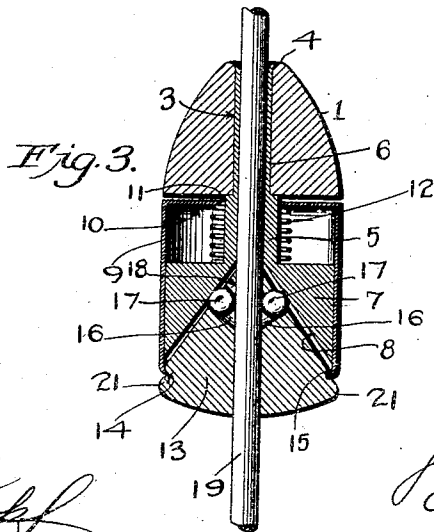
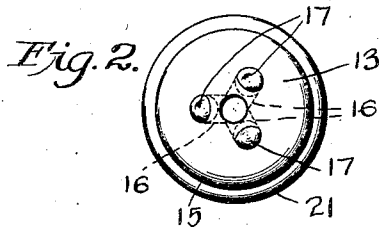
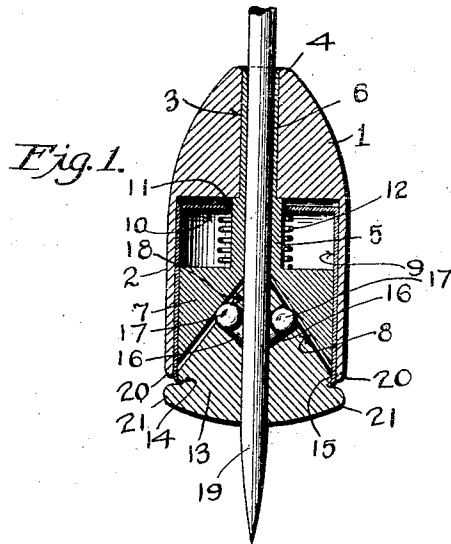


R. W. HARDIE.
SCARF PIN GUARD.
APPLICATION FILED JUNE 26, 1912.

1,039,936.

Patented Oct. 1, 1912.



WITNESSES

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SCARF-PIN GUARD.

1,039,936.

Specification of Letters Patent.

Patented Oct. 1, 1912.

Application filed June 26, 1912. Serial No. 706,026.

To all whom it may concern:

Be it known that I, ROBERT W. HARDIE, a citizen of the United States, and resident of the city of Yonkers, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Scarf-Pin Guards, of which the following is a specification.

This invention relates to clutches, designed to be used as guards for scarf pins, of the general character shown in Letters Patent issued to me, January 6, 1912, and numbered 1,015,265 and 1,015,266, respectively, and this invention is designed to improve the construction shown in said several Letters Patent, in the manner hereinafter described, and illustrated in the accompanying drawings, wherein I have shown my invention in the form most preferred by me, and wherein similar characters of reference indicate corresponding parts throughout the several views.

In the drawings Figure 1 is a vertical transverse section taken on the axial line of a scarf pin guard embodying my invention, Fig. 2 is a plan of a carrier and clamping device, consisting of small balls, mounted therein, and Fig. 3 is a vertical transverse section showing a modification of my invention.

As illustrated in the drawings, 1 represents a main head, which may be provided with a tubular shell or casing 2, extending from one end of said head. The head 1 is provided with a longitudinal bore 3 extending from the insertion end 4 of said head, through the head, on the axial line thereof. Adjacent to the innermost end of said head there is a hub 5 preferably having a sleeve 6 extending through the bore of the head 1, and the outer end of said sleeve may be flanged over on to the insertion end 4 of the main head 1, so as to secure said main head, sleeve, and hub together. On the opposite end of the hub 5 is an auxiliary head 7, provided with a conical inner wall 8, flaring outwardly from the inner portion of said head. The hub 5, sleeve 6, and auxiliary head 7 are provided with a bore or aperture adapted to receive a scarf pin. The outer wall of the head 7 is spaced from the inner wall of the shell or casing 2, and between said head and shell there is a shell or casing 9 having an inwardly extending wall or flange 10 forming an aperture 11 to receive the hub 5. The hub 5 serves as a

connection between the main head 1 and the auxiliary head 7, and is reduced in diameter relatively to that of the main head so as to form an annular recess around said hub between the main and auxiliary heads, within which recess is mounted a spring 12. The inwardly extending flange of the inner casing 9 extends into said recess between the main head and said spring. The outer end of the casing 9 is connected with a carrier 13, preferably by means of an annular groove 14 in said carrier, forming an annular shoulder 15 which is engaged by the flanged end of the casing 9. The carrier 13 is provided with apertures 16 within which apertures are mounted balls 17 adapted to serve as gripping devices. The apertures 16 extend from the outer wall of the carrier 13 to a central aperture 18, which is designed to receive a scarf pin 19.

