July 14, 1953 M. J. McFARLAND 2,644,992

BEAD CHAIN CLASP FOR JEWELRY

Filed May 6, 1949

FIG. 1.

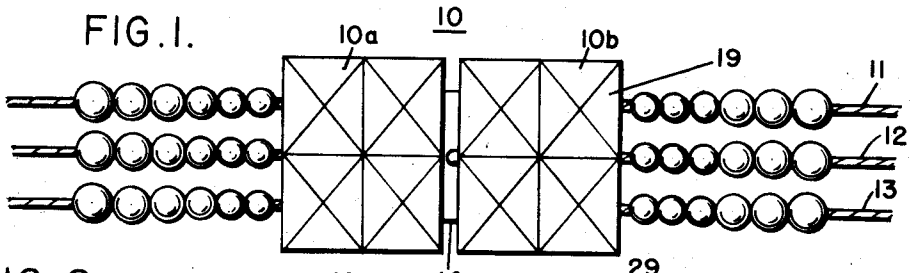


FIG. 2.

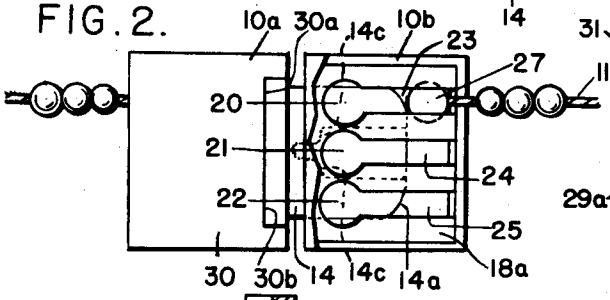


FIG. 4.

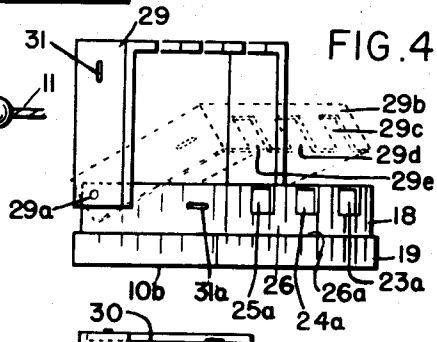
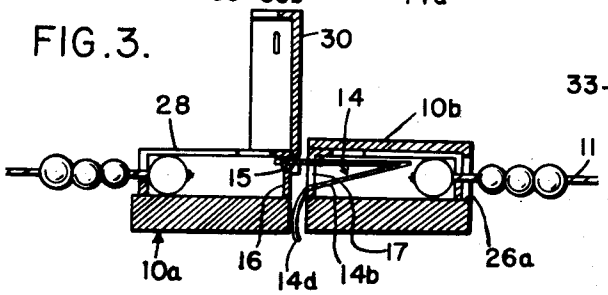


FIG. 3.



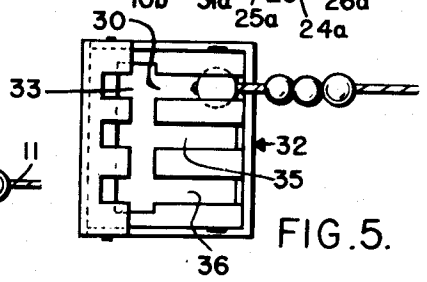


FIG. 5.

FIG. 6.

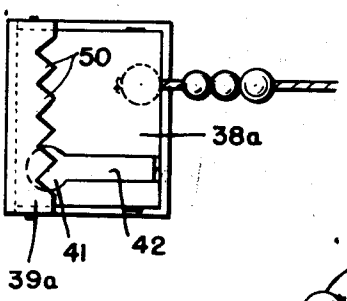
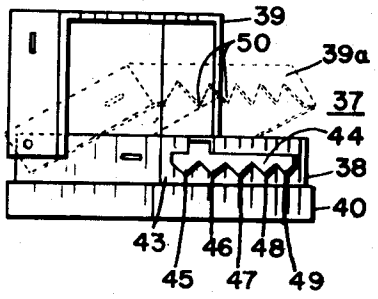


FIG. 7.



