

No. 782,803.

PATENTED FEB. 14, 1905.

D. L. WATSON, JR.  
SEPARABLE FASTENER.  
APPLICATION FILED OCT. 6, 1904.

FIG. 1.

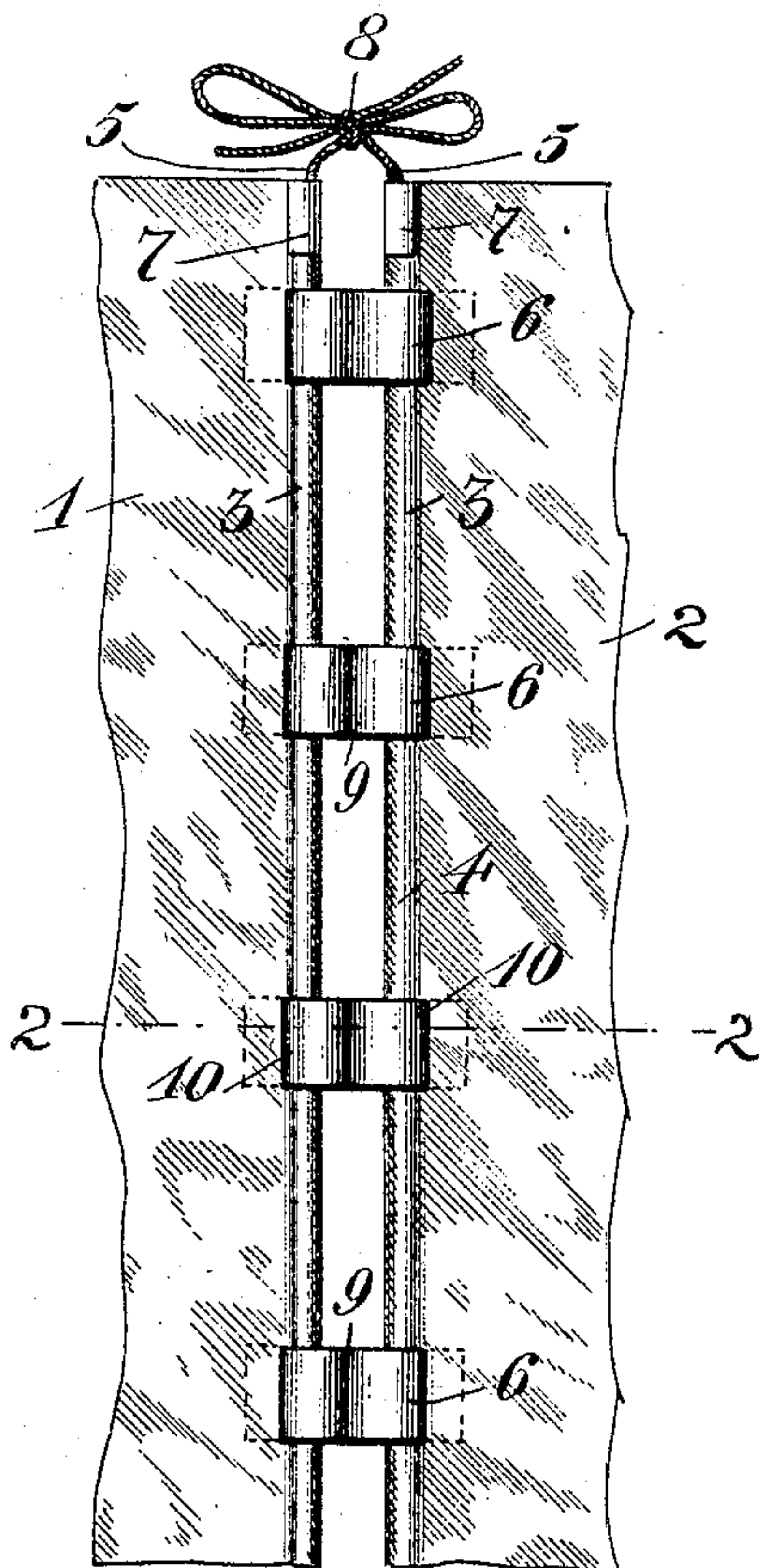


FIG. 2.

