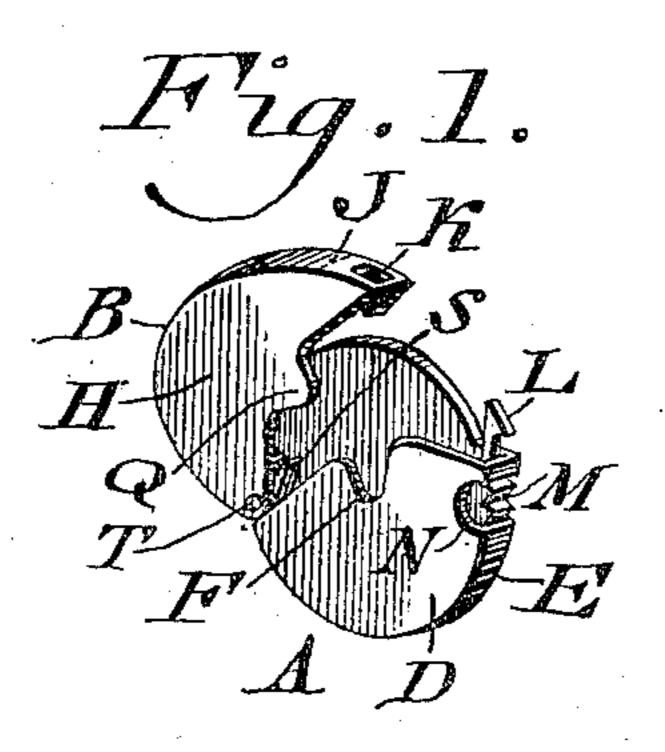
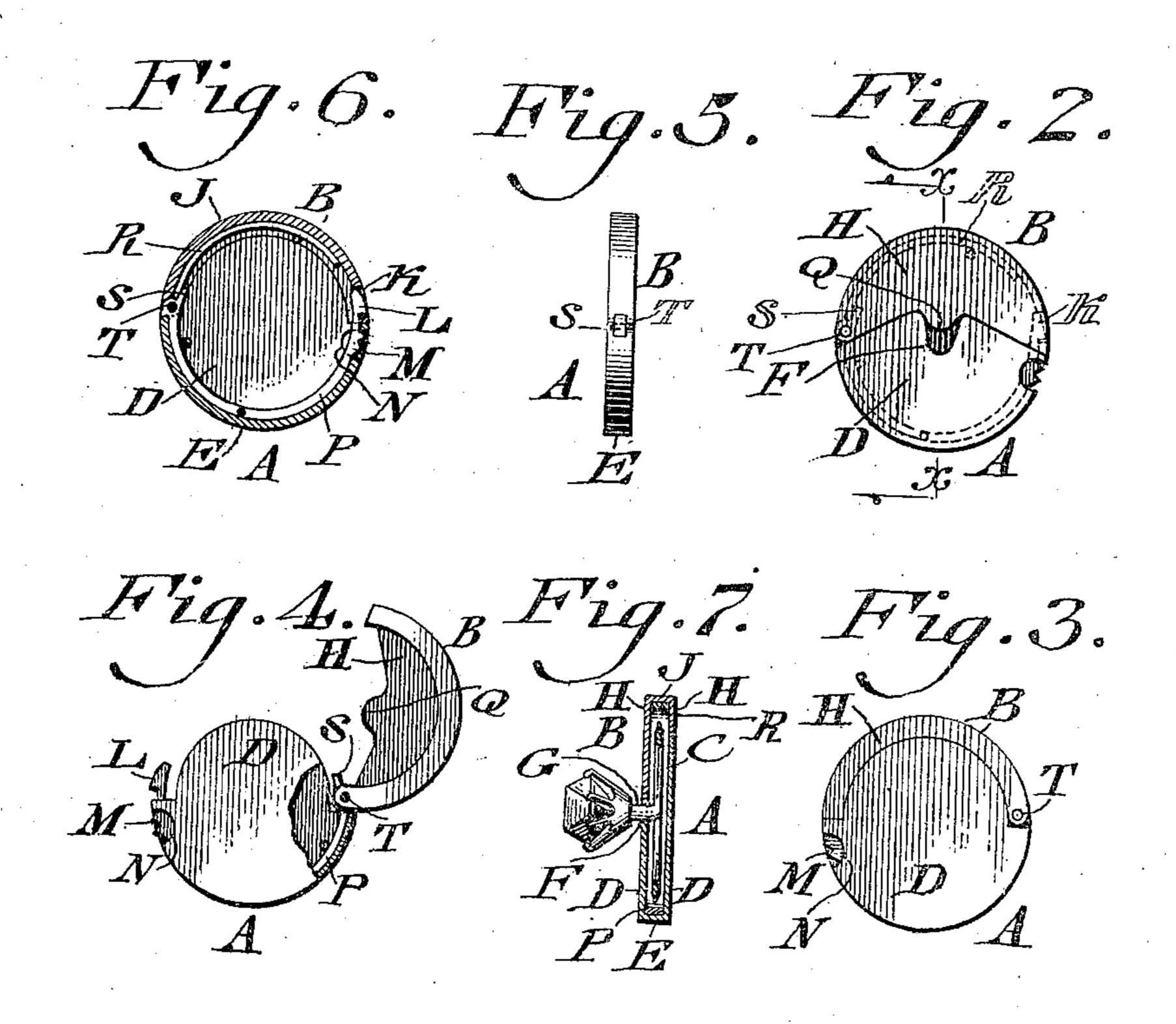
## E. P. HAPPICH & A. KNAUS. STUD GUARD.

