May 10, 1955

E. L. ARZT

2,708,128

EARRING JOINT

Filed Aug. 4, 1950

2 Sheets-Sheet 1

Fig. 1

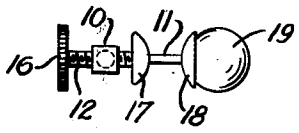


Fig. 2

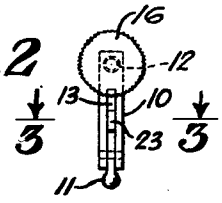


Fig. 3

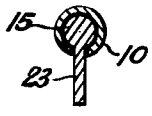


Fig. 5

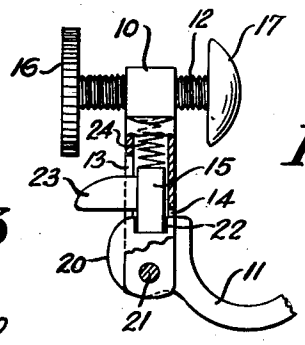


Fig. 4

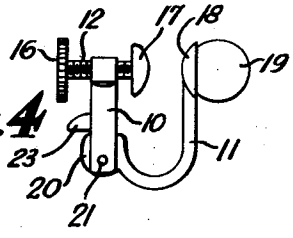


Fig. 7

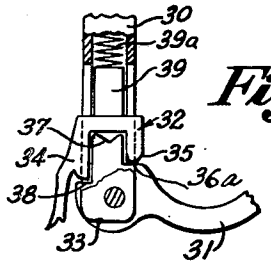


Fig. 6

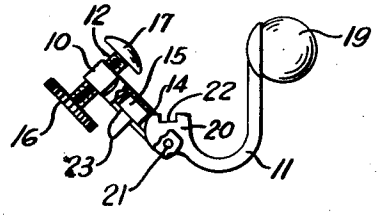
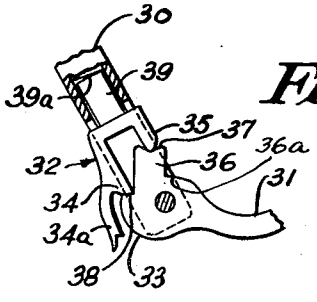


Fig. 8



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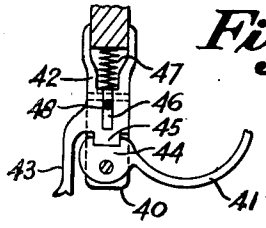
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EARRING JOINT

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Fig. 9



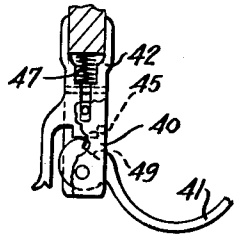


Fig. 10

Fig. 11

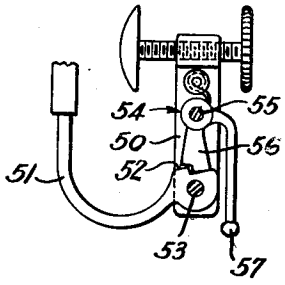


Fig. 12

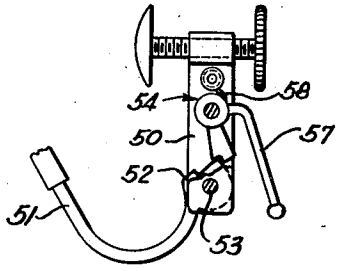


Fig. 13

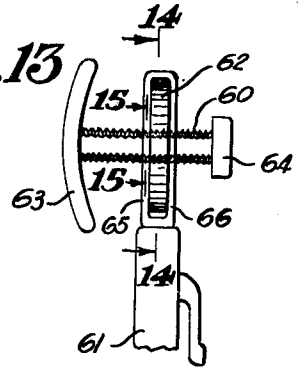


Fig. 14

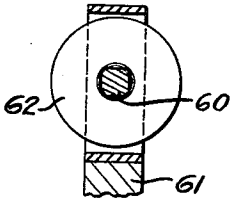
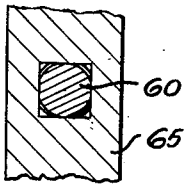


Fig. 15



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2,708,128

EARRING JOINT

Emanuel L. Arzt, New York, N. Y.