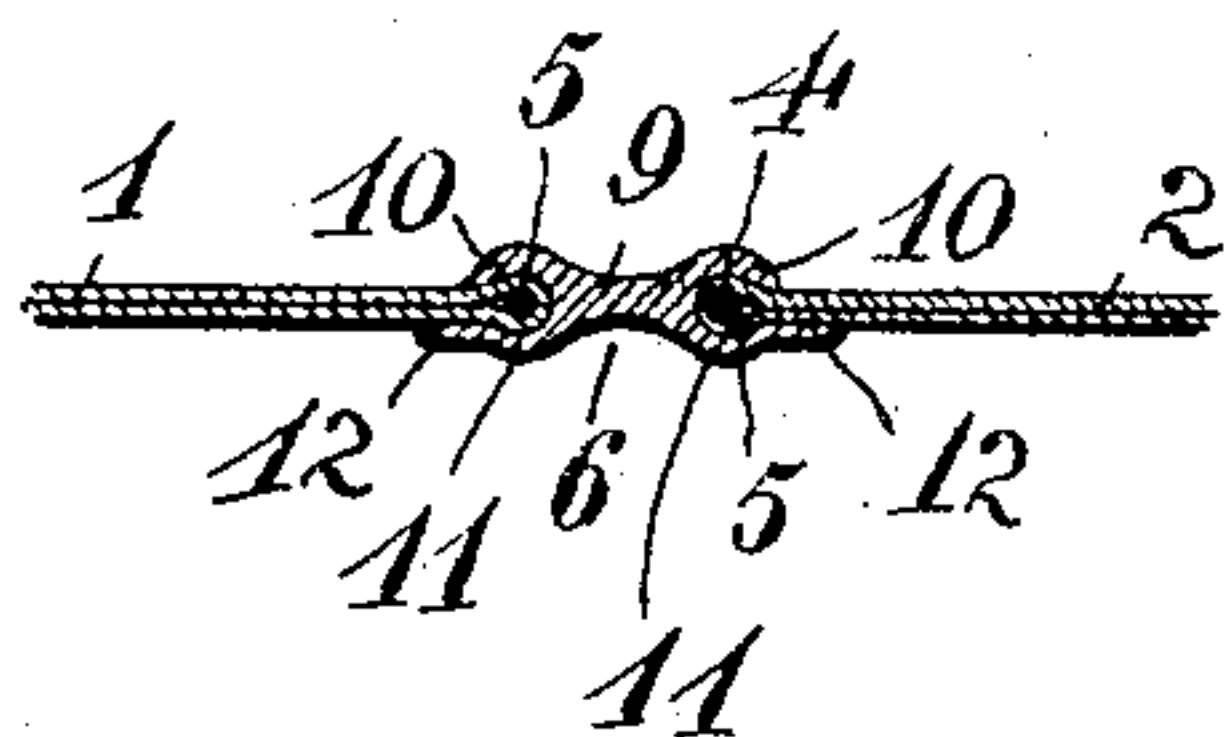


FIG. 3.

