H. S. SMITH.

COMBINATION TIE AND COLLAR FASTENER.

APPLICATION FILED JUNE 1, 1920.

1,413,692. Patented Apr. 25, 1922.

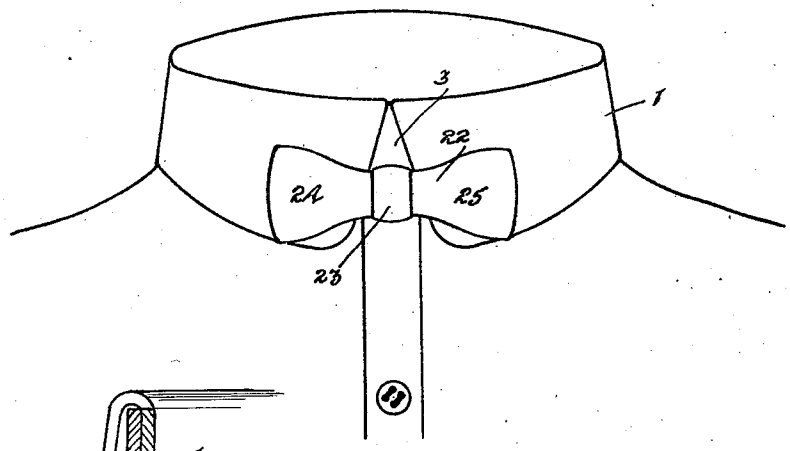


Fig 1

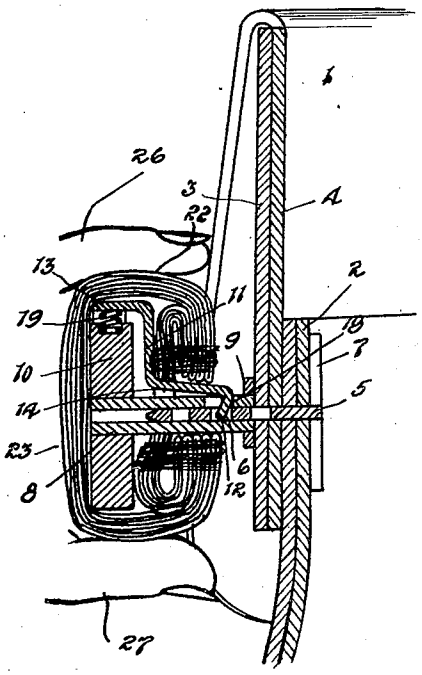


Fig 2

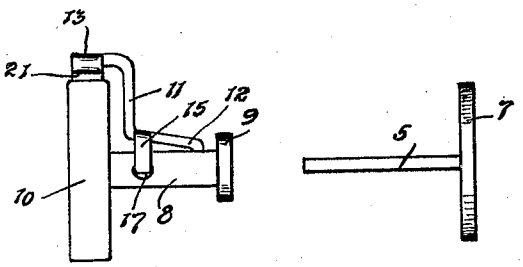


Fig 3

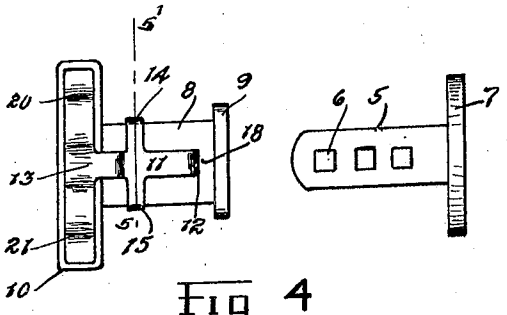


Fig 4

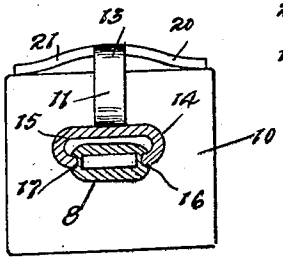


Fig 5

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UNITED STATES PATENT OFFICE.

HOWARD STANLEY SMITH, OF WINNIPEG, MANITOBA, CANADA.

COMBINATION TIE AND COLLAR FASTENER.

1,413,692. Specification of Letters Patent. Patented Apr. 25, 1922.

Application filed June 1, 1920. Serial No. 385,746.

To all whom it may concern:

Be it known that I, HOWARD STANLEY SMITH, of the city of Winnipeg, in the Province of Manitoba, Canada, have invented certain new and useful Improvements in Combination Tie and Collar Fasteners, of which the following is a specification.

The invention relates to improvements in combination tie and collar fasteners and the object of the invention is to provide a fastener in the form of a releasable button to which a tie can be permanently attached and which is utilized not only to hold the tie in position on the collar but also to fasten the collar to the neck band of a shirt.

A further object is to construct the fastener in a simple, durable and inexpensive manner and so that it can be readily manipulated when in use to either fasten or release the collar and tie as occasion requires.

A further object is to arrange the device so that the whole fastening or releasing action can be readily accomplished by a simple finger and thumb action and such that when fastened the tie will assume a natural position and cannot possibly come undone or twisted.

With the above more important objects in view the invention consists essentially in a shank having adjusting openings therein and terminating in a fixed head, a sleeve slidably mounted on the shank, a head located at one end of the shank and a jamming flange at the other, a tie permanently attached to the latter head and a spring pressed dog carried by the sleeve and adapted to enter one or other of the adjusting openings, the parts being arranged and constructed as hereinafter more particularly described and later pointed out in the appended claims, reference being had to the accompanying drawing in which:—

Fig. 1 is a front view of a tie and collar in their natural position and as held by my fastener.

