No. 780,691. PATENTED JAN. 24, 1905.

D. L. WATSON, JR.

# SEPARABLE FASTENING.

APPLICATION FILED APR. 28, 1904.

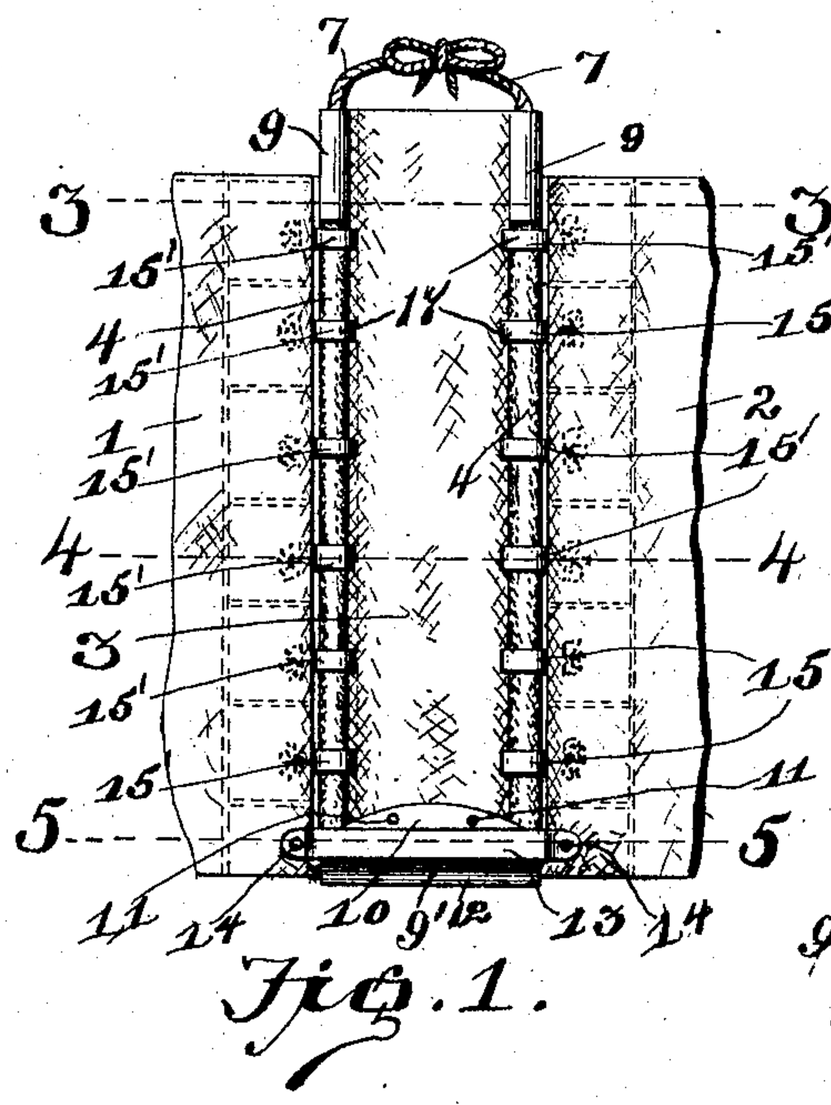

Fig. 1.

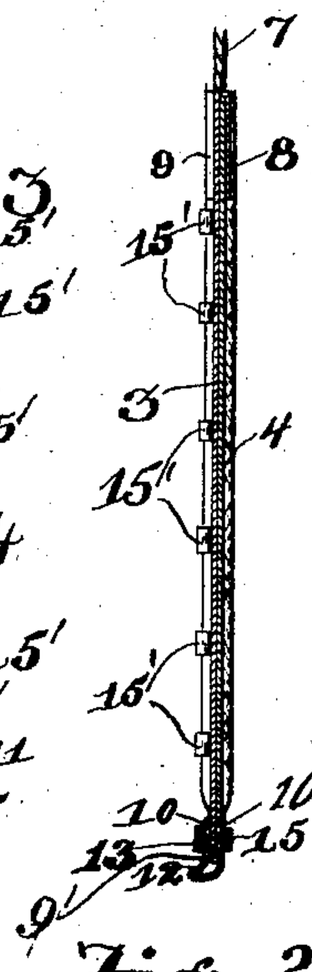

Fig. 2.