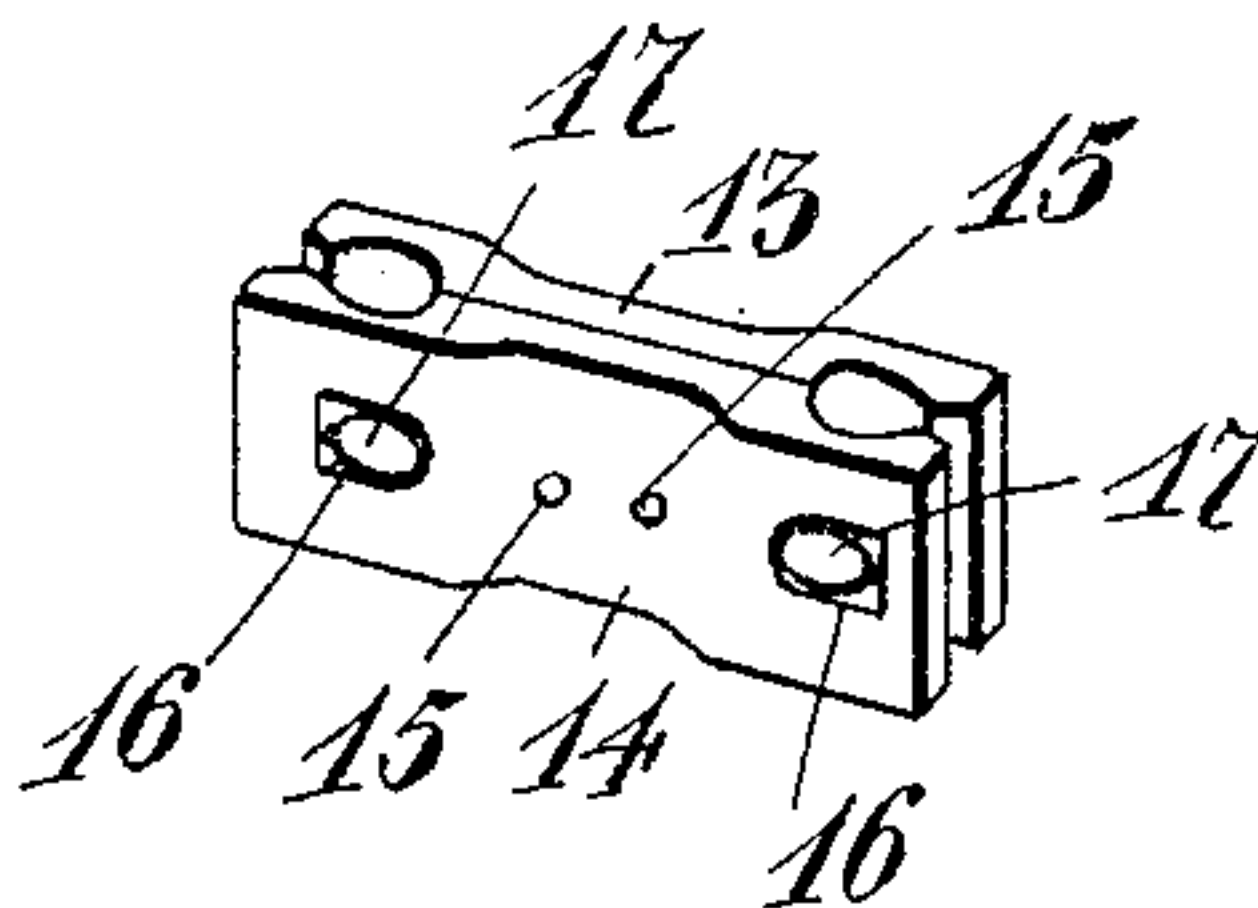


FIG. 4.

