May 12, 1953 J. GOODMAN ET AL 2,637,887

MAGNETIC JEWELRY CLASP

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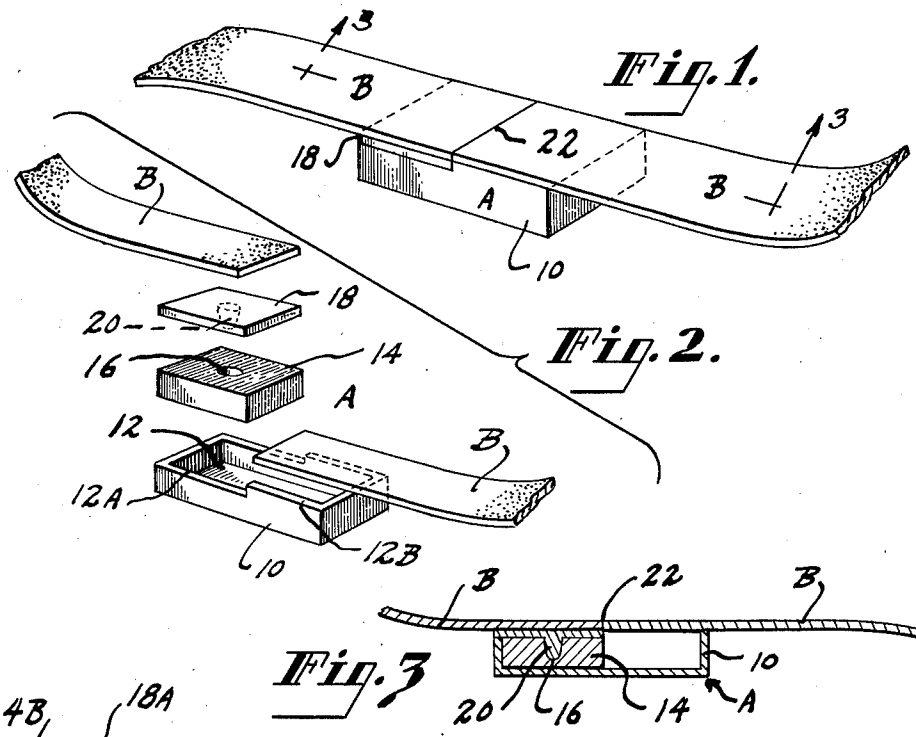


Fig. 1.

Fig. 2.

Fig. 3

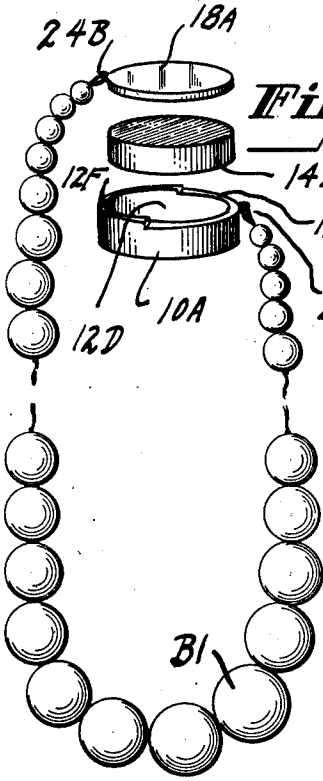


Fig. 4.

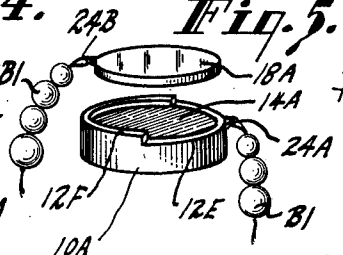


Fig. 5.

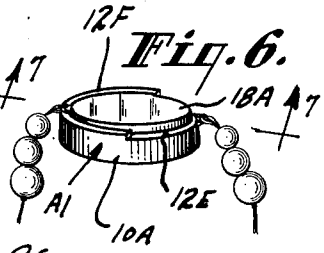


Fig. 6.

