whole is completed.

It will be seen that by this construction where the tongue extends outward from the bent portion of the frame with its ends passed through the eye in the frame that after the frame has been bent into its operating form that this tongue firmly secures the plate in position in the recess portion of the frame making it absolutely impossible for it to be removed without again straightening the frame, at the same time the tongue being cut down around the bend it permits a free and unobstructed movement of the remaining portion of the upper jaw when closed and opened by a movement of the operating lever.

The device is extremely simple and inexpensive in construction, very easy to assemble and is practical in its operation.

I claim:—

1. A clasp comprising a U-shaped frame, one member of which is provided with an opening through it, a spring plate arranged to fit into said frame, the middle portion of said plate being cut to provide a spring tongue extending from the bend forwardly and having its free end slightly offset and projecting through said opening in the frame, and a lever for engaging and operating one member of said spring plate to close the clasp.

2. A clasp comprising a U-shaped frame, one member of which is provided with two

openings having a bar between, a spring plate arranged to fit into said frame, the middle portion of said plate being cut to provide a spring tongue extending from the bend forwardly and having its free end forked with its branches slightly offset and projecting through said openings and straddling said bar, and a lever for engaging and operating one member of said spring plate to close the clasp.

3. A clasp comprising a U-shaped frame one member of which is provided with a portion depressed below the plane of its outer surface and said depressed portion being provided with an opening through it, a spring plate arranged to fit into said frame, the middle portion of said plate being cut to provide a spring tongue extending from the bend forwardly and having its free end slightly offset and projecting through said opening in the frame, and a lever for engaging and operating one member of said plate to close the clasp.

4. A clasp comprising a U-shape frame, one member of which is provided with a portion depressed below the plane of the outer surface and said depressed portion being provided with a plurality of openings through it, a spring plate arranged to fit into said frame, the middle portion of said plate being cut to form a tongue and the free end of said tongue being forked and its branches offset outwardly and extending through said openings in said frame, and a lever for engaging and operating one member of said spring plate to close the clasp.

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

OVE L. GAMMELGAARD.

Witnesses:

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