J. JENKINS.
Brooch-Pin.

No. 204,047. Patented May 21, 1878.

Fig: 1.

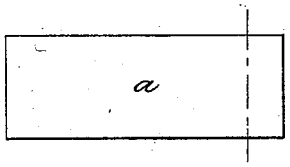


Fig: 2.

Fig: 3.

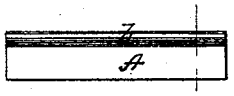


Fig: 4.

Fig: 5.

Fig: 6.

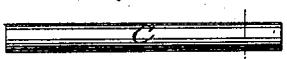


Fig: 7.

Fig: 8.

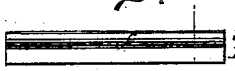


Fig: 9.

Fig: 10.

Fig: 11.

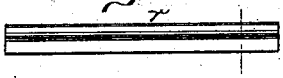


Fig: 12.

Fig: 15.

16. 17. 18.

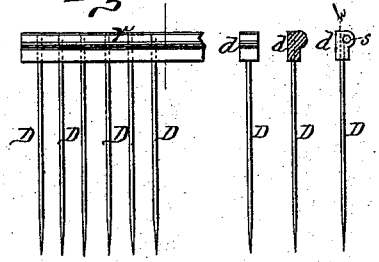


Fig: 13.

Fig: 14.

Fig: 20.

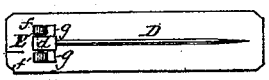


Fig: 23.

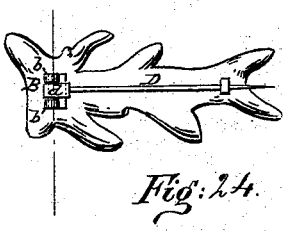


Fig: 21.

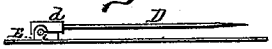


Fig: 24.

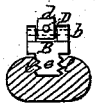


Fig: 22.

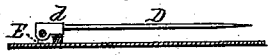
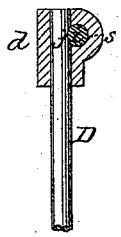


Fig: 19.



WITNESSES:

Chas. Nida.

H. L. Wattenberg

INVENTOR:

Joel Jenkins

BY Munn & Co.

ATTORNEY.

UNITED STATES PATENT OFFICE.

JOEL JENKINS, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN BROOCH-PINS.

Specification forming part of Letters Patent No. **204,047**, dated May 21, 1878; application filed January 30, 1878.

To all whom it may concern:

Be it known that I, JOEL JENKINS, of the city of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in the Manufacture of Brooch-Pins; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making part of this specification.

This invention is in the nature of an improvement in the manufacture of brooch-pins; and the invention consists in, as a new article of manufacture, a bearing for brooch-pins, constructed with a tubular portion and a flat portion integral and in continuous strips, and the head of the pin formed solid and in continuous strips, with its several parts integral, and with holes drilled therein for the reception of the pin, and a rivet for uniting it to the bearing, the bearings and pin-heads being complete when cut into sections without the use of solder; and the invention also consists in constructing the bearing with its tongue flat on two sides and serrated on its edges.

In the accompanying sheet of drawings, Figure 1 represents a plan or top view of a blank from which is formed a strip for the bearings of celluloid and similar ornaments; Fig. 2, a cross-section of same; Fig. 3, a plan or top view of strip for bearings drawn from sheet of metal by dies; Fig. 4, a plan or top view of a bearing cut from such strip; Fig. 5, a cross-section of same; Fig. 6, a view of tube to form strip for bearings which are to be soldered to metal backs; Fig. 7, a cross-section of same; Fig. 8, a plan or top view of strip for bearings drawn from tube; Fig. 9, a plan or top view of bearing cut from such strip; Fig. 10, a cross-section of same; Fig. 11, a plan or top view of strip of wire drawn by dies for the heads of the pins; Fig. 12, a cross-section of same; Fig. 13, a side view of strip for heads, with holes for pins; Fig. 14, a cross-section of same; Fig. 15, a plan or top view of strip for heads, with pins inserted; Fig. 16, a plan or top view of head, with pin therein cut from such strip; Fig. 17, a side view of same; Figs. 18 and 19, a side view and section of same, with rivet inserted to key the pin; Fig. 20, bearing cut from tube-strip, with head and pin therein and soldered to metal back; Fig. 21, a side view of same; Fig. 22, a longitudinal section of same; Fig. 23, a bearing from sheet-metal strip, with head and pin thrust into celluloid or similar ornament; and Fig. 24, a cross-section of same, showing serrations on edge of tongue of bearing.