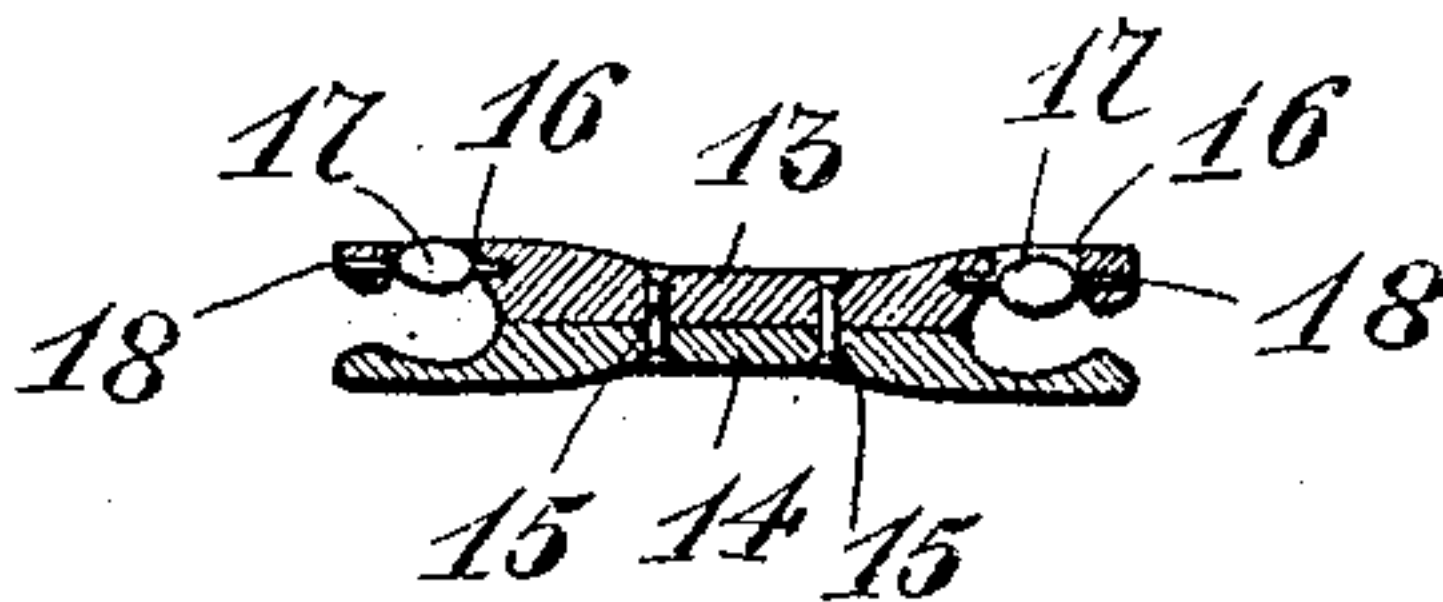


FIG. 5.

