

No. 776,969.

PATENTED DEC. 6, 1904.

F. H. VOIGT.
PIN RETAINER.

APPLICATION FILED APR. 13, 1904.

NO MODEL.

Fig. 1.



Fig. 2.

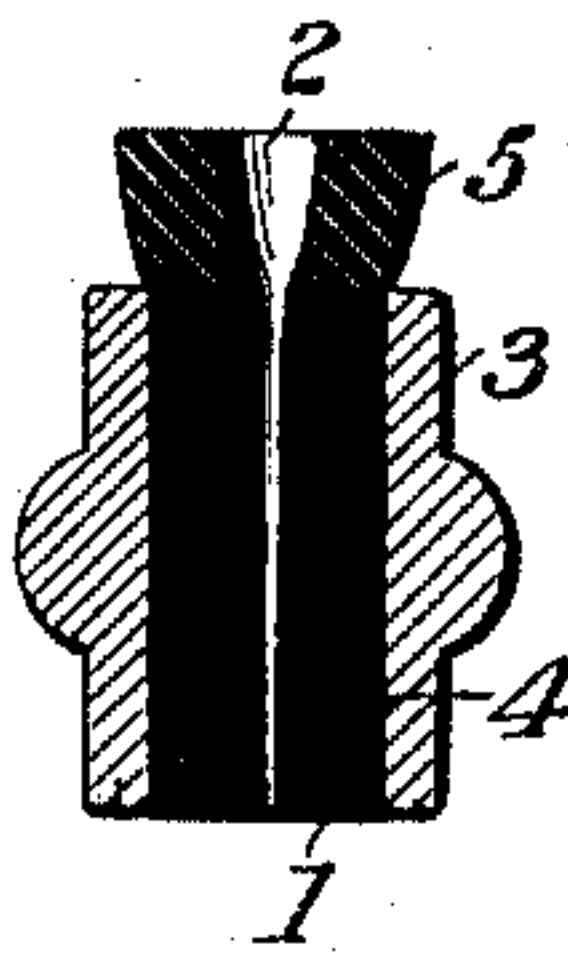
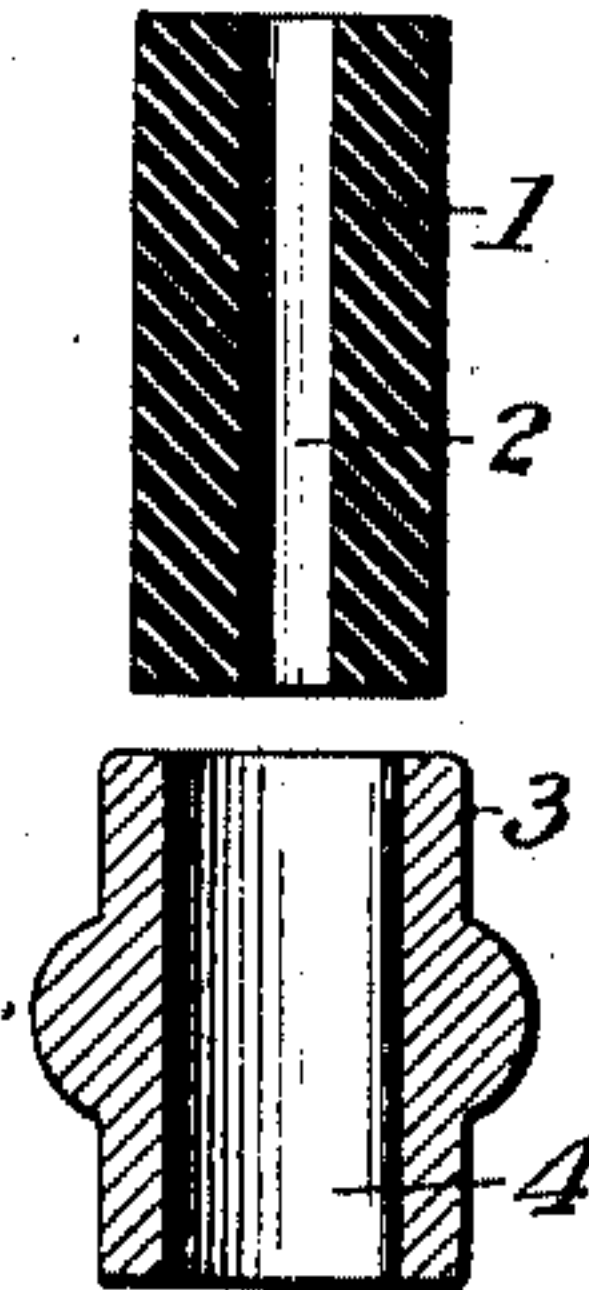


Fig. 3.



Witnesses:

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By William F. Hall
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UNITED STATES PATENT OFFICE.

FREDERICK HERMANN VOIGT, OF PHILADELPHIA, PENNSYLVANIA.