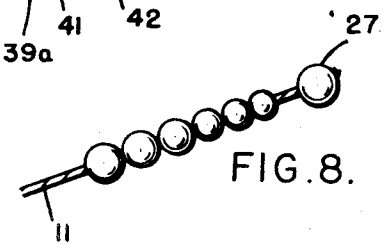


FIG. 8.

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BEAD CHAIN CLASP FOR JEWELRY

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2 Claims. (Cl. 24—116)

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This invention relates to clasps for string jewelry, and more particularly to clasps for necklaces, bracelets and the like having a plurality of strings of ornamental objects such as pearls or beads.

In clasps heretofore suggested for holding multiple strands of string jewelry, it has been the usual practice to secure permanently and separately each of the strands with the aid of an end piece of special design which is attached to each extremity of each string. Such permanent anchoring or securing normally is accomplished by soldering or by bending metal gripping members more or less permanently into their final position in gripping relation to the string members.

Moreover, in such prior clasps a breaking or damaging of the clasp is likely to release all of the multiple strings.

Furthermore, such clasps which have been heretofore proposed have normally required the above-mentioned specially designed end pieces which must be of special conformation in order to cooperate with the clasp. In addition to this, when it has become necessary to repair or replace one of the strings of jewelry, it has been necessary in many instances to remove all of the strings and, of course, to replace same after such repairing or replacement.

One of the objects of the present invention is to overcome the above difficulties or to reduce same to insignificance.

The invention in one aspect thereof comprises a clasp having two half portions, one for each extremity of the necklace or bracelet, which portions can be detachably secured to one another in a conventional manner by means of a well known spring detent device which can be secured to one of said clasp portions for cooperation with the other. Each of the half portions of the clasp comprise a box-like member which is also referred to as a base member and which is provided with a plurality of preferably parallel slots, each of which is smaller in width than the diameter of an end bead or the like which is to be passed under the slot into the box-like member for holding a string secured thereto in engagement with said member. A suitable aperture is formed in the box-like member adjacent the extremity of each slot, through which aperture such bead can be passed, such apertures preferably being located near the margins of the box-like members which are adjacent one another when the clasp is in normal use. Said slots and apertures are preferably formed on

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that side surface of each box or base member which is nearest the body of the wearer when in use and such slots extend into the end surfaces of the base member providing a generally serrated end surface having a plurality of slots equal in number, of course, to the number of strings of jewelry to be attached thereto. Each base member is provided with a hinged cover member having an end wall surface in which slots are formed and positioned for cooperating with the slots formed in the end surface of said base member. Thus when the hinged cover member is in a closed position, the above-mentioned apertures and portions of the connecting slots formed in said side surface are covered by the hinged cover member, and the slots upon the end surface of the latter move into register with the slots on the end surface of the base member to accommodate the strings of jewelry secured therein and thus to assist in holding the end bead in the desired position in the clasp. Suitable means may be provided for holding each cover member in closed relationship to the base member comprising, for example, a metallic dimple in the cover which cooperates with a suitable recess in the base.

The above and further objects and novel features will more fully appear from the detailed description when the same is read in connection with the accompanying drawings. It is expressly understood, however, that the drawings are for purposes of illustration only and are not intended as a definition of the limits of the invention, reference for this latter purpose being had to the appended claims.

In the drawings:

Fig. 1 is a top plan view of a multiple string necklace or bracelet secured to a clasp embodying the present invention;

Fig. 2 is a bottom view of the clasp shown in Fig. 1 with parts broken away and with certain other parts omitted for purposes of clarity;

Fig. 3 is a longitudinal cross-sectional view of the embodiment of Figs. 1 and 2;

Fig. 4 is a perspective view of a half portion of the clasp shown in Fig. 3;

Fig. 5 is a plan view of a modification of the embodiment of Figs. 1–4;

Figs. 6 and 7 are respectively a plan view and a perspective view of a second embodiment of the invention; and

Fig. 8 is a representation of one string or strand of jewelry which is adapted for being held by the novel clasp.

