

(No Model.)

H. F. HAMBRUCH.
BUTTON.

No. 390,855.

Patented Oct. 9, 1888.

Fig. 1.

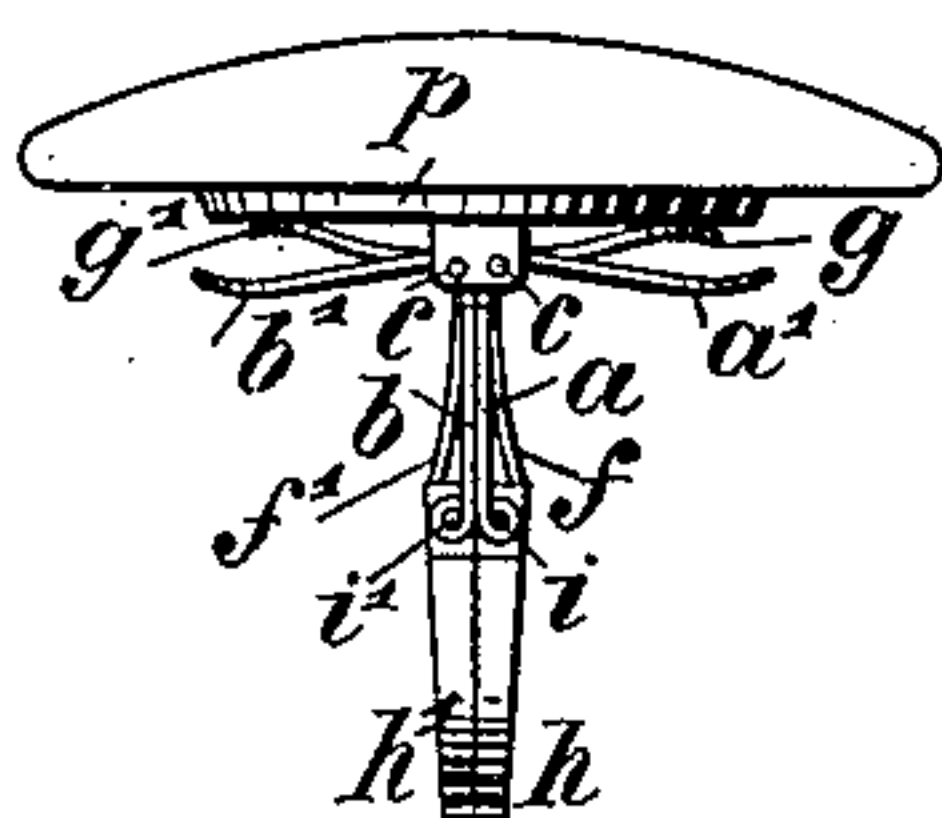


Fig. 2.

