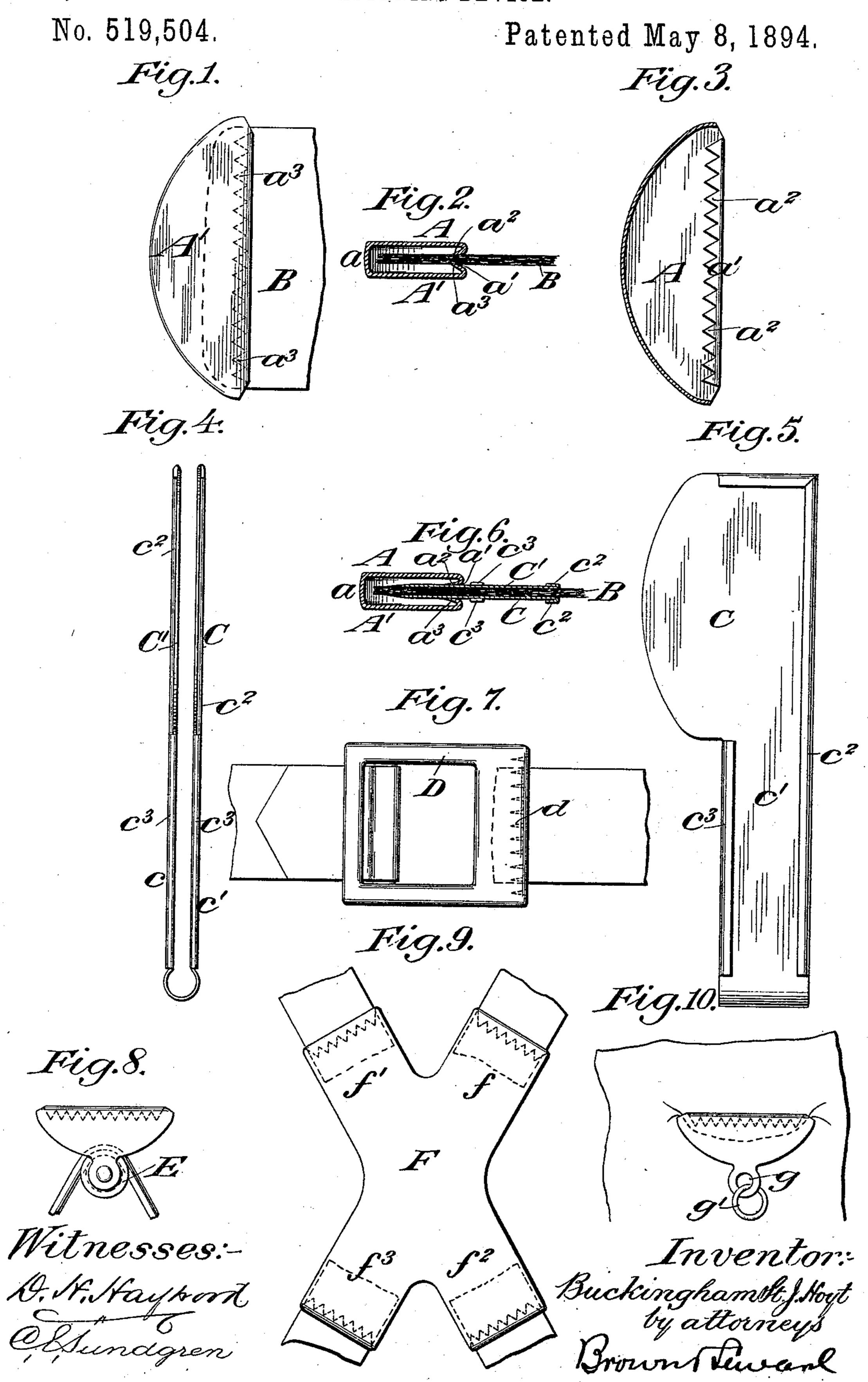
## B. ST. J. HOYT. FASTENING DEVICE.



THE NATIONAL LITHOGRAPHING COMPANY, WASHINGTON, D. C.

## United States Patent Office.

BUCKINGHAM ST. J. HOYT, OF NEW YORK, N. Y.

## FASTENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 519,504, dated May 8, 1894.

Application filed March 24, 1893. Serial No. 467,421. (No model.)

To all whom it may concern:

Be it known that I, Buckingham St. J. Hoyt, of New York, in the county and State of New York, have invented a new and useful Improvement in Fastening Devices, of which the following is a specification.

My invention relates to an improvement in fastening devices for use either as a tip or joint in connection with a garter, belt or other garment supporting device in which it is desirable to hold the end of a strap temporarily in locked adjustment.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

15 in which—

Figure 1 represents a tip piece in side elevation, showing the position of the end of the strap therein. Fig. 2 is a transverse section through the same. Fig. 3 is a longitudinal 20 section through the tip piece from its face toward its back. Fig. 4 is a view in edge elevation of a device for removing the strap from the fastener. Fig. 5 is a view of the said releasing device in side elevation. Fig. 6 is a 25 transverse section through the fastener, showing the position of the releasing device when adjusted within the fastener for the purpose of releasing the strap from the teeth of the fastener. Fig. 7 shows the application of the 30 fastener to a buckle. Figs. 8 and 9 show its application to the tab and back straps of a suspender, and Fig. 10 shows the application of the fastener to a gathered portion of loose material for the purpose of suspending some 35 article therefrom.