Application August 4, 1950, Serial No. 177,610

1 Claim. (Cl. 287—14)

This invention relates to improvements in earrings.

It is an object of the instant invention to provide earrings more readily attached and removed than heretofore possible.

A further object is to provide earrings that will substantially relieve pinching.

Another object is to provide earrings more readily adapted to changes in styles than known devices.

Other objects of the instant invention will become apparent in the course of the following specification.

In the attainment of these objectives, the improved earrings are made in four embodiments. In all embodiments the earrings are constituted of an inner stem to the bottom of which an outer stem is pivotally attached and extended under the lobe of the ear and upwardly along the outer surface thereof to carry the gem or other ornament and to coact with the top of the inner stem in maintaining the ear lobe gripped therebetween. The usual or a new adjustment screw in the top of the inner stem varies the spacing of the inner stem clamp relative to the ear lobe but with the adjustment once made no further manipulation of the screw is required because of the especially designed pivotal connection between the stems which varies the angle formed thereby when attaching and removing the earrings. The distinction between embodiments lies in the different mechanisms used for releasably maintaining the stems in the locked position, that is the attached position of the earrings.

The invention will appear more clearly when considered in conjunction with the accompanying drawings showing by way of illustration the preferred embodiments of the inventive idea.

In the drawings:

Figures 1 through 6 show the first embodiment of the improved earring on an enlarged scale and constructed in accordance with the principles of this invention, in which:

Figure 1 is a plan view of one of the improved earrings in closed position;

Figure 2 is an elevational view of the left end of the earring shown in Figure 1;

Figure 3 is a sectional view along 3—3 of Figure 2;

Figure 4 is a side elevational view of the earring shown in Figure 1;

Figure 5 is a fragmentary view of the earring shown in Figure 4 but on a still larger scale and with part of the surface broken away to more clearly show the internal construction; and

Figure 6 is similar to the earring shown in Figure 4 but in the open position.

Figures 7 and 8 show the second embodiment of the improved earrings and in which:

Figure 7 is a fragmentary side elevational view of one of the improved earrings in closed position with part of the surface broken away to more clearly show the internal construction; and

Figure 8 is like Figure 7 but in the open position.

Figures 9 and 10 show the third embodiment of the improved earrings and in which:

Figure 9 is a fragmentary side elevational view of one of the improved earrings in closed position with part of the surface broken away to more clearly show the internal construction; and

Figure 10 is like Figure 9 but in the open position.

Figures 11 and 12 show the fourth embodiment of the improved earrings and in which:

Figure 11 is a fragmentary side elevational view of one of the improved earrings in closed position with part of the surface broken away to more clearly show the internal construction; and

Figure 12 is like Figure 11 but in the open position.

Figures 13, 14, and 15 show a new form of adjustment screw for varying the spacing of the inner stem of the earring or the clamp carried by the inner stem from the ear lobe, and in which;

Figure 13 is a side elevational view of the improved adjustment screw;

Figure 14 is a sectional view along 14—14 of Figure 13, and

Figure 15 is a sectional view along 15—15 of Figure 13, but on an enlarged scale.

Referring now in greater detail to the first embodiment of the improved earrings shown in Figures 1 through 6 where like reference numerals indicate like parts, reference numeral **10** indicates the inner stem, and **11** the outer stem.

The inner stem **10** may be a hollow tube, at least as far upwardly (Fig. 5) as the later described screw **12**, and with open bottom. Through the walls of the tube are two aligned longitudinal slits **13** and **14** (Fig. 5) extended upwardly from the open bottom and parallel to the plane of the screw. The slit **13** may extend upwardly a greater distance than the slit **14** to give a means for the manipulation of a later described catch **15**.

At the top of the inner stem **10** is the known adjustment screw **12** threaded transversely through the top of the stem in the plane of the previously mentioned slits. Keyed to the end of the screw most remote from the ear lobe is a wheel **16** which when rotated moves the inner clamp **17**, fixed to the opposite end of the screw, toward or away from the inner surface of the ear lobe as desired or a new type of longitudinal adjustment means for the screw may be provided as later shown.