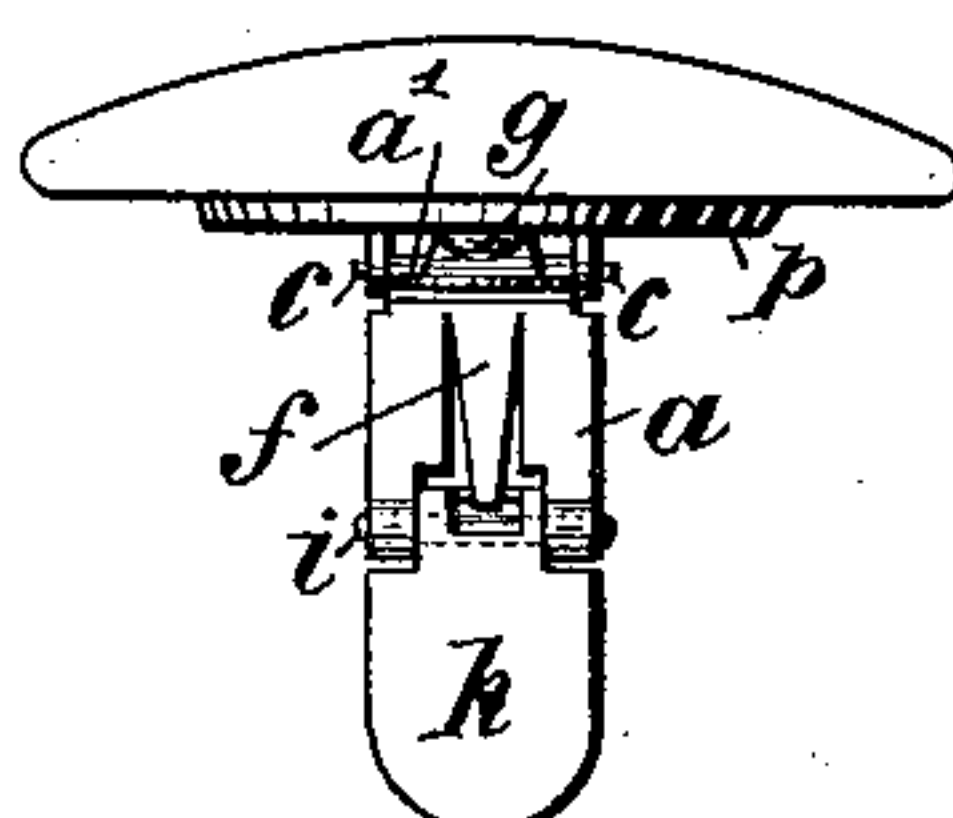


Fig. 3.

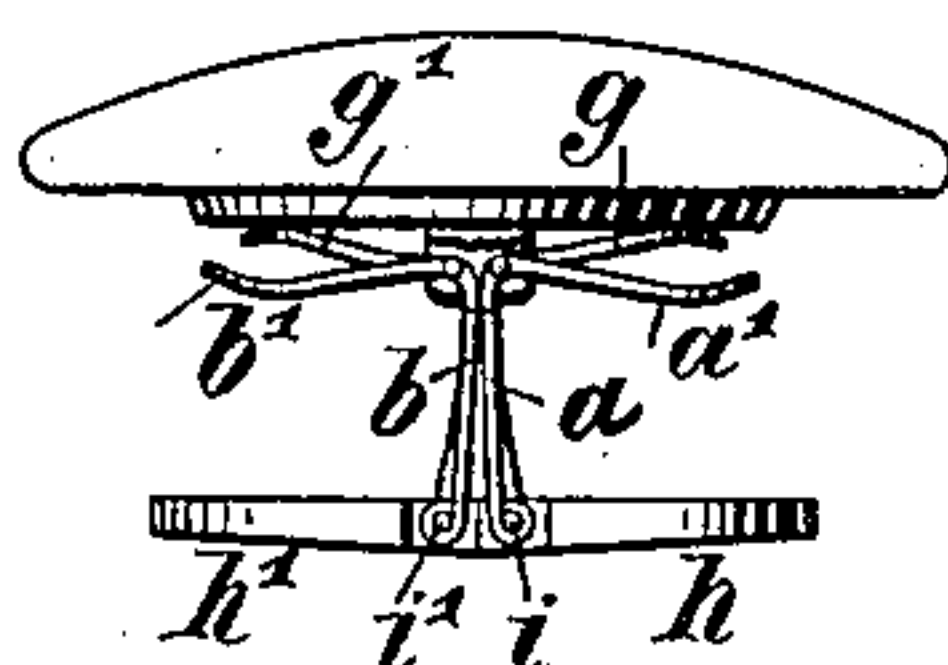


Fig. 4.