Referring to the drawings in further detail,

the present invention is constituted by a clasp 10 adapted for grasping the ends of a bracelet having three strings of beads or the like, such strings being indicated at 11, 12 and 13. The clasp is constituted by half portions 10a and 10b which are preferably secured together by a conventional spring detent 14 which is attached, as by a hinge pin 15, near a corner 16 of the clasp half 10a. The spring detent 14 is shaped as indicated in Figs. 2 and 3 and is provided with a tongue portion 14a which is adapted for insertion in a well known way into a suitable opening 17 in the adjacent end surface of the clasp half 10b. Secured to said tongue portion 14a is a spring member 14b having shoulders as at 14c which are adapted for cooperating with a suitable slot formed in the margin of the opening 17 whereby the two clasp halves are detachably secured together. The shoulders 14c can be lifted out of such slot by thrusting upwardly upon a finger piece 14d, as viewed in Fig. 3.

The clasp halves 10a and 10b are substantially identical. The latter, 10b, will be described. It comprises a box-like base member 18 to which there can be secured suitable ornamentation such as engraved precious metal or jewelry as at 19 and which is to be exposed to view when the clasp is in use. In order conveniently and accessibly to secure a plurality of strings, such as 11, 12 and 13, of jewels or the like to the clasp half 10b, the base member 18 thereof is provided on a side wall or surface 18a with a plurality of apertures 20, 21 and 22 and respectively in communication with said apertures are slots 23, 24 and 25 which extend to an outermost end wall or surface 26 of said base member forming slots or notches 23a, 24a and 25a respectively therein. Of course, it is possible for the slots 23, 24 and 25 to be sufficiently large to receive an end ball or anchoring member of a string of jewelry.

The above-described box-like member 18 is, in the form shown, hollow. The diameter of the apertures 20, 21 and 22 is adequate to permit the insertion of a suitable end bead or ball member as at 27 or some analogous means which can be so introduced in the aperture and thus moved into the box, whereupon such ball member with, for example, string 11 secured thereto, can be moved down the slot 23 into its final position as shown in Fig. 2 with string 11 extending from slot 23a.

The ball member 27 is also referred to as an anchor member and, of course, can be in any suitable shape for this purpose. Thus the principal holding means for the strings of jewelry are the base members, as at 18, of each of the clasp portions 10a and 10b. The base member for the clasp half 10a is indicated at 28 in Fig. 3. When the necklace or bracelet is in use, the thrusts upon the strings 11, 12 and 13 will, of course, tend to hold the end balls in their desired positions as shown in Fig. 1. Such a holding of the strings is, under normal circumstances, adequate to prevent the disengagement of the strings from the clasp. However, novel means are provided for insuring that the strings of the jewelry are secured in place as in Fig. 1 comprising a hinged cover member 29 which is provided for the clasp portion 10b, there being an analogous hinged cover portion 30 provided for clasp portion 10a. Hinged cover portion 29 is secured, for example, as at 29a by means of a suitable hinge pin which is provided on each side of the cover member and preferably without extending all the way across the clasp half. In other words, there is a hinge pin as at 29a and this extends only through the adjacent surfaces of the cover member 29 and the base member 18, and a second hinge pin (not shown) is axially in alignment with pin 29a and extends through analogous portions on the opposite side of the clasp half.

The cover member 30 is, of course, hinged to its base member in a manner analogous to cover member 29. Thus cover member 30 is adapted for angular motion to a position as shown in Fig. 3. In order to permit such angular motion, a notch as at 30a is formed in the margin thereof adjacent the center line between the clasp halves in order to accommodate the tongue portion 14a of the spring detent 14.

