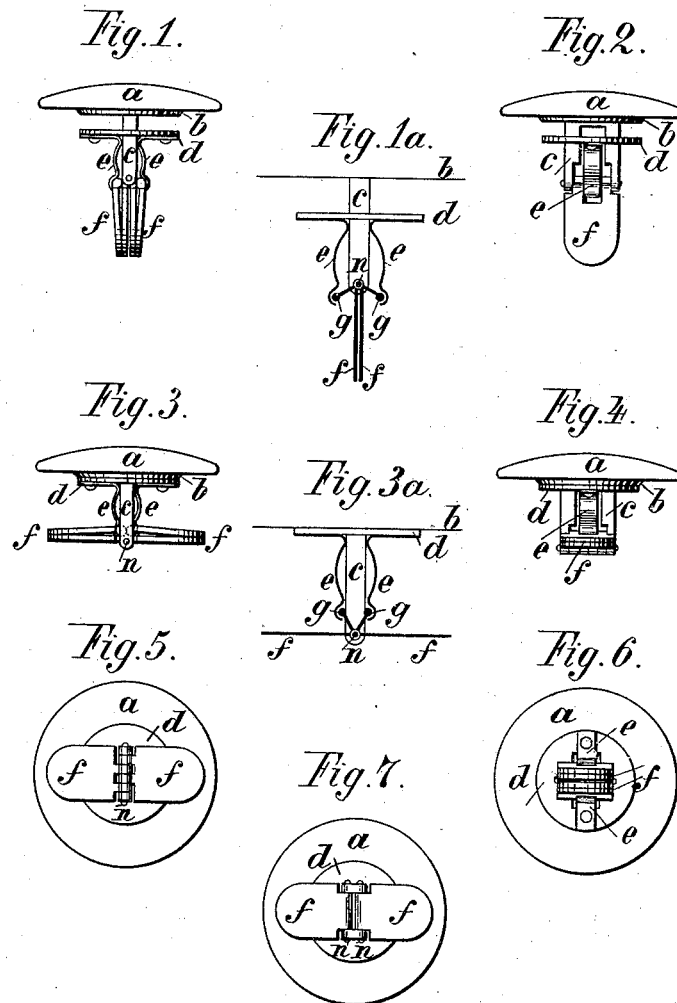


(No Model.)

H. F. HAMBRUCH.
DETACHABLE BUTTON OR STUD.

No. 383,052.

Patented May 15, 1888.



Witnesses:

C. J. Beer

F. R. Keys

Inventor.

Heinrich Friedrich Hambruch

By Paine & Ladd,

Attys.

UNITED STATES PATENT OFFICE.

HEINRICH FRIEDRICH HAMBRUCH, OF HAMBURG, GERMANY, ASSIGNOR
TO AUG. F. RICHTER, OF SAME PLACE.

DETACHABLE BUTTON OR STUD.

SPECIFICATION forming part of Letters Patent No. 383,052, dated May 15, 1888.

Application filed January 19, 1888. Serial No. 261,256. (No model.)

To all whom it may concern:

Be it known that I, HEINRICH FRIEDRICH HAMBRUCH, a subject of the Emperor of Germany, residing at Hamburg, in the German Empire, have invented certain new and useful Improvements in Detachable Buttons or Studs, of which the following is a specification.

My invention relates to improvements in detachable buttons or studs in which the fastening is effected by means of flaps pivoted to the stay of the button; and the objects of my improvements are, first, to afford facilities for the proper movement of the locking-flaps, and, second, to avoid the injury of the button-holes when employing this improved fastening device. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figures 1 and 2 represent a button provided with my fastening device in the position prepared for the introduction into the button-holes. Figs. 3 and 4 are two different elevations of the improved button when being locked. Fig. 5 is a bottom view of Fig. 3. Fig. 6 is the same of Fig. 2. Fig. 7 is a modification, and Figs. 1^a and 3^a are diagrams of the fastening device as represented by Figs. 1 and 3.

Similar letters refer to similar parts throughout the several views.

a is the button, to which is connected, by means of the plate *b*, the locking device forming the object of my invention. The plate *b* is provided with the shank *c*, in which rest the wings *f* by their pivots *n*. The wings, forming one-armed or crank levers, are connected at the point *g* by means of the arms *e* with the plate *d*, which is movable in the direction of the shank *c*, serving also as a guide for the motion of the plate *d*. It is preferable to form the arms *e* so as to have the tendency of a

spring, in order to arrest the turning wings *f* in both their final positions, Figs. 1^a and 3^a; or this effect may be gained by other well-known means in direct combination with the flaps.

The operation of this locking device will be as follows: In the position shown in Figs. 1, 2, and 4 the button is apt to be introduced into the button-holes until the plate *d* touches the adjacent solid material of the objects to be joined together by the button, when the plate *d* will be pushed toward the plate *b*, whereby the wings *f* are forced into the position shown in Figs. 3, 4, and 5, in which the device is locked. When detaching the button from the objects held together, as described, either one of the wings *f* may be turned in line with the shank *c*, whereupon the other wings, as well as the plate *d*, will follow correspondingly, and the latter will be serviceable in withdrawing the button out of the button hole.

I am aware that prior to my invention detachable buttons and studs have been made with vibrating wings pivoted to the shank of the button. I therefore do not claim such combination, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The combination, in a detachable button or stud, of wings *f*, pivoted to a shank, *c*, with a plate, *d*, having arms *e*, connected with the said wings, substantially as specified.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 24th day of December, 1887.

HEINRICH FRIEDRICH HAMBRUCH.

Witnesses:

ALEXANDER SPECHT,
DIEDRICH PETERSEN.