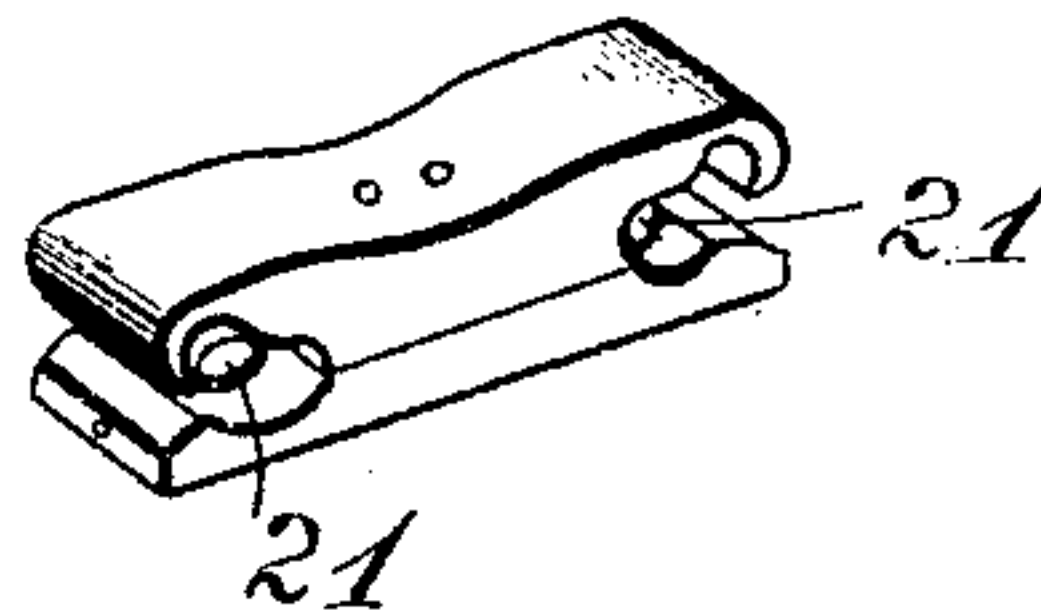
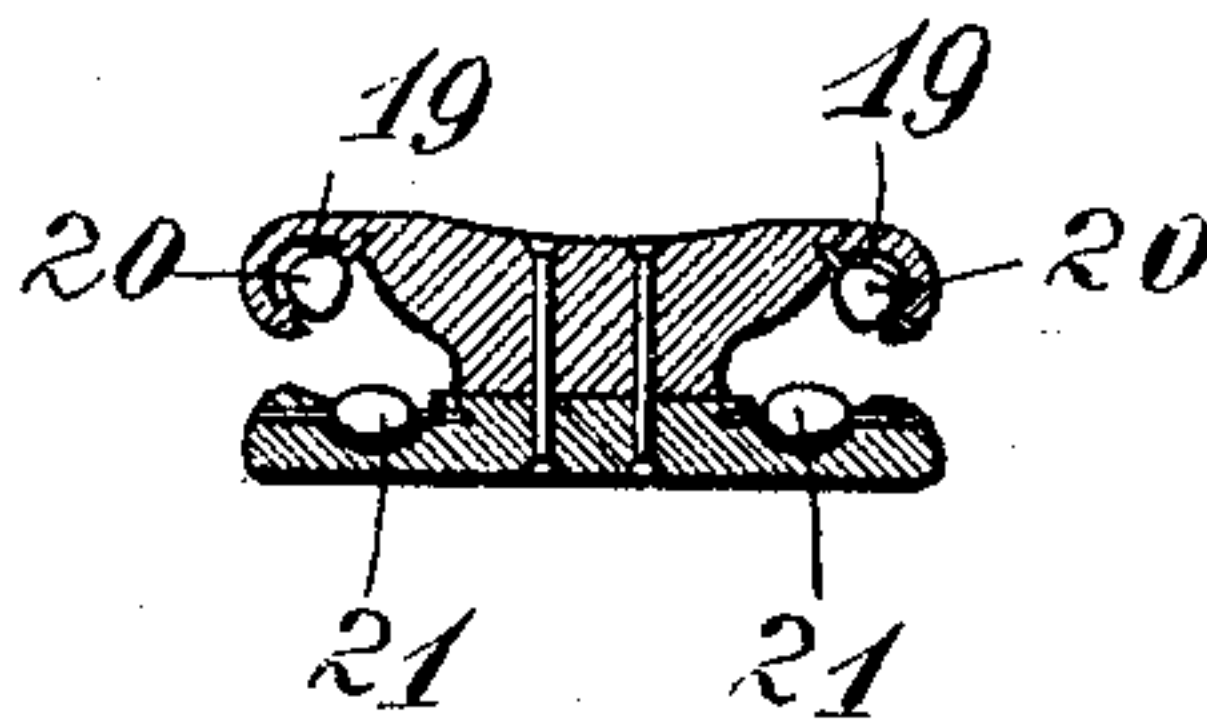