The parts are so constructed and arranged, that the balls 17 not only bear against the inner conical wall 8 of the auxiliary head 7, but also against a scarf pin 19 inserted in the aperture 18 of said head. The terminal 20 of the casing 2 is preferably spaced from the outer margin 21 of the carrier 13 so as to enable the outer edge of the casing 9 to be pressed into the annular groove 14 formed in the carrier 13.

After a scarf pin has been inserted in the guard, the tension of the spring 12 draws the flanged end 10 of the casing 9 inward, and forces the gripping devices 17 up into a more contracted portion of the recess of the auxiliary head 7, and inwardly against the scarf pin 19. When an effort is made to pull the scarf pin 19 from a scarf, the gripping devices 17 are forced into a still more contracted portion of the recess of the auxiliary head 7, and grip the scarf pin more tightly than before.

The scarf pin 19 is released from the guard by drawing the carrier 13 outwardly to a slight extent against the tension of the spring 12, thereby bringing the gripping devices 17 into a wider portion of the conical wall of the auxiliary head 7.

The foregoing construction may be modified, by dispensing with the casing 2 shown in Fig. 1, and making the casing 9 of the same outer circumference as that of the adjacent portion of the head 1, as is shown in Fig. 3; and in some instances I prefer to use such a construction in carrying out my invention. By means of such construction, the

necessity of bringing the fingers between the outer margin 21 of the carrier 13 and the end of the casing 2 of the construction shown in Fig. 1 is dispensed with. In such construction the scarf pin is inserted in the guard in the same manner as in the construction shown in Fig. 1, and is released from the guard by simply drawing the casing 9 slightly outwardly from the head 1.

10 In the construction shown in the drawings, the hub 5, sleeve 6, and auxiliary head 7 are constructed integral with each other, and the sleeve 6 is projected through the bore of the head 1 and flanged to the insertion end of the head 1. Such construction may, however, be modified without departing from my invention, and in some instances the sleeve 3 may be dispensed with, and the auxiliary head 7 connected with the head 1 in any other suitable manner. The recessed connection between the main and auxiliary heads may also be modified if desired, and a recess of a different kind adapted to receive a spring may be used in lieu of the construction shown in the drawings and described herein.

By means of the construction herein shown and described, the outer casing may be made of gold, while the remaining portions of the device may be made of cheaper metal, thereby providing a high class pin guard at a comparatively low cost. By means of such construction, moreover, the inclined bearing surface against which the gripping devices operate, being independent of the casing and removed thereof, may be made of harder metal than the casing, such as bronze or steel, thereby providing a much more durable bearing surface; whereas in prior devices of this character, an inclined bearing surface has been formed on or with an outer casing, and being of comparatively soft material, it soon becomes cut and worn by the steel balls constituting the gripping devices, thereby causing a rough surface, which interferes materially with the proper operation of the gripping devices.

What I claim as new and desire to secure by Letters Patent is:—

50 1. A scarf pin guard comprising a main head provided with an axial bore, an auxiliary head provided with a conical inner wall and with a bore in line with the bore of the main head, a hub connection between the main and auxiliary heads smaller in diameter than that of the main head forming a

recess between said heads and provided with a bore in line with the bore of said heads, a spring mounted in the recess between said heads, a carrier arranged within said auxiliary head and provided with an axial bore and with gripping devices, and means connecting said spring and carrier to cause said carrier to be pressed inward by the tension of said spring.

2. A scarf pin guard comprising a main head provided with an axial bore, an auxiliary head provided with a conical inner wall and with a bore in line with the bore of the main head, a hub connection between the main and auxiliary heads smaller in diameter than that of the main head forming a recess between said heads and provided with a bore in line with the bore of said heads, a sleeve extending from said connection through the bore of the main head and secured to said head, a spring mounted in the recess between said heads, a carrier arranged within said auxiliary head and provided with an axial bore and with gripping devices, and means connected with said spring and carrier to cause said carrier to be pressed inward by the tension of said spring.

3. A scarf pin guard comprising a main head provided with an axial bore and a tubular outer shell extending beyond said main head, an auxiliary head provided with a conical inner wall and with a bore in line with the bore of the main head, a hub connection between the main and auxiliary heads smaller in diameter than that of the main head forming a recess between said heads and provided with a bore in line with the bore of said heads, a spring mounted in the recess between said heads, a carrier arranged within said auxiliary head and provided with an axial bore and with gripping devices, and an inner tubular connection between said spring and carrier extending between said outer shell and auxiliary head and housed within said outer shell to cause said carrier to be pressed inward by the tension of said spring.

In witness whereof I have hereunto affixed my signature in the presence of two attesting witnesses.

ROBERT W. HARDIE.

Witnesses:

JAMES A. BLANCHFIELD,
GERALDINE BLANCHFIELD.