The outer stem **11** may also be a tubular member designed for attachment at the front of the ear lobe by an outer clamp **18** affixed thereto and which coacts with the already mentioned inner clamp **17** in a squeezing movement on opposite surfaces of the ear lobe. Opposite the outer clamp **18** may be any ornamentation **19** fastened in a known manner. The outer stem **11** at the opposite end curves inwardly under the ear lobe and terminates in a flattened surface **20** which coacts with the aligned slits **13** and **14** aforementioned. A pivot pin **21** is transversely disposed through the end of the hollow inner stem after the flattened surface of the outer stem has been inserted in the slits **13** and **14** of the inner stem which permits rotation, of the stems, the axis of the pivot pin being perpendicular to the plane of rotation. Along the upper edge of the flattened surface is an open recess **22** with the adjacent edge of the flattened surface on the inside rounded as shown.

Coacting with the open recess **22** is the catch **15** reciprocable in the hollow inner stem and having an integrally formed finger piece **23** protruding through the slit **13**. Maintaining the catch under downwardly directed tension in the recess **22** is the spiral spring **24**.

In operation, when first attaching the earrings to the ear lobes, the screw **12** by trial and error and with the outer stem **11** in the position shown in Figure 4 is at-

tached to the ear lobe in the usual manner. After adjustment of the screw **12**, assuming that the earring is attached, by lifting the finger piece **23** upwardly against the tension of the spring **24** the end of the catch **15** in the recess **22** is withdrawn and the outer stem **11** or inner stem **10** can then be pivoted downwardly substantially to the position in Figure 6 which releases the ornamentation from the ear without disturbing the setting of the screw **12**. On the reattachment of the earrings and with each screw **12** in the same position for the same individual, the inner clamp **17**, of course, being in back of the lobe, the outer stem **11** can be rotated toward the ear lobe which in coaction with the already adjusted inner clamp **17** will fasten the ornamentation securely, the catch **15** automatically reentering the recess **22** by virtue of the rounded periphery of the flattened surface **20** until released. It will be noted that with the type of construction described, the basic fastening and unfastening components can be produced in quantity and any desired ornamentation **19** added at a substantial saving in manufacturing costs compared with known forms of earrings.

In the second embodiment of the improved earring shown in Figures 7 and 8, reference numeral **30** indicates the inner stem and **31** the outer stem.

All parts of the earring shown in Figures 7 and 8 are identical with the previously mentioned first embodiment except for the catch **32** and the coacting form of the flattened surface **33** of the outer stem **31**.

The catch **32** is of inverted "U-shape" and has on the side opposite the outer stem **31** a leg or arm **34** of greater length than the opposite leg or arm **35**, the periphery of the end of which is shaped as illustrated.

The flattened surface **33** of the end of the outer stem **31** extended under the ear lobe has an upwardly directed integrally formed central surface portion **36** along the upper edge or periphery of which is the V-shaped recess **37**. On the side of the outer stem **31**, the periphery of the flattened surface has a second recess **36***a* at a lower elevation than the recess **37** while on the side opposite the outer stem **31** is a third recess **38** at an even lower elevation than the recess **36***a*. When the catch **32** which may have a plunger **39** reciprocable in the hollow end of the inner stem **30** against the tension of a spring **39***a* is in the down position (Fig. 7), that is the closed position of the earring, the short arm **35** of the catch, integrally formed with or otherwise attached to the plunger and reciprocable therewith, is in the recess **36***a*. The long arm **34** on the opposite side of the catch, that is the side opposite the outer stem, and also integrally formed with or otherwise attached to the plunger, is in the recess **38** of lowest elevation. When the catch **32** is moved upwardly by the finger piece **34***a*, integrally formed with the long arm **34**, the outer stem **31**, when the central portion **36** is free from the catch **32**, can be pivoted forwardly and downwardly from the ear lobe until the end of the short arm **35** is in the V-shaped recess **37** with the end of the long arm **34** remaining in the recess **38**. By rounding the ends of the arms of the catch as shown, the stems will automatically move to the closed position of the earring without moving the finger piece **34***a* upwardly.