APPLICATION FILED AUG. 3, 1910.

995,866.

Patented June 20, 1911.





WITNESSES

P. F. Nagla.

BY

Erner P. Harris.

August Smarrs.

August Carbants.

ATTORNEYS

THE NORRIS PETERS CO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

ERNEST P. HAPPICH AND AUGUST KNAUS, OF PHILADELPHIA, PENNSYLVANIA.

STUD-GUARD.

995,866.

Specification of Letters Patent. Patented June 20, 1911.

Application filed August 3, 1910. Serial No. 575,242.

To all whom it may concern:

Be it known that we, Ernest P. Happich and August Knaus, both citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Stud-Guard, of which the following is a specification.

Our invention consists of a stud guard or device composed of a casing adapted for inclosing the screw or spiral of a stud for a shirt or other garment, whereby the point of the same will not enter an undergarment or pierce the skin of the wearer, and the screw or spiral is completely inclosed, and may have but a small convolution, while the device is comparatively thin and occupies but little space, and serves also to prevent loss or improper abstraction of the stud from the garment.

It consists also in providing the device with a plurality of springs, one being applied to the catch of the closing cap, and the other to the cap to throw out the same when released of said catch, the spring of the cap being adapted to be seated on a member of the spring of the catch, while said member is employed to receive the pivot or axial pin of the cap, thus avoiding the hinging of the cap to the walls of the body, which otherwise do not possess the same strength as said member.

For the purpose of explaining our invention, the accompanying drawing illustrates a satisfactory reduction of the same to practice, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific arrangement and organization shown and described.

Figures 1 and 4 represent perspective views of opposite sides of a stud guard in open condition embodying our invention. Figs. 2 and 3 represent elevations thereof. Fig. 5 represents an elevation at a right angle to Fig. 2. Fig. 6 represents a section of the casing and a view of the interior thereof. Fig. 7 represents a section on line x—x Fig. 2.

Similar letters of reference indicate cor-

responding parts in the figures.

Referring to the drawings, A designates the body of the guard, and B designates the cover or cap therefor, said body and cap being each hollow, and comprising together a cylindrical shaped receptacle or casing

within which the screw or spiral C of a stud may be located, the cap being hinged to the body so as to be readily opened as in Figs. 1 and 4, and closed as in Figs. 2 and 3. 60

The body A is formed of the opposite side walls D, D, and the peripheral wall E, the edge of one of said walls having a recess F therein, the same forming a seat for the shank or neck G of the screw or spiral 65 C, as most plainly shown in Fig. 7, said screw or spiral having scarcely more than a single convolution.