PIN-RETAINER.

SPECIFICATION forming part of Letters Patent No. 776,969, dated December 6, 1904.

Application filed April 13, 1904. Serial No. 202,993. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK HERMANN VOIGT, a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Pin-Retainers, of which the following is a specification.

My invention relates to pin-retainers or attachments designed to be secured to the shank of any construction of pin, as a scarf-pin or brooch, to provide a stop thereon which will prevent the pin being either surreptitiously or accidentally withdrawn from the material through which it has been passed.

The object of the invention is to provide an article for this purpose which is particularly simple and compact in construction, pleasing in appearance, and highly efficient in use.

To this end the invention includes the combination and arrangement of component parts to be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which illustrate one embodiment of my invention, Figure 1 shows the same in perspective secured upon a scarf-pin. Fig. 2 is a longitudinal sectional view of the retainer, and Fig. 3 is a view showing the retainer with the parts thereof separated.

The invention includes generally but two elements, one a tube of yielding material and the other a compressing and inclosing barrel for the tube.

In the illustrated exemplification of my invention the tube is designated by 1, is preferably of cylindrical shape, and is provided with a bore 2, which when the tube is in its relaxed or normal condition is preferably of as great or of slightly greater diameter than the diameter of the pin to which the retainer is to be applied.

The barrel is designated by 3, is preferably constructed of rigid or inelastic material, and is provided with a bore of less diameter than the diameter of the tube 1 when the latter is in its normal or relaxed condition.

In the complete article the major portion of the tube 1 occupies a position within the bore 4 of the barrel 3, and this tube, by rea-

son of the proportions of the parts, is held under transverse compression, while a minor portion 5 of the tube projects from one end of the barrel and is in a relaxed or normal state. By reason of the compression of the major portion of the tube the diameter of the bore thereof is contracted or reduced, while the bore of the minor portion 5 is of normal size, and the wall thereof slightly flares outwardly from the contiguous portion of the contracted part of the bore and provides a guide for facilitating placing the retainer upon a pin. The opposite end of the tube to the minor portion thereof is preferably flush with the contiguous end of the barrel 3.

According to one method which may be followed in the manufacture of the articles a number of the barrels 3 are threaded upon a long piece of tubing which has been expanded lengthwise, and after the barrels are in position the tube is allowed to relax or reassume its normal condition so far as it may. The sections of tubing are then cut off with one end of each section terminating flush with one end of the barrel surrounding the same and the opposite end of said section protruding a distance from the contiguous end of the barrel.

The construction of retainer described can be readily slipped on a pin in a direct lengthwise direction by introducing the point of the pin into the flaring opening provided by the bore of the minor portion of the tube; but any strain placed on the pin to withdraw the same from the retainer in a direct lengthwise direction tends to draw up the wall of the bore inwardly and cause the same to more tightly grip the pin. For removing the retainer, when this is desired, the same is rotated or turned about the pin at the same time it is being drawn off the same, so that it will have a spiral movement, and by this means the drawing up of the wall of the bore is avoided.

I am aware that it has been suggested to construct a pin-retainer of a rubber block having an opening made through the same to receive the shank of the pin and also to provide such a block with an inclosing casing, and I do not claim such an article as my invention; but

What I do claim is—

1. A pin-retainer, comprising a barrel and

an elastic tubing permanently fixed therein and having a major portion compressed within the barrel with its end flush with one end of the barrel, and a minor portion projecting
5 beyond the opposite end of the barrel, substantially as described.

2. In a pin-retainer and in combination, an inelastic barrel and an elastic tubing permanently fixed therein and having a portion projecting
10 beyond one end of the barrel, the bore of said projecting portion forming a flaring opening tapering into the bore of the portion held within the barrel, substantially as described.

15 3. A pin-retainer, comprising a barrel of elastic material having a bore which when the tubing is relaxed is of greater diameter than the diameter of the pin to which the retainer is to be applied, and an inclosing barrel hav-
20 ing a bore of less diameter than the diameter of the tubing when the latter is relaxed, said tubing having a portion of the same compressed within the bore of the barrel, whereby

a portion of the bore of the tubing is contracted, substantially as described. 25

4. A pin-retainer, comprising a tubing of elastic material having a bore which when the tubing is relaxed is of greater diameter than the diameter of the pin to which the retainer is to be applied, and an inclosing barrel hav- 30
ing a bore of less diameter than the diameter of the tubing said tubing having a portion of the same compressed within the bore of the barrel, and a relaxed portion projecting beyond one end of the bore, substantially as de- 35
scribed.

In testimony whereof I have hereunto signed my name, in the presence of two attesting witnesses, at Philadelphia, in the county of Philadelphia and State of Pennsylvania, this 11th 40
day of April, 1904.

F. HERMANN VOIGT.

Witnesses:

FRANK. HENDRY,
ALBERT S. WRAY.