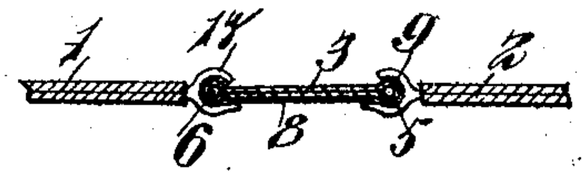

Fig. 3.

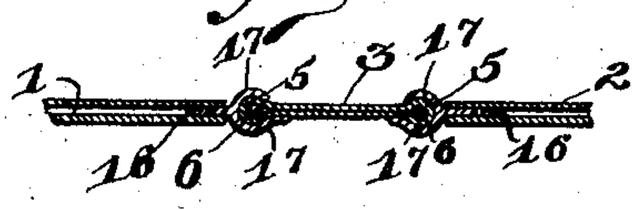

Fig. 4.

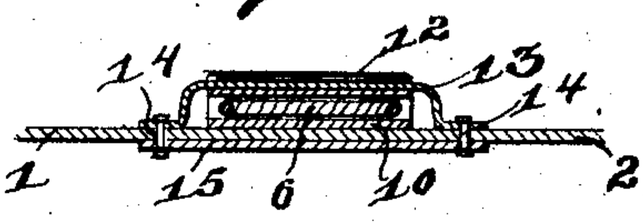

Fig. 5.

Witnesses
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No. 780,691. Patented January 24, 1905.

# UNITED STATES PATENT OFFICE.

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

## SEPARABLE FASTENING.

SPECIFICATION forming part of Letters Patent No. 780,691, dated January 24, 1905.

Application filed April 28, 1904. Serial No. 205,394.

*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 Fastenings; 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.

The object of the 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.

In the accompanying drawings, Figure 1 is a plan view showing the invention as applied for fastening the meeting edges of the placket of an article of personal wear together. Fig. 2 is a vertical longitudinal section of the same; and Figs. 3, 4, and 5 are cross-sections taken, respectively, on the lines 3 3, 4 4, and 5 5 of Fig. 1.

Referring to the drawings, 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. As shown, a longitudinal tongue or connecting-strip 3, which may be formed of two layers, is arranged to cover the space between the portions 1 and 2, and is provided along each of its longitudinal side edges with a bead 4, formed by a sheath or pocket 5, through which passes a stiffening-strand 6, which may be a cord, wire, or other suitable flexible, inflexible, or semiflexible element of like character adapted to fill the sheath or 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 a fastener. In the present instance I have shown the strands 6 in the form of cords which have ends 7 projecting at one end of the tongue or strip 3, so as to be tied to form an ornamental bow or knot, which is the preferred arrangement when the fastening is used to connect 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. At that end of the tongue or strip 3 from which the ends 7 of the cords project a stiffening plate or strip 8 is employed, and the edges of the same are bent to form tips 9 to grip the contiguous ends of the beads 4, thus preventing relative movement of the cord or pocket folds at that point, and consequently preventing the parts from becoming frayed or worn or wrinkling from manipulation of the ends of the cords. The plate 8 further forms a finger grasp to enable the tongue or strip 3 to be conveniently taken hold of and drawn in one direction, as will be readily understood. Said plate 8 also serves as a convenient means for inserting the beaded edges of the strip between the jaws of the connectors. The opposite or lower end of the strip 3 is reinforced by a plate 9′, bent to form jaws 10, bearing against opposite sides of said strip and secured thereto by rivets or other suitable fastenings 11. The lower end of the plate is bent outward at an angle to provide a finger-piece 12, by which the said lower end of the strip may be grasped and drawn in in a downward direction. Said finger-piece 12 further serves as a stop to abut against a guide-strip 13 and limit the movement of the strip 3 in the direction in which it is drawn by the finger-piece 8. It will be observed that the plate 9′ not only serves as a stiffener and finger-piece, as described, but also protects the lower end of the tongue or strip 3 from wear and clamps the adjacent ends of the cords and pocket folds from relative movement. (See Figs. 1 and 2.) Of course the cords or stiffening-strands may be independent or continuous in a single piece, the return or intermediate portion being arranged to cross under the plate 9′ when a continuous piece is used.