FIG. 6.



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# UNITED STATES PATENT OFFICE.

DAVID L. WATSON, JR., OF DETROIT, MICHIGAN.

## SEPARABLE FASTENER.

SPECIFICATION forming part of Letters Patent No. 782,803, dated February 14, 1905.

Original application filed April 28, 1904, Serial No. 205,394. Divided and this application filed October 6, 1904. Serial No. 227,496.

*To all whom it may concern:*

Be it known that I, DAVID L. WATSON, JR., a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Separable Fasteners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to means for fastening the meeting edges or portions of elements or for connecting independent elements together.

This is a divisional application, the subject-matter of which was originally included in my application filed April 28, 1904, Serial No. 205,394.

The object of my invention is to provide fastening means which are simple, inexpensive, reliable, and efficient and are adapted for general use for connecting two portions or coacting members together.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a plan view showing the invention as applied for fastening together the meeting edges of a placket of an article of personal wear. Fig. 2 is a cross-section through the same, taken on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of a slightly-modified form of connector. Fig. 4 is a longitudinal sectional view through the same. Fig. 5 is a perspective view of a further-modified form of connector, and Fig. 6 is a longitudinal sectional view through the same.

Referring to the drawings by numeral, 1 and 2 represent two portions or elements to be connected, which may be the meeting edges of parts of a garment or parts or elements of any kind to be secured or united together. I do not limit the invention to any specific application in this particular. Along the edges of these parts 1 and 2 are provided beads 3, which are preferably formed by a sheath or

pocket 4, through which passes a stiffening-strand 5, which may be a cord, wire, or other suitable flexible, inflexible, or semiflexible element of like character adapted to fill the pocket to reinforce the same and provide a bead or rim of suitable stiffness and cross-sectional form to be engaged or gripped by the hooked edges or jaws of fasteners or connectors 6. As shown, the parts 1 and 2 are formed of two layers folded upon each other to provide the pockets or sheaths through which the strands 5 extend; but these parts may be of any desired construction. The beads 4 at the ends of the parts 1 and 2 are covered with circular metallic tips 7, which permit said beads to be readily inserted between the jaws of said connectors, as presently explained. The upper or outer ends of the strands 5, here shown in the form of braided cords, project beyond the said tips and are adapted to serve as lacing-strings. These ends may be tied together in a bow-knot, as shown at 8, or otherwise secured together or to the parts 1 and 2 to hold the ends of the latter together.

The connectors 6, as shown in Figs. 1 and 2 of the drawings, each consist of an intermediate shank or body portion 9, formed or provided with oppositely-projecting pairs or sets of hooked members or jaws 10 and 11, which slidably engage said beads 3 on the parts 1 and 2. The frictional engagement between the beads and the jaws of the connectors is sufficient to normally retain the latter against movement; but they may be disengaged by a forceful sliding movement, as will be readily understood. The jaws 11 of each pair are formed with extended portions 12, which are adapted to reinforce or support parts 1 and 2. By providing the metallic tips 7, which slide freely between said jaws 10 and 11, the beads 3 may be readily inserted between said jaws, and the ends of the parts 1 and 2 are strengthened and prevented from fraying or wearing. The connectors may be formed of a single casting, as shown in Figs. 1 and 2 of the drawings, or of two longitudinal pieces riveted to the body or otherwise suitably united, as shown in Figs. 3 to 6, inclusive, of the drawings.



Figs. 3 and 4 illustrate connectors which are designed for connecting elements which by reason of their weight or comparative stiffness require the use of connecting elements of some strength and ease of adjustment. As shown, this form of connector preferably consists of two sections 13 and 14, connected by rivets 15, the jaws of one of the sections being provided with slots 16, in which are friction-rollers or other antifriction devices 17, mounted on short shafts or pins 18. These rollers allow the connector to be moved with more or less freedom along a stiff bead or rim, and thereby prevent the same from binding when there is much strain or tension on the connected parts.

Figs. 5 and 6 of the drawings show a construction similar to that just described; but here the jaws of one section are enlarged to form recesses 19 to receive antifriction-rollers 20, which are disposed at an angle to the passage between the jaws, as clearly shown in Fig. 6. In the opposite jaws of this form of connector are journaled additional friction-rollers 21, so that the connectors may slide freely upon the beads.

The operation and advantages of my invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings.

It will be understood that any number of the connectors 6 may be provided and when arranged at suitable intervals from each other will effectively connect the parts 1 and 2. When it is desired to separate or disconnect said parts, all of the connectors or a sufficient number of them are moved close together or toward one end of the parts 1 and 2.

The invention is advantageous in providing a construction of fastening means which is adapted for general use and is simple, cheap, durable, efficient, and reliable and which enables the connected parts to be readily engaged and disengaged.

It will be noted that the fastening is particularly adapted for fastening or connecting the meeting edges of corsets, gloves, shoes, drapery, and other articles of personal wear and those used in the household or elsewhere for utility or ornamentation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A fastening comprising the parts 1 and 2 provided with beaded edges, said beads being formed by pockets with inclosed cords, the ends of which cords project beyond the beads to be used as lacing ends, sliding connectors formed with jaws at their opposite edges, to frictionally engage and slide on said beads, and stiffening-tips upon the upper ends of said beads to permit them to be readily inserted between the jaws of said connectors, substantially as described.

2. A fastening comprising the parts 1 and 2 provided with beaded edges, said beads being formed by pockets with inclosed cords, the ends of which cords project beyond the beads to be used as lacing ends, sliding connectors formed with jaws, antifriction-rollers in said jaws to engage and slide on said beads, and stiffening-tips upon the upper ends of said beads to permit them to be readily inserted between the jaws of said connectors, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

DAVID L. WATSON, JR.

Witnesses:

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PETER F. GREENWALD.