Fig. 2 is an enlarged detailed vertical sectional view through the fastener as it appears in use.

Fig. 3 is a side view of the fastener with the shank undone.

Fig. 4 is a plan view of the parts as they appear in Figure 3.

Fig. 5 is a vertical sectional view at 5—5′ Fig. 4.

In the drawing like characters of reference indicate corresponding parts in the several figures.

As herein before intimated this device is in the nature of a button constructed not only to carry and fasten the tie but also to hold the collar in place on the neck band and in so doing makes the operation of attaching the collar and tie a very convenient one.

I have not considered it necessary to enlarge on the details of the neck band or collar as these are such common commodities that they are well understood.

The collar is indicated at 1 and the neck band of the shirt at 2. The end flaps 3 and 4 of the collar are provided with the customary collar button openings and are lapped in the ordinary way when the collar is attached in order to bring two button holes into registration.

The lapping ends of the neck band are also provided with the customary registering collar button openings and through the button openings of the shirt neck band and the collar flaps I pass the shank of my fastener which is constructed in detail as now described.

5 is a flat metallic shank provided with a number of adjusting openings 6 and carried by a disc like or flat head 7. The shank is adapted to pass through the button openings of the neck band and collar and when inserted has the head 7 at the inner side of the neck band and the tip of the shank projecting forwardly beyond the collar flaps.

8 is a sleeve slidably receiving the shank and provided at one end with a jam flange 9 and at the other end with an enlarged head 10. The sleeve carries a releasable fastening device for connecting the sleeve to the shank, such being in the form of an L-shaped lever 11 fitted at one end with a dog or catch 12 and at the other end with a finger piece 13, the lever being pivotally secured to the sleeve by side arms 14 and 15 having their ends pivotally mounted as indicated at 16 and 17 in the sides of the sleeve.

An opening 18 is provided in the sleeve to allow the dog or catch to enter one or other of the adjusting openings 6 in the shank and the dog is normally pressed inwardly towards the shank by the action of a coiled spring 19 inserted between the finger piece and the head 10. The finger piece is pro-

vided with spring like side extensions 20 and 21 which rest on the top side of the head 10.

The end or tip of the shank is tapered so that when the shank is inserted in the sleeve and pressed inwardly the tip of the shank will engage the dog and force it out against the action of the spring and as soon as the dog reaches one of the openings it will automatically enter the opening and lock the sleeve to the shank.

If one desires to enter the dog in the second or third openings he presses down on the finger piece to hold the dog out during the interval that the sleeve is being forced in and then releases the dog when the opening is reached.

The sleeve can be removed from the shank by pressing the finger piece to release the catch or dog and the arrangement of the head 10 and finger piece is such that the action is an easy one as one would naturally grasp the head between the first finger and thumb and press the thumb and finger together to force in the finger piece and relieve the catch.

The tie 22, which in the present instance is a bow tie, is formed from several pieces fastened together such as by sewing and held by the sewing to the sleeve and head. The knot part 23 of the tie passes around the head and over the lever and is sewn in place to the wings 24 and 25 at the back of the head.

As the material of the tie is cloth it is very flexible so that it does not interfere with the operation of the lever although it encloses the same. The finger piece can be manipulated by a finger and thumb action as previously described by pressing inwardly with the finger and thumb as indicated at 26 and 27 Fig. 2. The spring like arms 20 and 21 serve to keep the knot part of the tie spread and here I might explain that if these extensions were not provided the bow part of the tie would be humped at the centre and would present an irregular appearance.

Whilst I have shown a bow tie attached to the head 10, it will be obvious that a four-in-hand or any other type of made up tie could be sewn to the head.

The adjusting openings are made so that when the collar end flaps have been placed on the shank they can be tightly jammed in place between the head 7 and the flange 9 and held jammed by the action of the dog in a selected opening. By this jamming action the applied tie is rigidly held in place and as the shank is a flat one there is no tendency to rotation.

What I claim as my invention is:—

1. A combination tie and collar fastener comprising a shank passing through the fastening flaps of the collar and provided at the inner end with a head and a tie carrying head detachably connected to the outer end of the shank and provided with a jam flange engaging the front collar flap.

2. A combination tie and collar fastener comprising a shank passing through the fastening flaps of the collar and provided at the inner end with a head, a sleeve slidably mounted on the shank in advance of the collar flaps and provided at the end adjacent the collar flaps with a jam flange and at the other end with an enlarged head, a tie permanently secured to the latter head and enclosing the same and a spring pressed finger actuated catch carried by the sleeve and releasably engaging the shank.

3. A combined tie and collar fastener comprising a flat shank provided at one end with a head and supplied with adjusting openings, a sleeve slidably mounted on the shank and provided at one end with a jam flange and at the other end with an enlarged head and a spring pressed catch carried by the sleeve and adapted to engage one or other of the adjusting openings in the shank, said catch being formed to provide a finger piece located at the top of the head carried by the sleeve.

4. A combined tie and collar fastener comprising a flat shank provided at one end with a head and supplied with adjusting openings, a sleeve slidably mounted on the shank and provided at one end with a jam flange and at the other end with an enlarged head, a substantially L-shaped lever pivotally mounted on the sleeve and provided at one end with a catch engageable with one or other of the adjusting openings in the shank and at the other end with a finger piece overlying the top of the head of the sleeve, a spring inserted between the finger piece and the latter head and a made up tie sewn to the head and shank and enclosing the lever.

Signed at Winnipeg, this 20th day of May, 1920.

HOWARD STANLEY SMITH.

In the presence of—

GERALD S. ROXBURGH,

W. A. BOGGESS.