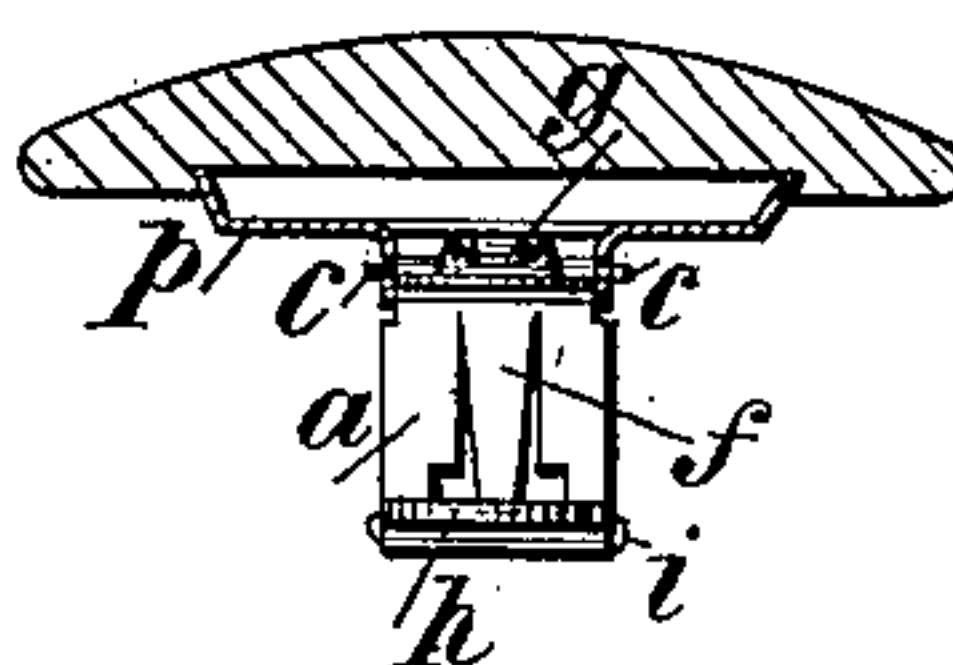


Fig. 5.

