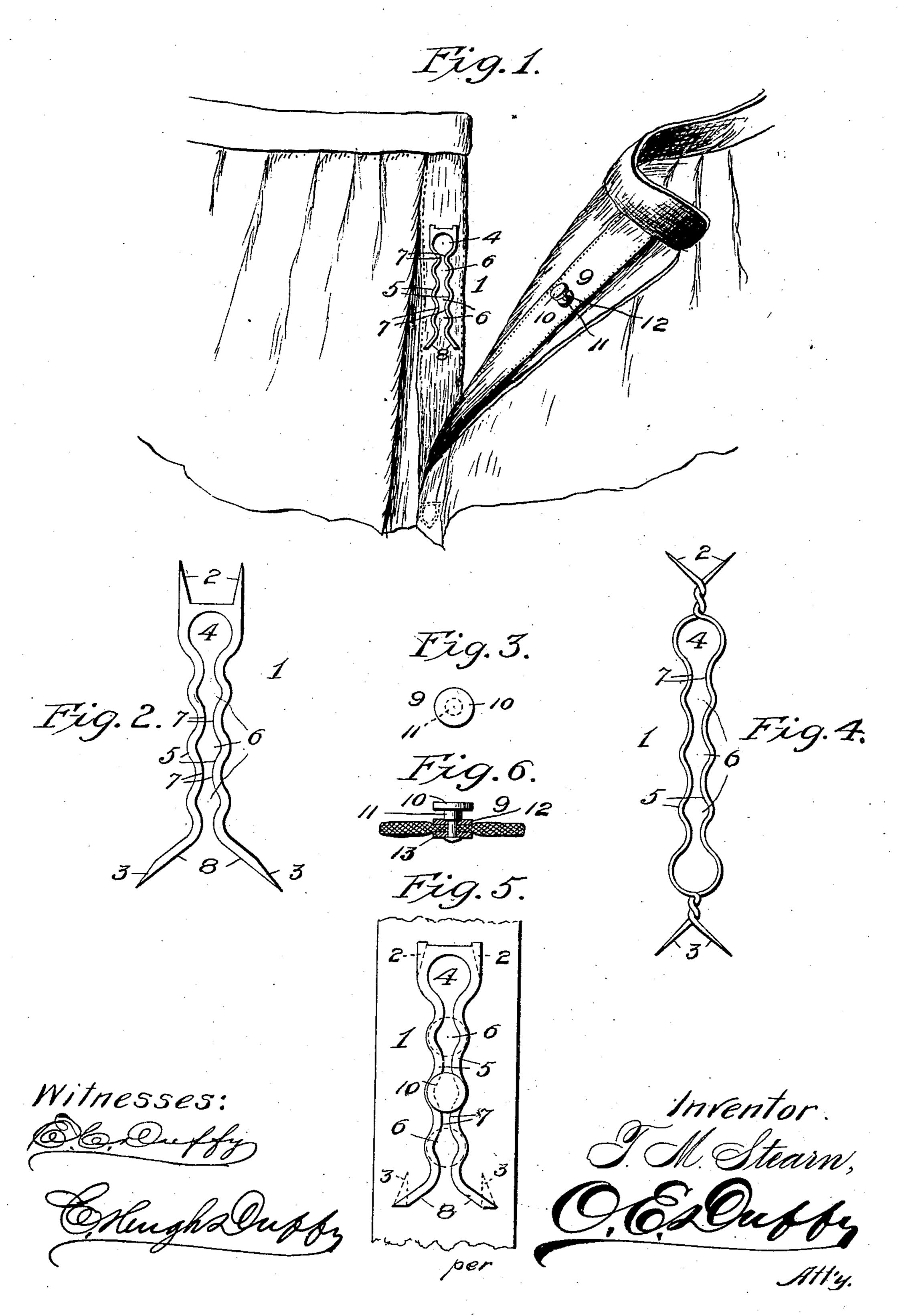
## T. M. STEARN. PLACKET FASTENER.

(Application filed June 17, 1902.)