A novel cooperative action occurs by virtue of the disposition of the hinged cover member 29 on the so-called under or body side of the clasp, that is, on the side which is adjacent the body of the wearer. This arises by virtue of the longitudinal thrusts upon the strings 11, 12 and 13 which tend to urge the base member 18 toward or against the hinged cover member 29. Consequently, any tendency for the hinged cover member 29 to open is resisted by said longitudinal thrusts upon such strings which thrusts, when the bracelet or necklace is in normal use, are alone adequate for this purpose. However, in order to further insure the maintenance of a closed relationship of said hinged cover member 29, and, of course, 30, with respect to their respective base members, a suitable detent can be provided, for example, of the so-called "dimple" type as indicated in Fig. 4 at 31 and 31a, the element 31a comprising a suitable dimple which is adapted for engagement by small protuberance 31, the latter being formed in the cover member 29. An analogous detent arrangement can, of course, be provided for the other clasp half.

An outermost end surface 29b of the hinged cover member 29 is provided with slots as at 29c, 29d and 29e which are positioned for moving into register respectively with the slots 23a, 24a and 25a.

A modification of the embodiment of Figs. 1–4 is shown in Fig. 5, there being illustrated only one clasp half 32 which is substantially identical to that shown in Fig. 4 with the exception of the conformation of the apertures. The modification of Fig. 5 instead of having separate apertures as at 20, 21 and 22 has a common aperture as indicated generally at 33 or such common aperture can be considered to be made up of a plurality of separate but interconnecting apertures. The aperture 33 is generally oblong rather than circular and is in communication with slots 34, 35 and 36. One of the main benefits for the common oblong aperture 33 is that it facilitates the mass production of necklaces and bracelets by virtue of the fact that it is somewhat easier tot install a plurality of strings of jewelry in this modification as compared to the embodiment of Fig. 2 because of greater facility in introducing simultaneously a plurality of such strings and moving them in their final positions.

In one form of the invention, as shown in Fig. 3, the end wall surface 26 is rigidly secured at the base thereof as at 26a to the ornamental element 19. However, it may be possible, in accordance with another aspect of the invention, to avoid so connecting said base and end wall

whereby there is no rigid connection therebetween, that is, the end wall surface 26 may be bulged outwardly under the influence of the longitudinal thrust of the strings, for example, 11, 12 and 13. Such thrust will tend to urge said end wall surface 26 into engagement with the inner face of end wall surface 29b of the cover member 29, thereby assisting in holding it closed and further diminishing the possibility of the clasp opening and releasing any of the strings of jewelry.

It is not possible in the forms of the invention shown in Figs. 1–5 to regulate the distance between the strings of jewelry. Very often it becomes desirable to situate the strings of a multiple string necklace close to one another for one desired visual effect, and on another occasion to spread apart such strings so that there is a greater interval between adjacent strings whereby an entirely different visual effect may be obtained.

In the embodiment of Figs. 6 and 7, it is possible to accomplish this result, for example, with a three strand or three string bracelet or necklace, and it is possible with one adjustment of the strings to dispose them relatively close to one another, and with a second adjustment thereof to spread them apart.

In the embodiment of Figs. 6 and 7, only a single clasp half will be described, it being understood that the other clasp half is similar thereto with the exception of the necessary structure for accommodating the spring detent 14 and the recess into which it is inserted.

The multiple strands which may be installed in the clasp of Figs. 6 and 7 may be spread apart relative to one another or moved close together, and can be so adjusted to preserve the symmetry of the arrangement of the strings. As shown in Fig. 7, a clasp half 37 is provided comprising a base member 38 and a hinged cover member 39. The base member 38 can be provided with an ornamental portion as at 40 which is analogous to the portion 19 (Fig. 4). The base member 38, moreover, is generally of the same conformation as the above-described base member 18 but instead of being provided with a plurality of individual slots, one for each of the strings, there is provided only a single aperture and communicating slot in a side surface 38a of the box member (Fig. 6), this aperture and slot being respectively indicated at 41 and 42. The latter is in communication with a slot formed in an end surface 43 of the base member 38, it being, of course, possible to slide a plurality of strings of jewelry having suitable end balls thereon into the aperture 41 and thence through the slot 42 and into the slot 44 formed in the end surface 43. In order to assist in holding the strings of jewelry in preselected symmetrical locations, one of the margins of the slot 44 is notched or serrated, for example, to provide five notches or serrations having, of course, five corresponding valley portions, as at 45, 46, 47, 48 and 49. The strings of jewelry are held in such valley portions by means of the cooperating hinged cover member 39 which has formed in an end surface 39a thereof suitable serrations as at 50 having valley portions which are movable into close cooperative relationship with the respective valley portions of the serrations in the slot 44. Thus when the cover member 39 has been closed and resiliently there held by means of a so-called "dimple" detent, any strings of jewelry which are situated in the slot 44 are