Referring now to the third embodiment of the improved earring shown in Figures 9 and 10, reference numeral **40** indicates the inner stem, and **41** the outer stem.

All parts of the improved earring of the third embodiment are the same as those described under the first except for the means of releasably locking the inner and outer stems in the closed position which is as follows:

Reciprocable in the tubular end of the inner stem **40** is a catch **42**, held in place by a guide **43** fixed in the stem and coacting with a slideway **46** in the catch. A spiral spring **47**, in the expanded end of the slideway **46**, maintains the catch under downwardly directed tension. The catch **42** carries a downwardly directed protuberance **45** at the end coacting with a recess **49** in the upwardly directed edge of the flattened surface of the outer stem **41** pivotally connected in the end of the hollow stem **40**.

At the top, the catch **42** bifurcates as illustrated to coact with the inner stem below the adjustment screw (not shown).

Operation with the earring of the third embodiment is substantially the same as that described ante under the first embodiment.

In the fourth embodiment of the improved earrings shown in Figures 11 and 12, reference numeral **50** indicates the inner stem and **51** the outer stem.

The inner stem **50** is similar to the inner stems of the previously described embodiments and the outer stem **51** is similar to the outer stems previously described except for the notched or angular upper edge **52** of the flattened surface of the outer stem **51** pivotally connected in the hollow stem **50** by the pivot pin **53**.

Coacting with the angular upper edge **52** of the outer stem is a catch **54** pivotally mounted in the hollow inner stem by any suitable means **55**. The downwardly directed end of the catch terminates in an edge coacting with the angular edge of the outer stem and is moved in (Fig. 11) and out (Fig. 12) of engagement with that edge by an integrally formed handle member or finger piece **51**. Slits in the hollow inner stem permit rotating the various members in and out of the stem during manipulation and a spring **58** disposed in the tip of the hollow inner stem maintains the catch **54** under downwardly directed tension at all times.

The operation with the earrings of the fourth embodiment is similar to that already described under the first embodiment except for the variation in the direction of motion for releasing the catch.

In all four embodiments, the adjustment screw **12** (Fig. 1) actuated by the wheel **16** carrying the spacing of the inner clamp **17** relative to the inner surface of the ear lobe is of a well known type. However, in Figures 13, 14, and 15 another and new type of adjustment screw **60** is shown and can take the place of the adjustment screw **12** in all of the four embodiments.

The adjustment screw **60** is a square bar (Figs. 14 and 15) threaded along the four edges. The screw **60** is inserted through aligned openings in the bifurcated top of the inner stem **61** where it is longitudinally adjustable by a wheel **62** rotatably threaded on the screw between the bifurcated members **65** and **66**. At one end, the screw **60** has attached the inner clamp **63** and at the opposite end the member **64**. By rotating the wheel **62**, the screw **60** can be made to move longitudinally without rotating the clamp **63**. Thus, the clamp **63** moves longitudinally only and prevents any pinching of the ear lobe by the clamp which may readily occur in the case of the known adjustment screws illustrated with the four embodiments.

It will be understood that the invention is not limited to the exact disclosure herein described but may lend itself to a variety of expressions within the scope of the appended claim.

What is claimed is:

An earring comprising an inner and an outer stem, the inner stem being formed hollow at the bottom and having two aligned longitudinal slits formed therein, the outer stem terminating at the bottom in a flattened surface portion pivotally disposed intermediate the aligned slits, the flattened surface portion having three spaced recesses formed in the periphery thereof, one of the recesses being of V-shape and substantially centered in the hollow interior of the inner stem in the closed position of the earring, the second recess being on the side of the outer stem and below the elevation of the V-shaped recess, the third recess being on the side opposite the outer stem and substantially below the elevation of the second mentioned recess, a catch of inverted U-shape reciprocable in the aligned slits, the arm of the inverted U-shaped catch on the side opposite the outer stem having a length greater than that of the arm on the side of the outer stem and coacting with the third mentioned recess, the arm of the inverted U-shaped catch

on the side of the outer stem coacting with the first and second mentioned recesses, a finger piece disposed on the catch and protruding therefrom on the side opposite the outer stem, and means for maintaining the catch under downwardly directed tension toward the flattened surface portion.

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