Similar letters of reference indicate like parts in the several figures.

A represents a continuous strip of bearings for the pin. This is formed by taking a piece of thin sheet metal, *a*, folding it over against itself, and drawing it through a series of holes or dies until it is forced into the shape desired, and which is shown in Fig. 3.

In this operation of drawing, the raised portion *b* of the bearing assumes a tubular form. When this strip for the bearings is produced, as just described, and of the form shown in Fig. 3, by means of a circular saw or otherwise, a seat, *c*, is formed in the tubular portion *b* of the bearing, and the strip is then cut into sections B, each section constituting a bearing for the pin, the tubular portion *b* of the bearing constituting the eyes for the insertion of the rivet to hold the pin in place, and the other portion, *e*, of the bearing forming a tongue, whereby the bearing may be secured to celluloid or other articles of jewelry of like character by simply heating the tongue and forcing it into the substance of the ornament to which it is to be attached. To insure the tongue remaining fixed to such ornament, the edges of the tongue *e* are serrated, as shown at *l* in Fig. 24.

If desired, the bearing may be made without the tongue *e*, but still in a continuous strip, by forming the bearing of a tube, C, and by drawing such tube through a series of dies until it assumes the form shown in Fig. 8. In this case the tubular portion *f* is reduced to form the eye for the rivet, as in the other case; but, instead of a tongue, the metal is simply flattened out somewhat, as at *g*, Fig. 9, to make a better surface for soldering the bearing to a metal back, as in Fig. 20, and for this kind of attachment the bearing formed from tub-

ing is designed. The tubular bearing, however, has seats formed in it, and it is cut in sections E in precisely the same manner as the bearings formed from sheet metal, as before described.

Now, to form the head *d* of the pin, or that portion of it which is to be received within the seat *c* of the bearing, a wire, *r*, of brass or other suitable metal and of suitable gage, is likewise drawn to a continuous length through dies until it assumes the shape shown in Fig. 11. This strip for the heads *d* of the pins is solid, and it is then cut to the required length to be received within the seat of the bearing; but before it is cut for this purpose a series of holes, *h*, are drilled through it, as shown in Figs. 13 and 14. Into these holes is inserted the unsharpened end of the pin D, and the head is then drilled in the direction of its length, as shown at *s* in Figs. 18 and 19. The strip of heads being then cut, as before stated, to the size necessary to fit them within the seat *c* of the bearing, a rivet, *i*, is passed through the eye *b* of the bearing and through the hole which has been drilled lengthwise into the head, uniting the head to the bearing by a hinge-joint, and since the hole which is drilled in the head for the reception of this rivet necessarily passes through one side of the pin D, which is inserted in the head, a recess, *j*, is formed in the pin by this means, so that when the rivet *i* is in place it not only forms the pivot that enables the head to turn within the bearing and uniting the two together, but it also, by passing into the recess *j*, just described, in that portion of the pin which enters the head, keys the pin to the head itself, as shown in Figs. 18 and 19.

By this process of constructing brooch-pins it will be seen that no solder is employed or is necessary. The pins are not only made exceptionally strong, but with great facility and economy. The tongue *e* of the bearing being flat, it is prevented from turning in the substance into which it is inserted, and, as before stated, the serrations *l* on the edge of the tongue prevent it from being withdrawn, so that the flat sides of the tongue and its serrated edges combined make a close union between the bearing and the ornament it is fastened to.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, bearing B for brooch-pins, with the tubular portion *b* and the flat portion *e* thereof integral and in continuous strips, and the head *d* of the pin formed solid in continuous strips, with its several parts integral, and with holes *h* and *s* drilled therein, the bearings and pin-heads being complete when cut into sections without the use of solder, substantially as described.

2. The tongue of a brooch-pin bearing flat on two sides and serrated on its edges, substantially as and for the purpose set forth.

JOEL JENKINS.

Witnesses:
H. L. WATTENBERG,
G. M. PLYMPTON.