

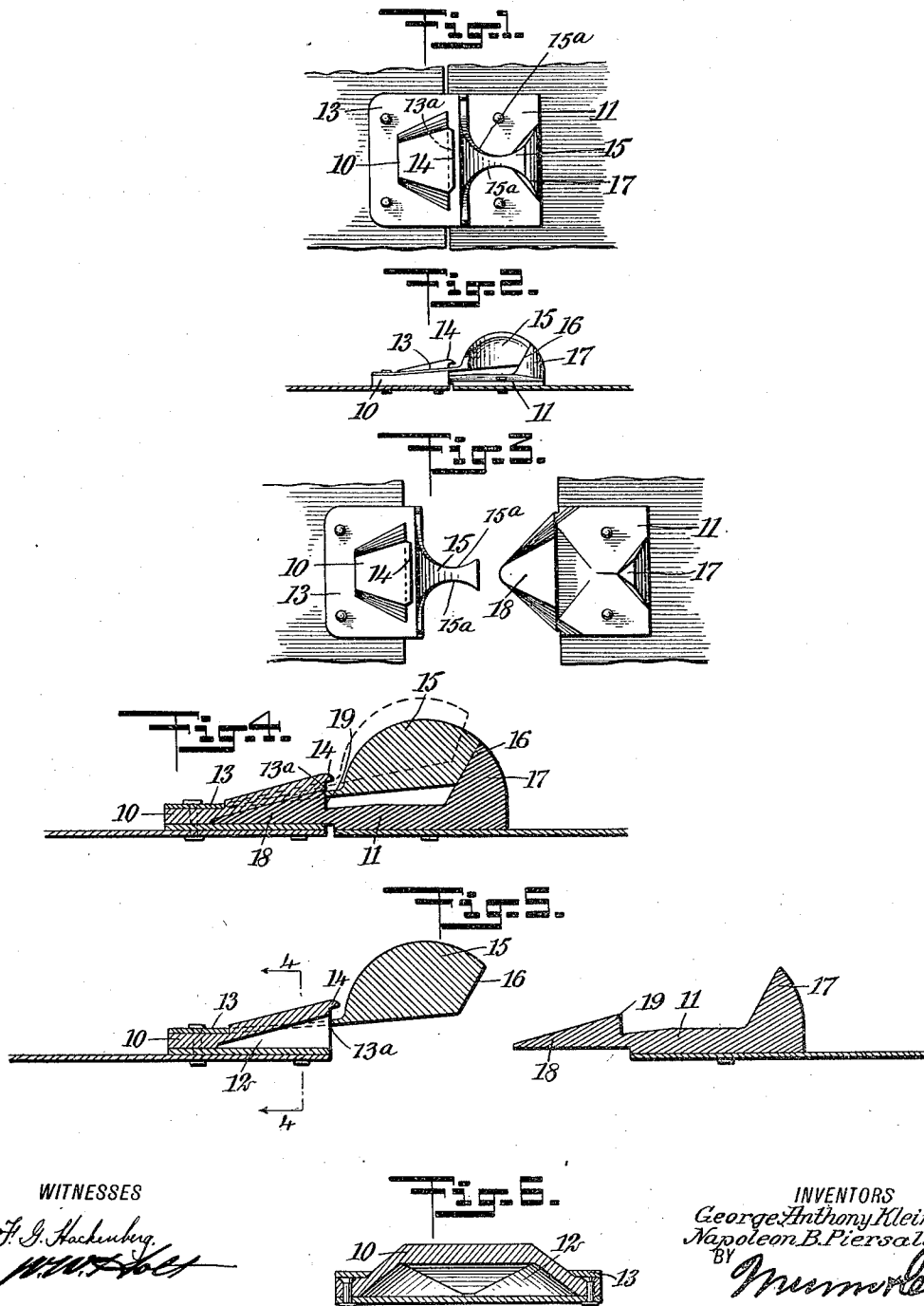
G. A. KLEIN & N. B. PIERSALL.

LATCH.

APPLICATION FILED JAN. 5, 1909.

997,832.

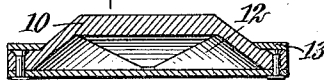
Patented July 11, 1911.



WITNESSES

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Fig. 6.



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LATCH.

997,832.

Specification of Letters Patent.

