

No. 731,245.

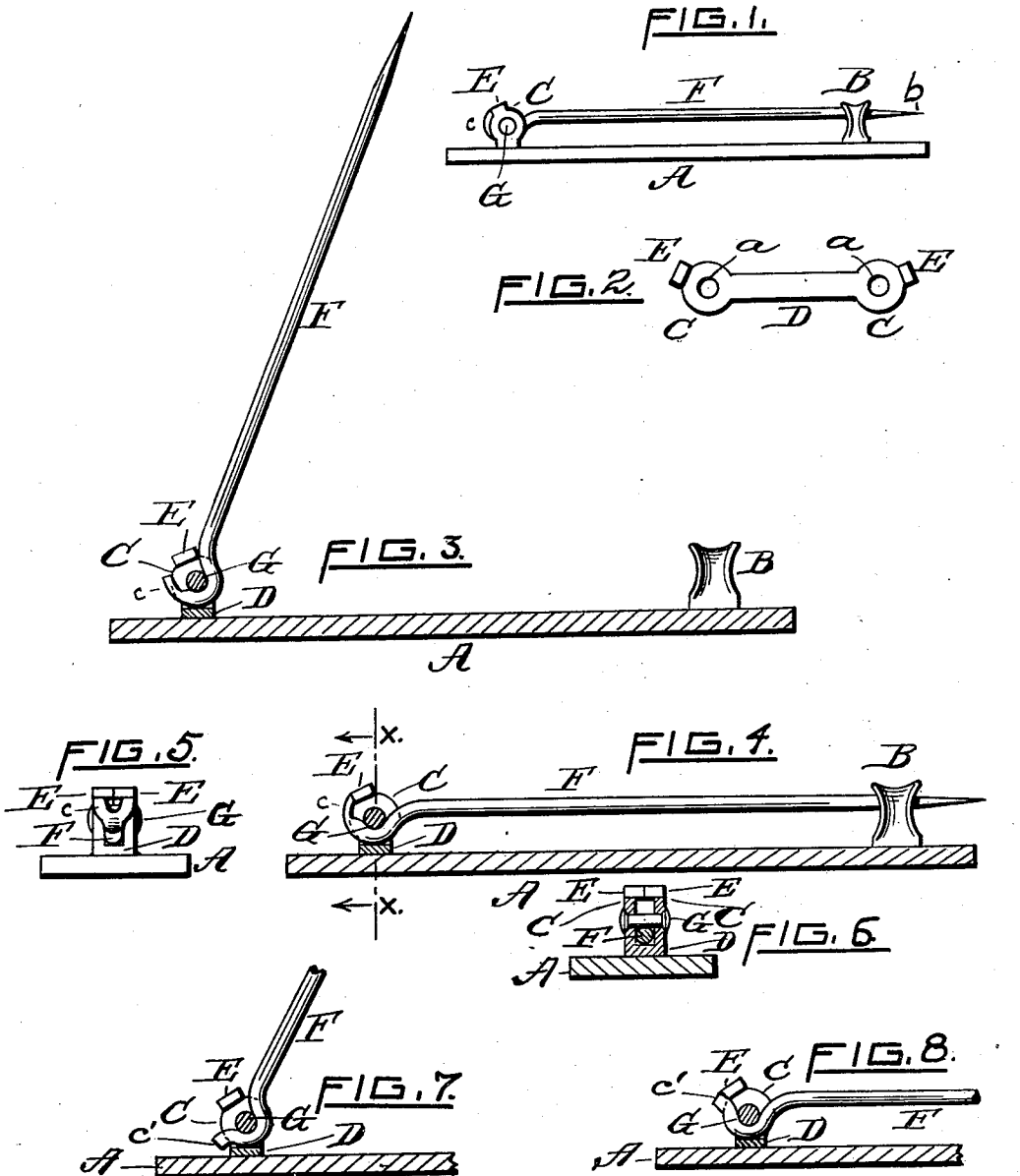
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G. H. TILFORD.

PIN TONGUE AND HINGE JOINT FOR BREASTPINS.

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NO MODEL.



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GEORGE H. TILFORD, OF PROVIDENCE, RHODE ISLAND.

PIN-TONGUE AND HINGE-JOINT FOR BREASTPINS.

SPECIFICATION forming part of Letters Patent No. 731,245, dated June 16, 1903.

Application filed February 13, 1903. Serial No. 143,217. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. TILFORD, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Pin-Tongues and Hinge-Joints for Breastpins, of which the following is a specification, reference being had therein to the accompanying drawings.

10 Like letters indicate like parts.

Figure 1 is a side elevation of a breastpin provided with my improved pin-tongue and hinge-joint. Fig. 2 is a plan of the hinge-joint before bending. Fig. 3 is a view showing the pin-tongue and pin-catch in side elevation, the back plate of the breastpin in central longitudinal section, and the hinge-joint partly in side elevation and partly in central section. In this figure the pin-tongue is shown in its open or entering position. Fig. 4 is the same as Fig. 3 except that the pin-tongue is shown in its closed or wearing position and engaged with the pin-catch. Fig. 5 is an end elevation of my improved breastpin at the 25 hinged end thereof. Fig. 6 is a view as seen on line *xx* of Fig. 4. Figs. 7 and 8 are views of a modified form of my invention, Fig. 7 showing the open position of the pin-tongue, and Fig. 8 the closed position thereof.