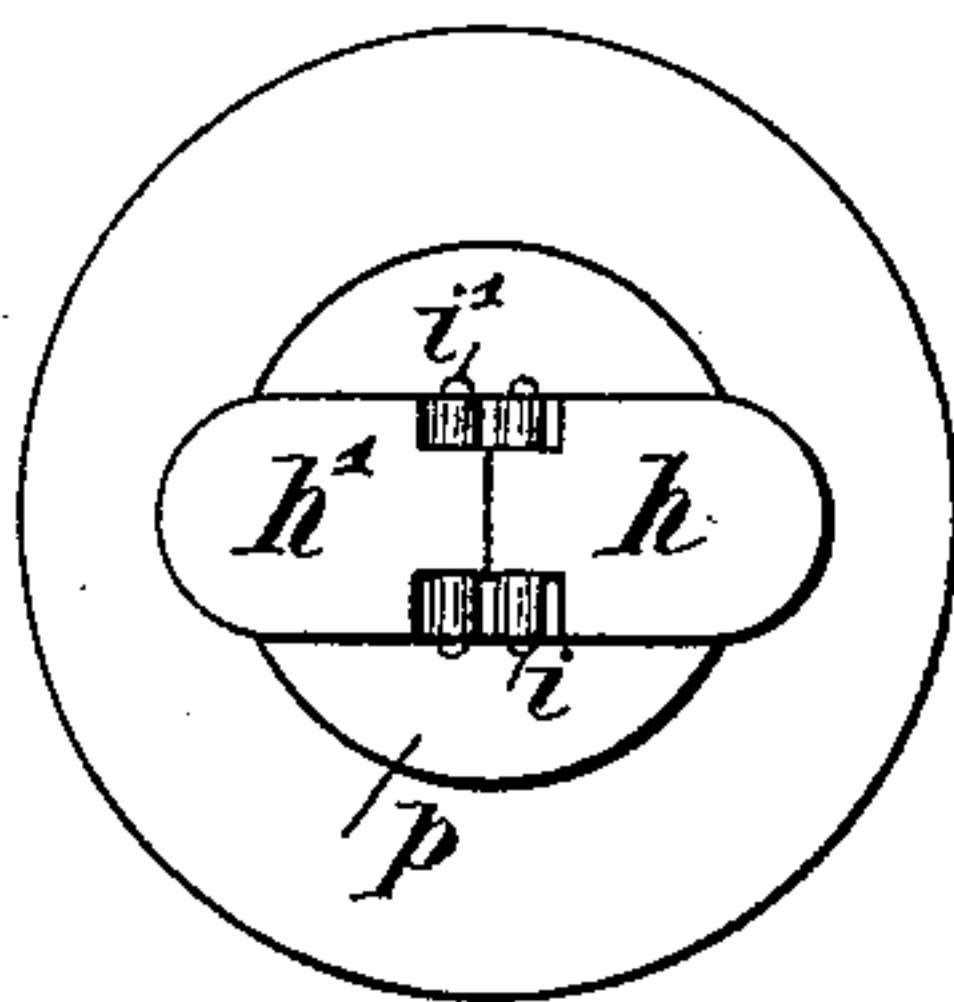
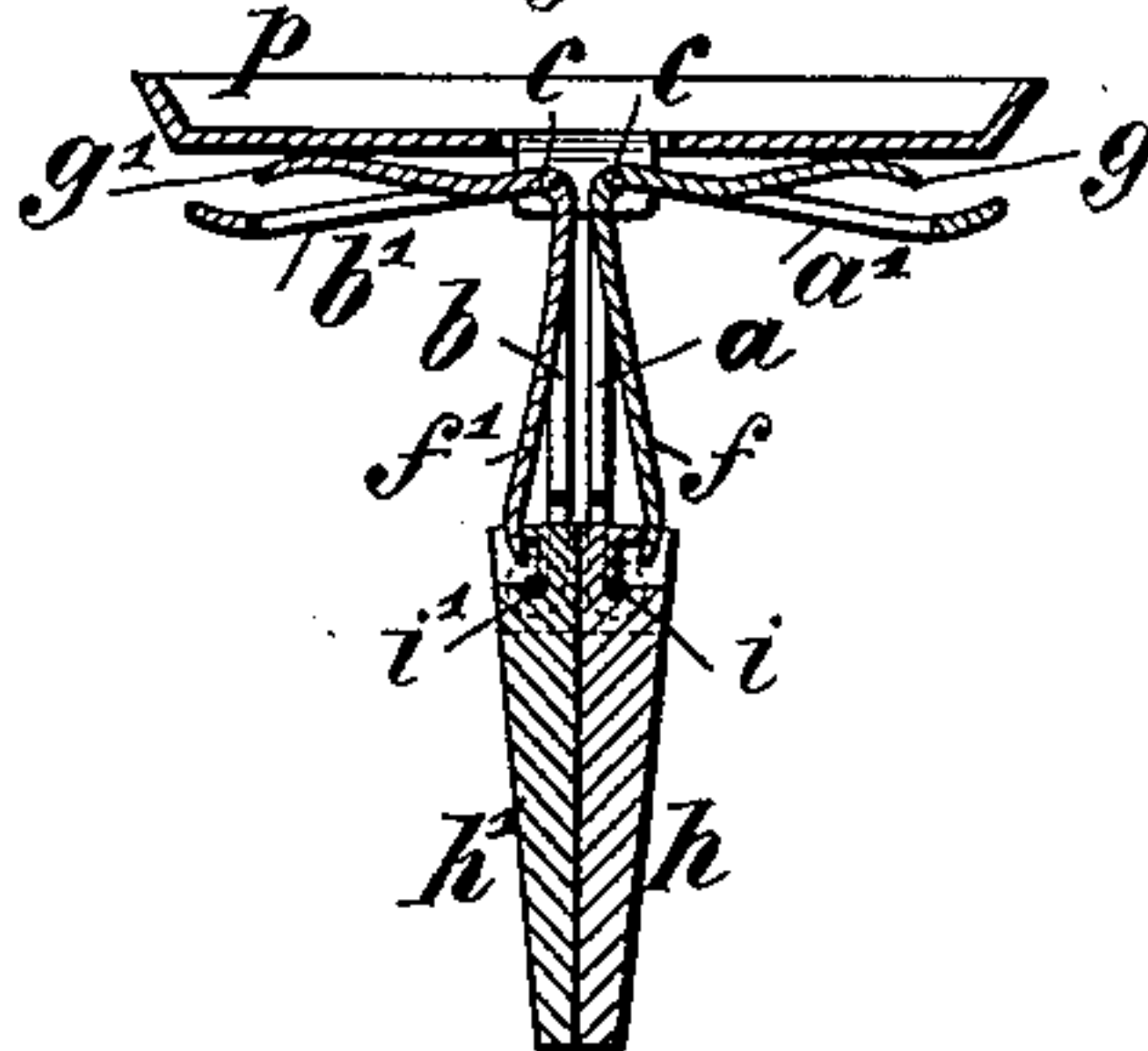


Fig. 6.