Patented July 11, 1911.

Application filed January 5, 1909. Serial No. 470,840.

To all whom it may concern:

Be it known that we, GEORGE ANTHONY KLEIN and NAPOLEON B. PIERSALL, citizens of the United States, and residents of the city of New York, borough of the Bronx, in the county and State of New York, have invented a new and improved Latch, of which the following is a full, clear, and exact description.

The invention is an improvement in latches adapted as a fastening for clothing, straps and general usage, and may be defined as consisting of two members, one of which has a pocket normally open at the front, with an engaging spring overhanging the entrance of the pocket having a shoulder, the pocket having rigid side, bottom and top walls, and the other member having a head constructed to lift the spring in passing into the pocket, and provided with a shoulder arranged to automatically engage the shoulder of the spring when the head is nested in the pocket, an extended finger-piece which abuts against and forms a finished joint with a projection on the head member of the latch when the two members are engaged, thus presenting no projections on which the clothing may be accidentally caught.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a face view of the preferred form of our improved latch, with the members attached to the opposite opening portions of a garment or other device and engaged; Fig. 2 is an edge view of the same, showing the garment or device in section; Fig. 3 is a view similar to Fig. 1, with the latch members disengaged; Fig. 4 is a longitudinal section through the latch with the members engaged; Fig. 5 is a similar section with the members of the latch disengaged; and Fig. 6 is a cross-section through the catch member of the latch substantially on the line 4-4 of Fig. 5.

The latch is composed of two principal members 10 and 11, which for convenience we respectively term a catch member and a head member. Both members have openings or other suitable means for securing them to the parts to be connected, and are preferably constructed with flat inner faces. The catch member has a pocket 12 and a flat spring 13, the pocket being V-shaped in

longitudinal section both as regards planes parallel to and perpendicular to its inner face. That portion of the metal or other material of the member 10 over the pocket 12 conforms to the inclination of the pocket, as shown in Figs. 4 and 5, extends outwardly from the face of the member to which the spring 13 is secured, and has a lip 14 at the entrance to the pocket. The spring 13 is riveted or otherwise secured at its outer end to the pocket portion of the member 10, and if the bottom of the pocket be made in a separate piece as shown, this is also united by the rivets or other devices used for attaching the spring. The spring has an opening fitting over the raised or outstanding portion of the outer wall of the pocket, with the front edge of the opening overhanging the mouth of the pocket inwardly of the top thereof, and arranged under the lip 14, which provides a stop therefor when the spring is lifted. The spring is inwardly extended and arched to provide a thumb-piece 15, which, as best shown in Figs. 1 and 3, is concaved at opposite sides as indicated at 15^a to receive the fingers, and has a bevel end 16, which, when the members 10 and 11 are engaged, abuts against the counterpart end or face of a projection 17 carried on the member 11. The member 11 has a latch head 18 tapered longitudinally both as regards its height and width to conform to the pocket 12, and has a shoulder 19 with which the outer edge of the opening or shoulder 13^a of the spring 13 snaps into engagement when the two members are moved together. In thus passing the head within the pocket the head operates to lift the spring until the former is wholly entered, when the spring snaps over the shoulder 19. In order that the inner or under faces of both members 10 and 11 may lie in the same plane when the members are engaged, the head is cut out on its under side a distance equal to the thickness of the bottom of the pocket. The finished joint produced, as shown in Figs. 1 and 2, by the finger-piece 15 with the lug or projection 17 when the members of the latch are engaged, obviates projections on which the clothing might be caught and torn.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:

1. The combination in a latch, of a member having a pocket and a flat spring, the

outer wall of the pocket having a lip and the spring having an opening providing a shoulder at the entrance to the pocket, with the spring limited in its outward movement
5 from the pocket by said lip, and a member having a latch head provided with a shoulder with which the shoulder of the spring is adapted to engage when the head is inserted in the pocket.

- 10 2. The combination in a latch, of two members, one of which has a pocket and a spring, and the other member having a head and a lug, the head being engaged by the

spring when inserted in the pocket, said spring having an operating arched finger-piece to contact with said lug and form a finished joint therewith when the head is engaged by the spring.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

GEORGE A. KLEIN.
NAPOLEON B. PIERSALL.

Witnesses:

FRANK MASON,
FRANK H. SAGE.

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