The cap B is formed of the opposite side walls H, and the peripheral wall J, and like 70 the body is rendered hollow, so that the cap is closed, the screw or shank C may be contained, entirely contained, in the body A, and inclosed by the same, so as to be concealed and protected from outside influences, while the front of the screw or spiral is covered by the back walls of the two part device, and so prevented from piercing the skin of the wearer of the stud, or working into the adjacent portion of the undergar-80 ment back of the same.

The rear wall D of the hollow body A is elevated or extended beyond the edge of the front wall D thereof by the plate D' which forms a stop and guide serving to 85 permit the spiral or rear head C to abut against the same in first locating the device on said spiral, so that the latter will not pass rearward of the body. Then, when the spiral rides down on said guide, on being 90 directed into the body, its shank is directed true into the recess F without liability of being worked out of the body by improperly or irregularly turning of the body or the stud.

The rear wall H of the cap is cut-away on its under side and so made narrower as at H' than the front wall, whereby it closes snugly against the edge of the extended plate D', and remains flush with the rear 100 of said plate D' and the adjacent portion of the body A, as most plainly shown in Figs. 3 and 7.

In order to retain the cap in closed position, the peripheral wall J of the same is 105 formed, near its free end, with an opening, which acts as a keeper for the nose of the catch L which projects from the upper edge of the body A near the periphery thereof, and has a finger piece M which is accessible 110 at the opening N in said periphery. P designates the shank of said catch, the same ex-

tending in curved segmental form within the peripheral portion of the body A, and is riveted or otherwise secured at a proper portion of its length to the walls of the body A, 5 so as to be resilient, whereby when the cap is moved toward the body in order to be closed, it presses against the nose of the catch L, and forces the same backwardly or inwardly until said nose registers with the 10 opening N, when the former springs into the latter and the catch on the body engages with the cap in the opening or keeper K thereof, whereby the cap is held in closed condition, and the screw or spiral of the 15 stud remains inclosed in the said body, and the cap and the guard prevents the stud from loosening itself from the garment, or being surreptitiously withdrawn therefrom.

As the neck or shank G of the stud occupies the recess or seat F, it is important to control said neck or shank, so as to prevent movement and rattling of the stud. For this purpose, the lower edge of the cap has an inwardly projecting tongue Q depending therefrom, the same projecting toward said recess F, so that when the cap is closed, said tongue abuts against the neck or shank G, and presses the same upon the base wall of said recess and so tightens said shank in opposite directions in the guard for the purposes above stated, the effect of which is evident.

Within the cap is the spring R which curves around the periphery of the same to35 ward the hinged or pivotal end of the cap, where its end is free, while the other end is firmly secured to the cap, said free end thus being resilient, it resting against the heel S which is a continuation of the spring P, and extends from the latter at the peripheral portion of the body A, adjacent to the place of pivotal connection of the cap B with said body, it being noticed that the pivot T which forms the hinge or axis of said cap is passed through said cap and also through said heel

S and headed on the latter, it being evident that the connection of the cap with the body is through said heel which provides a strong joint for said cap and body, as the heel being part of the spring P is more durable than 50 the walls of the body. This construction also permits the cap at its joint or axis to be entirely outside of the body, so that the walls of the cap and joint on the opposite sides are flush and assist in making the desides are flush and small, without shoulders or projections on its front and rear faces, as most clearly perceived in Figs. 5 and 7.

Having thus described our invention, what we claim as new and desire to secure by Let- 60

ters Patent, is:—

1. A stud guard of the character stated, composed of a hollow body having front and rear walls and an open top, the rear wall being extended above the top edge of the front 65 wall and the front wall having a recess in its upper edge to receive a stud, and a cap to close over the top of the body and having front and rear walls to coöperate with the front and rear walls of the body to form a 70 closed casing.

2. A stud guard of the character stated comprising a casing, consisting of a hollow body and a hollow cap hinged thereto, a throw-out spring for said cap, a catch for 75 the latter, said body and cap having front and rear walls and the front wall of the body having a recess in its top edge, and its other wall extending above the top edge of the recessed wall of said body, and the cap 80 having its rear wall reduced on its under side to cover the top edge of said extended plate, and a tongue on the front wall of said cap adapted to enter said recess in the body.

ERNEST P. HAPPICH. AUGUST KNAUS.

Witnesses:

John A. Wiedersheim, Wm. Caner Wiederseim.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."