The guide-strip 13 comprises a piece of metal or other suitable material bridging across the front of the space between the lower ends of the portions 1 and 2 and secured at its

outer ends to said portions 1 and 2 by rivets or other preferred fastenings 14, the body of the strip being bowed or offset to form a passage for the tongue or strip 3. The rivets 14 also pass through a stay 15, extending across the space between the portions 1 and 2 at the back of the latter and in line with the guide-strip 13, said stay serving, in connection with said guide-strip, to retain the lower ends of the said portions 1 and 2 in proper relative position.

Arranged at intervals along the edges of the parts 1 and 2 are connectors 15′, each consisting of a stem or shank 16, attached to the edge of the part 1 or 2, as the case may be, and having curved jaws 17 embracing and frictionally engaging the contiguous bead or rim 4 of the tongue or strip 3, the sets or series of connectors thus slidably connecting the strip 3 with the parts 1 and 2 and retaining the edges of the latter in proper spaced relation. By this construction it will be seen that the strip 3 may be entirely detached by sliding it downward past the guide-strip 13, thus releasing the parts 1 and 2, and that by a reverse sliding movement of said strip 3 on the connectors 15′ the parts may again be connected and held in closed relation.

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.

The operation of my fastening may be described as follows: When the parts are in their closed position (shown in Figs. 1 and 2 of the drawings) and it is desired to open them, the finger-piece 12 is drawn downwardly until the parts 1 and 2 are disconnected sufficiently for the purpose required, the beads 4 and tips 9 sliding through the connectors 15′, as will be readily understood. If the fastening is used upon a shoe or the like, it will not be neeessary to entirely remove the tongue or strip 3; but for some purposes it may be necessary to entirely withdraw the same from the connectors 15′. When it is desired to connect or secure the parts 1 and 2, the strip 3 is drawn upwardly, so that the tips 9 and beads 4 slide through the connectors 15′. The finger-piece 12 engaging the guide 13 will limit the upward movement. The operation of connecting the parts 1 and 2 together by the tongue or strip 3 is greatly facilitated by the stiffening-plate 8, the tips 9 of which may be easily passed between the jaws of the connectors 15′. When the parts are in their closed position, the strip 3 will be prevented from dropping downwardly by the frictional engagement of the connectors 15′ with the beads 4.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

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, and desire to secure by Letters Patent, is—

1. A fastening comprising the parts 1 and 2, a guide-strip connecting said parts, connectors upon said parts formed with jaws, a tongue or strip having beaded edges slidably engaged with the jaws of said connectors, a plate upon one end of said tongue formed with a finger-piece adapted to engage said guide-strip to limit the movement of said tongue, and a stiffening-plate adjacent to the other end of said tongue having tips engaging said beads and slidable in the jaws of said connectors, substantially as described.

2. A fastening comprising the parts 1 and 2, a guide-strip connecting said parts, connectors on said parts formed with jaws, a tongue or strip having beaded edges slidably engaged with the jaws of said connectors, and a plate on one end of said tongue or strip and having a finger-piece adapted to engage said guide-strip to limit the movement of said tongue.

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

DAVID L. WATSON, Jr.

Witnesses:
SIMON WEISS,
EDWARD C. SCHULTZ.