Witnesses:

J. Thomas Sothern,
Ch. Lee.

Inventor:

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By *Paine & Lord,*
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UNITED STATES PATENT OFFICE.

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

BUTTON.

SPECIFICATION forming part of Letters Patent No. 390,855, dated October 9, 1888.

Application filed June 21, 1888. Serial No. 277,775. (No model.)

To all whom it may concern:

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

This invention relates to improvements in the class of detachable buttons or studs in which the fastening is effected by means of folding wings or flaps pivoted to the shank of the button; and the object of my improvements is to afford means for automatically operating the folding wings when passing the button-hole. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figures 1 and 2 represent a button provided with my improved fastening device in the position when entering the button-hole. Figs. 3 and 4 are two different elevations, partly in section, of the improved button when being locked. Fig. 5 is a plan of Fig. 3, and Fig. 6 a vertical section of the device in enlarged scale.

Similar letters refer to similar parts throughout the several views.

The button is fixed to a plate, *p*, out of which are pressed the brackets *s*, serving as bearings for the angle-levers *a a'* and *b b'*, whereof the arms *a* and *b* form the shank of the button, in which the wings *h h'* are duly journaled at *i i'*. Two tongues, *f* and *f'*, directly stamped out of these arms *a* and *b* and serving as springs, bear against the heads of the wings *h h'*, while two other tongues, *g g'*, which may be also stamped out of the arms *a' b'*, and forming also springs, bear against the plate *p*, so as to press the arms *a b* together.

The heads of the wings *h h'*, pivoted at *i i'* and acting as levers, are formed in such a manner as to enable the springs *f f'* to turn the wings into the closed position as soon as the springs *g g'* cease to act upon the arms *a* and *b*. This is obtained by pressing the arms *a'* and *b'* against the plate *p*, so that the arms

a and *b* diverge from each other at *i i'* so far that the heads of the wings may pass each other.

The operation of this fastening device is as follows: When introducing the wings *h h'* in their opened position, Figs. 1, 2, and 6, into the button-holes and pressing the arms *a' b'* against the adjacent solid material of the parts to be joined together by the button, the ends of the arms *a* and *b* recede from each other, and the springs *f f'*, acting on the heads of the wings, will turn them into the position Figs. 3, 4, and 5.

As soon as the arms *a'* and *b'* are released, the springs *g g'* tend to cause the angle-levers *a a'* and *b b'* to return into their normal position and to press the blunt heads of the wings *h h'* firmly together, and thus hold the wings in the closed position.

The wings are opened in the usual manner.

Instead of stamping the tongues *f f'* and *g g'* directly out of the arms *a b* and *a' b'*, separate springs of any desired shape may be connected in any suitable manner with the angle-levers, or the springs *f f'* may be rigidly fixed to the plate *p* or the brackets *s*, in which case springs *g g'* may be entirely dispensed with.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, what I desire to claim, and secure by Letters Patent, is—

1. The combination, in a detachable button or stud, of the angular levers *a a'* and *b b'*, and the wings *h h'*, pivoted to the ends *i i'* of the angular levers *a a'* and *b b'*, with a plate, *p*, having brackets *s*, whereon the angular levers are pivoted at *c c*, substantially as and for the purpose specified.

2. The combination, in a detachable button or stud, of the wings *h h'*, pivoted to the ends *i i'* of angular levers *a a'* and *b b'*, with the springs *f f'* and *g g'*, and the said angular levers, substantially as and for the purpose set forth.

3. The combination, in a detachable button or stud, of the angular levers *a a'* and *b b'*, and the wings *h h'*, pivoted to the ends *i i'* of an-

gular levers *a a'* and *b b'*, with springs *f f'*,
rigidly affixed to the plate *p* or brackets *s*,
and bearing against the heads of the wings *h*
h', substantially as and for the purpose speci-
5 fied.

In testimony that I claim the foregoing as
my invention I have signed my name, in pres-

ence of two witnesses, this 4th day of June,
1888.

HEINRICH FRIEDRICH HAMBRUCH.

Witnesses:

ALEXANDER SPECHT,
ERWING BUCK.