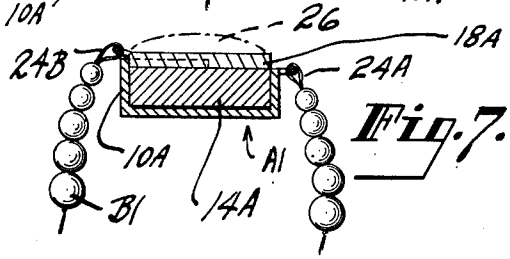


Fig. 7.

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MAGNETIC JEWELRY CLASP

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2 Claims. (Cl. 24—230)

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Our invention relates to a jewelry clasp and relates particularly to a jewelry clasp utilizing the attractive force of a magnetic material.

In the past, it has been customary to use clasps for jewelry consisting of a plurality of small mechanical parts which were weak in structure. These clasps had the obvious disadvantages of being subject to failure under accidental rough handling and difficult, if not impossible, to repair when broken, as well as being difficult to fasten and unfasten because of the smallness of the engaging parts.

It, therefore, is an object of our invention to provide a jewelry clasp which utilizes the attractive force of permanent magnetic material to secure the engaging parts together.

Another object of our invention is to provide a permanent magnetic jewelry clasp which is simple to fasten and unfasten.

Another object of our invention is to provide a permanent magnetic jewelry clasp which if accidentally sprung open will not suffer any ill-effects.

Another object of our invention is to provide a permanent magnetic jewelry clasp which may be readily engraved, or combined with a stone or stones, to enhance its appearance.

Other objects of our invention are to provide an improved jewelry clasp, simple and sturdy in construction, easily and economically produced, and which is highly efficient in use.

With the above and related objects in view, our invention consists in the details of construction and combination of parts, as will be more fully understood from the following description when read in conjunction with the accompanying drawing, in which:

Fig. 1 is a perspective view of one embodiment of our invention as used in connection with a bracelet and/or necklace.

Fig. 2 is an exploded view of the various parts of a permanent magnetic clasp embodying our invention.

Fig. 3 is a cross-sectional view taken along the line 3—3 of Fig. 1.

Fig. 4 is an exploded view of the elements comprising another embodiment of our invention.

Fig. 5 is a perspective view of the assembled elements of the permanent magnetic clasp of Fig. 4.

Fig. 6 is a perspective view of the elements of our clasp in a closed position.

Fig. 7 is a cross-sectional view taken along the line 7—7 of Fig. 6.

Referring now in greater detail to the drawing

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wherein similar reference characters are used to denote similar parts, we show a permanent magnetic jewelry clasp, generally designated as A, with a piece of jewelry, generally designated as B, attached thereto.

In the embodiment of our invention illustrated in Figs. 1, 2 and 3, the clasp A comprises a magnetic material receptacle 10 having a hollow interior 12 defined by an upraised wall 12A and 12B. The wall 12A is slightly lower than the wall 12B, each wall travels approximately one-half way around the periphery of the receptacle 10. The wall 12B is in symmetrical relation to the wall 12A. A permanent magnet 14 having a centrally positioned bore 16 therethrough is inserted and secured by a suitable means in the hollow interior 12. The magnet 14 is of such thickness that its top plane is even with the uppermost portion of the wall 12A, and is of such length that it only fills the hollow interior 12 on the side opposite the wall 12B, thus reducing the weight of the clasp A. A plate or magnetic keeper 18 conforming to the size and shape of the magnet 14 is provided with a small centrally positioned pin 20 to interfit with the bore 16. In use the magnet 14 holds the plate or keeper 18 securely to itself while the pin 20 within the bore 16 holds the plate from sliding along the magnet and thus coming apart. One end of a piece of jewelry B is permanently attached to the wall 12B by any suitable means such as welding, soldering or brazing so the empty portion of the receptacle is completely covered and then the complementary end of the piece of jewelry B is permanently attached to the plate or keeper 18. To insure a neat joint 22 the plate or keeper 18 should be in engagement with the permanent magnet 14 when the markings for securing the jewelry B to the plate or keeper 18 are made.