urged into the above-described valleys and there held by means of the cooperating valley portions of the serrations 50 formed in the cover member 39.

It is readily seen that if the above-mentioned three strings of jewelry are held by the clasp half 37, they may be disposed with the central string, of course, always in the central valley 47 and with the other two strings either in the valleys 46, 48 or 45, 49. By this means a symmetrical arrangement of the strings is obtainable and two adjustments can be had of the lateral distance between said strings.

Another advantage of the embodiment of Fig. 7 is found, for example, in the case where a plurality, such as five strings of jewelry, are grasped by the cooperating serrations and one of said strands breaks whereupon it becomes necessary to relocate the remaining strands in a symmetrical arrangement. If, for example, a strand in valley 45 is broken and it becomes necessary to relocate the remainder, this may be done easily merely by shifting those strings in the valleys 46 and 47 to the left one tooth, as viewed in Fig. 7.

The above-described adjustment of the strings in order to secure symmetry therebetween when one is broken can be effected without removal of any of the strands from the clasp half, thereby diminishing the danger of dropping one of the strands and breaking same. Moreover, such adjustment can be made easily by the wearer by merely lifting the hinged cover member 39 and shifting the strands as above suggested. Of course, an analogous adjustment must be made with respect to the other cooperating clasp half (not shown).

While the invention has been described with respect to certain preferred examples which have given satisfactory results, it will be understood by those skilled in the art, after understanding the invention, that various changes and modifications may be made without departing from the spirit and scope of the invention, and it is intended, therefore, in the appended claims to cover all such changes and modifications.

What is claimed as new and is desired to be secured by Letters Patent is:

1. A clasp for a multiplicity of strings of beads and the like chain jewelry including: a clasp half-portion constituted by a box-like base member having a side wall and an end wall, there being formed in said side wall a relatively enlarged aperture having in communication therewith a slot which extends into said end wall and is in communication with another slot formed in said end wall, the latter slot being provided with a plurality of serrations along one edge thereof; a cover member hingedly secured to said box-like member and having an end wall positioned for moving into proximity with the end wall of said box-like member and being provided also with a like plurality of serrations, the valley portions of the serrations in the cover member and in the base member being positioned for moving into string accommodating relationship wherein each valley portion of the serrations of said cover member is closely adjacent and opposite to a corresponding valley portion in said base member when said clasp half portion is closed.

2. A clasp half-portion for use with one or a plurality of strings of bead or the like chain jewelry, each string having end holding means, including in combination: a box-like base member having a side wall and an end wall, there

being formed in said side wall an aperture of preselected size for receiving the end holding means, said aperture having in communication therewith a slot formed in said side wall which extends into said end wall, said slot having a width smaller than the maximum dimension of the end holding means, said end wall having another slot formed therein in communication with said first-mentioned slot, said other slot being provided with a plurality of serrations along one edge thereof whereby said serrations are in communication with one another via said last-mentioned slot; and a cover member hingedly secured to said base member and having an end wall positioned for moving into proximity with the end wall of said base member and being provided also with a like plurality of serrations, each valley portion of said cover member serrations being movable to a position closely adjacent and opposite to a corresponding valley portion of the serrations in said base member,

the width of the slot in said end wall being less than the maximum dimension of the end holding means.

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