(No Model.)



## United States Patent Office.

THOMAS MURRAY STEARN, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-THIRD TO JOHN SCRIVENER, OF WASHINGTON, DISTRICT OF COLUMBIA.

## PLACKET-FASTENER.

SPECIFICATION forming part of Letters Patent No. 710,123, dated September 30, 1902.

Application filed June 17, 1902. Serial No. 112,057. (No model.)

To all whom it may concern:

Be it known that I, Thomas Murray Stearn, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Placket-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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to placket-fasteners, and has for its object to provide a device of this class which is particularly simple in construction, easy of operation, and composed of a minimum number of parts.

A further object of my invention is to provide a placket-fastener which is attached and detached by operating in the same direction.

A further object of my invention is to provide a device of this class which has a series of points of engagement, whereby a placket can be made to always set smoothly, thereby obviating a common defect of having one side drawn while the other is loose.

With these objects in view my invention 30 consists in the novel construction of my placket-fastener.

My invention also consists in certain other novel features and in combinations of parts, which will be first fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 is a view of my invention in an open position. Fig. 2 is a plan view of my fasten40 ing. Fig. 3 is a plan of the fastening-stud. Fig. 4 is a plan of the fastening made of resilient wire. Fig. 5 is a plan of the fastening secured to tape, showing stud in position and in dotted lines. Fig. 6 is a vertical section of the fastening-stud secured to tape.

Like numerals of reference indicate the same parts throughout the several figures, in which—

1 indicates the fastening, which is stamped

out of sheet spring metal, and 2 indicates the 50 securing-tangs at the top thereof.

3 shows the securing-tangs at the bottom. The fastening 1 is provided with a large circular opening 4 at the top thereof. The sides 5 are uniformly curved or waved, so as to 55 form a series of loops 6 and oppositely-located points 7. The free ends 8 of said sides diverge and form the lower securing-tangs 3.

9 indicates the fastening-stud, having a head 10 somewhat larger than the loops 6, and a 60 shank 11, which is thicker in cross-section than the distance between the points 7 of the sides 5.

12 and 13 indicate flanges which are carried on the shank 11 on either side of the tape, the 65 shank and flange 13 forming a rivet.

In operating, the fastening 1 is secured to the tape by means of the securing-tangs 2 and 3, and the tape is then sewed on the placket, preferably as shown. The stud is riveted to 70 the tape and the tape is then secured to the placket, as shown. In order to fasten the placket, the stud is inserted between the diverging ends 8 and drawn up between the sides 5. As the shank of the stud comes in 75 contact with the points 7 it spreads them apart and enters the next loop above, in which position it will remain unless drawn up another loop in order to cause each section of the placket to hang evenly, and it will 80 be seen that there is quite a latitude of adjustment in this respect.

In order to unfasten the placket, the stud is drawn entirely up until it reaches the large opening at the top, at which point it will be 85 disengaged.

In Fig. 4 I show the fastening 1 made of resilient wire, with both ends closed, the operation and mode of securing it to the tape being the same.

Having thus described my invention, I do not wish to be understood as limiting myself to the exact construction herein set forth, but consider myself clearly entitled to all such changes and modifications that fall within 95 the limit and scope of my invention as defined by the following claims.

It will be noticed by referring to Fig. 4 that

the sides 5 are twisted together at each end and the free ends form the tangs 2 and 3.

What I claim is—

1. In a placket-fastener the combination with the fastening 1, having securing-tangs formed integrally therewith at both ends thereof and rigidly formed thereon, the sides of said fastening being waved to form series of loops, and a fastening-stud adapted to be held in said loops, said tangs being adapted to be inserted in material and bent permanently to secure the fastening in position.

2. A placket-fastener having its sides waved to form a series of loops, the sides of said fastener being twisted together near each end, 15 the free ends of said sides forming securingtangs.

In testimony whereof I affix my signature

in presence of two witnesses.

THOMAS MURRAY STEARN.

Witnesses:

C. HUGH DUFFY, PETER J. DUFFY.