30 My invention relates to the pin-tongue of a breastpin and the hinge-joint therefor; and it consists of the novel construction and combination of the several parts, as hereinafter particularly described, and specifically set forth in the claims.

In the drawings, A represents the back plate of a breastpin, provided with the usual pin-catch B.

40 The hinge-joint before bending is in the shape illustrated in Fig. 2, consisting of two rounded ends C C, connected by and integral with a bar portion D. Each end C has a radially-extending bent flange E and is centrally perforated, as seen at *a*. This joint is bent, as shown in Figs. 5 and 6, and is soldered or otherwise attached centrally to the plate A, the two ends C C and the adjacent portions of the bar D when the latter is bent forming walls or sides parallel with each other and the edges of the two flanges E E being brought into abutment one with the 50

other, as illustrated in Figs. 5 and 6. These flanges E E when so abutted leave a certain space between the inner surfaces of the rounded portions C C.

55 The pin-tongue is designated as F. It is resilient, being made of tempered wire, and has the usual sharp point *b*. Near its opposite end it is symmetrically bent into a curve, approximately a semicircle, and the blunt end *c* of this pin-tongue is thinned and laterally enlarged and spread and preferably bifurcated to form a U shape. (Shown in Fig. 5.) The extremities of this bifurcated end *c* when the pin-tongue is in the closed position 65 (shown in Figs. 1 and 4) are in contact with and press up against the lower (rear) edges of the flanges E E of the hinge-joint, as seen in Figs. 4 and 5. This curved-portion of the pin-tongue F is inserted in the space between the inner surfaces of the parallel bent-up end portions C C of the hinge-joint, and a pivot G passes through the holes *a a* of the rounded ends C C of the hinge-joint and in contact with the inner surface of the curve 75 of the pin-tongue F. Thus the enlarged end of the pin-tongue F extends in rear of the pivot, and the outer transverse edge of the said enlarged or butt end rests and presses against the rear edges of the flanges E E 80 when the pin-tongue F closes to the plate A. In this manner the pin-tongue F freely swings upon the pivot G and is prevented from lateral movement by its contact with the inner surfaces of the ends C C of the 85 hinge-joint. The extent of this swinging movement in an outward direction is limited by the forward edges of the flanges E E, as illustrated in Fig. 3. When the pin-tongue F is engaged at its point *b* in the pin-catch B, 90 the upper edges of the bifurcated butt-end *c* of the pin-tongue are in forcible contact with the rear edges of the flanges E E of the hinge-joint, as illustrated in Figs. 1 and 4. In this position the rear edges of the flanges E E 95 serve as bearing-points for the end *c* of the pin-tongue and enable the pin-tongue to be sprung into engagement with the pin-catch B.

It is obvious that instead of having the hinge-joint provided with integral flanges E 100 E which are bent and lie in abutment one with the other, as shown, these flanges may

be dispensed with and a stop-block may be used, which is inserted and secured between the ends C C of the hinge-joint in the same position and to serve the same purpose.

- 5 In Figs. 7 and 8 I show a modified form of my invention, in which the butt-end of the pin-tongue (designated in said figures as c') is not thinned, spread, or bifurcated, but is simply bent angularly outward. In this construction the end c' of the pin-tongue in coming in contact with the portion D of the hinge-joint limits the outward oscillation of the pin-tongue, as seen in Fig. 7, and in coming into contact with the rear edge of the flanges E E finds a bearing against the same for enabling the springing of the pin-tongue, as seen in Fig. 8.

I claim as a novel and useful invention and desire to secure by Letters Patent—

- 20 1. In a breastpin having a back plate and a pin-catch, the combination therewith of a hinge-joint centrally secured thereto and comprising two parallel walls or sides which are perforated and also two flanges bent into abutment one with the other, a pivot passing through the perforations of the walls or sides of the hinge-joint, and a resilient pin-tongue bent into a curve and inserted at its curve beneath said pivot and between the sides or walls of the hinge-joint and provided with a butt-end adapted to bear against the rear edges of said flanges of the hinge-joint when the pin-tongue is closing to the pin-catch, all arranged and operating substantially as shown and for the purpose specified.

2. In a breastpin, the combination of a

plate, a pin-catch, a hinge-joint secured to said plate and having two parallel perforated sides, a pivot mounted in the perforations of said hinge-joint, a stop located between the sides of the hinge-joint on the rear thereof near the top, a resilient pin-tongue having near its blunt end a curved bend and terminating in an enlarged end, which curved portion extends between the sides of the hinge-joint and beneath said pivot with said enlarged end extending in rear of said pivot and movable into contact with the rear end of the stop when the pin-tongue closes to said plate, said stop also being so placed that the pin-tongue is limited in its outward movement by its contact with the forward edge of the stop, substantially as described.

3. The improved breastpin herein described, consisting of the combination of a plate, a pin-catch, a hinge-joint with two parallel perforated sides, a pivot mounted in the perforations of said hinge-joint, a stop located between the sides of the hinge-joint on the rear thereof near the top, a resilient pin-tongue having a curved bend which extends beneath said pivot and also having a laterally-enlarged end which extends in the rear of the pivot, the outer transverse edge of which enlarged end is adapted to rest against said stop, substantially as specified.

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

GEORGE H. TILFORD.

Witnesses:

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