The several forms which I have chosen to represent the practical use of the fastener are a few only of the many forms or slight modifications of the fastener which might be adopted, as other forms would readily suggest themselves for the particular purpose in hand.

The gist of my invention lies in a socket or slot for the reception of the end of the strap or other article to be fastened, the said slot being provided along its wall with one or more inwardly projecting teeth extending obliquely across the socket or slot or across a portion thereof in the path of the strap or other article inserted in the socket or slot, the said tooth or teeth being constructed to yield laterally for the purpose of permitting the fas-

tened strap or article to be removed when so desired.

When employed as a tick piece, as represented in Figs. 1, 2, 3 and 6, the fastener may 55 consist of a flat hollow casing, the sides of which are denoted by A and A' and its back by  $\alpha$ . Along its face there is formed an elongated slot a' for the reception of the end of a strap B and from the opposite walls of the 60 slot a' teeth  $a^2$  and  $a^3$  extend inwardly and toward each other across the path of the strap B. The casing is preferably made of some resilient metal, such for example as spring brass or steel, and its teeth  $a^2$  and  $a^3$  may be 65 cut from the portion of the metal along the opposite sides of the slot and the hollow interior of the casing may be formed by turning the portions of the metal upon the opposite sides of the slot back substantially parallel 70 with each other and spaced apart the desired distance and united along their back edges by soldering together the flanges which may be turued toward each other from the edges of the sides of the metal. The teeth  $a^2$  and 75  $a^3$  will readily yield to permit the end of a piece of elastic, or other fabric or a piece of leather to be inserted between them, but their direction is such that when an attempt is made to pull the fabric out from between the 80 teeth, the latter will embed themselves in the opposite sides of the fabric and will hold the end of the strap or other article securely in place.

For convenience in removing the fastener 85 for any purpose, I provide a releasing device comprising a pair of thin blades C, C' having their shanks c, c' connected, the whole being conveniently formed by stamping the shanks and blades from a continuous strip of thin 90 metal and then rolling over the edges of the backs, as shown at c<sup>2</sup> and the front edges of the shanks, as shown at c<sup>3</sup> to form stiffening ribs and for convenience in handling the releasing device.

To apply the releasing device to release the fastener from the strap or other article held, the blades C, C' may be inserted within the slot a' in the face of the fastener and upon opposite sides of the strap or other article held, thereby springing the teeth out of engagement with the fabric and forming a guard between the teeth and fabric to permit the latter to be freely drawn out, when the releasing device itself may be readily removed.

In the case of a buckle, as shown in Fig. 7, I provide the buckle frame D at one end with a slit or socket having inwardly directed teeth d in a manner quite similar to that hereinabove shown and described. I have here shown the teeth d as of a more slender formation than the teeth a and a and I find it desirable to use such slender teeth in connection with a belt or strap of silk or other fine delicate material.

In the form shown in Fig. 8, the fastener is employed as an end piece for the suspender strap and has connected to its back a bearing piece (in the present instance a pulley E) for the reception of the cord, such as commonly employed to connect suspender tabs at the front.

In Fig. 9, I have shown a four-way fastener piece consisting of a body portion F terminating in a pair of diverging branches f and 25 f' at the top and a pair of diverging branches  $f^2$  and  $f^3$  at the bottom, the ends of each of the said branches being provided with a slot or socket for the reception of the end of a strap and with inwardly projecting teeth extending from the opposite walls of the sockets. In Fig. 10, I have shown the fastening de-

vice in connection with a piece of loose fabric,

as for example the side of the garment, the garment being puckered to form a bight which is inserted between the toothed lips or jaws 35 of the fastener, and the back of the fastener is provided with an eye g and a ring g' for the purpose of suspending therefrom any article that may be desired, such for example as a pair of eye-glasses.

The fastener has the advantage of being free from any separable parts which are liable to become displaced, it perfectly houses the end of the strap or material inserted within it, it may be formed of a single piece of metal 45 and readily removed for the insertion of a

new piece of material when desired.

What I claim is—

A removable fastening device, comprising a socket piece having yielding teeth formed 50 on its outer inturned edges integral therewith and extending obliquely inward from the margin of its mouth in position to engage an article inserted within the mouth, a sufficient space being left between the opposite sides of the mouth to permit the insertion of a thin blade within the mouth upon opposite sides of the article inserted within the mouth to spring back the yielding teeth to release the article, substantially as set forth.

BUCKINGHAM ST. J. HOYT.

Witnesses:

FREDK. HAYNES, F. HOWARD TITLAR.