While only a straight joint 22 is illustrated, it is readily apparent, that any configuration of joint may be fitted easily together with the exercise of reasonable care.

The magnetic clasp A is easily and readily secured by placing the keeper pin 20 within the bore 16 in the magnet whereafter the clasp A secures itself by the permanent magnet 14 exerting an attractive force upon the plate or keeper 18. To open the clasp A is a simple matter involving only the holding of one end of the jewelry B while the other end is lifted away against the attractive force of the magnet 14.

Figs. 4, 5, 6 and 7 illustrate another embodiment of our invention having a permanent magnetic material receptacle 10A, a hollow interior

12D and upraised walls 12E and 12F defining said interior. The wall 12F is slightly higher than the wall 12E and is utilized to stop the plate or keeper 18A from slidably disengaging from the permanent magnet 14 which entirely fills the hollow interior 12D. One end of the jewelry B1 is attached to the side of the receptacle 10A away from the wall 12F and the other end of the jewelry B1 is attached to the plate or keeper 18A which is of slightly smaller size but identical configuration than the receptacle 10A so it can rest within and against the wall 12F to limit the slidable movement of the plate or keeper 18A in one plane. The joining of the jewelry B1 to the receptacle 10A and keeper 18A may be done in a conventional manner by means of the eyes 24A and 24B, respectively. We have found this embodiment of our invention very satisfactory for necklaces, chains, and other jewelry of this type. A jewelry stone or stones 26 may be mounted upon the plate or keeper 18A to enhance the appearance of the catch A1.

From the foregoing description, it is readily apparent that our invention is easily and readily operable and should it be accidentally separated there will be no ill-effects to the clasp as the attractive force of the magnet will not be impaired. It is also apparent that our invention lends itself to modifications which have not been described but which fall within the spirit of the invention.

Although our invention has been described in considerable detail, such description is merely meant to be illustrative rather than limiting, as our invention may be variously embodied, and the scope of the invention is to be determined as claimed.

We claim as our invention:

1. In a magnetic jewelry clasp, a magnet retaining member having a bottom and an upwardly extending wall, said wall provided with a raised edge subtantially over one-half of its periphery, said raised edge being symmetrically disposed to the remainder of said wall, a permanent magnet secured within said wall and to said bottom, said magnet having a centrally positioned bore extending therethrough, and a magnetic keeper of substantially the same size and configuration as said magnet provided with a centrally positioned pin to engage said bore, said keeper being of substantially the same thickness as the raised edge portion of the wall and being secured by the attractive force of said magnet to said magnet in covering relation to the portion of the retainer in which the magnet fits, said pin fitting within said bore preventing sliding of said keeper from said magnet, and a piece of jewelry having one end permanently attached to the raised edge portion of the wall in covering relation to the empty portion of the retaining member, the other end of said jewelry being attached to said keeper in covering relation thereto.

2. Linear jewelry, and a clasp for releasably securing ends of the jewelry together comprising a box-like housing secured to one end of the jewelry and having a bottom and upstanding walls, said walls having portions offset vertically to form high and low portions, a permanent magnet mounted in said housing and having an upper face in the plane of upper edges of the low portions of the walls, and a metal plate mounted against the under face of the other end of said jewelry and constituting a keeper applicable slidably to the upper edges of the low wall portions for engagement with said magnet and having abutting contact with shoulders formed by the high wall portions, said plate being of a thickness disposing outer surfaces of the ends of the jewelry substantially flush with each other.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,198,227	Hinchey	Sept. 12, 1916
2,475,573	Smith et al.	July 5, 1949
2,483,031	Avedon	Sept. 27, 1949