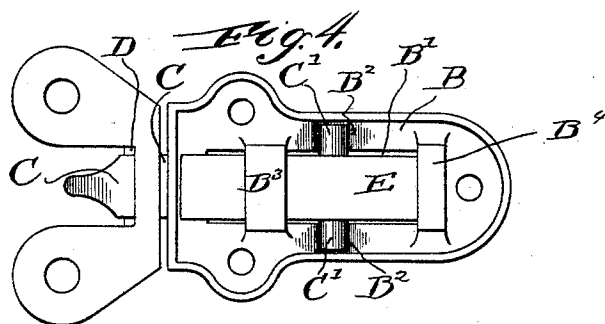
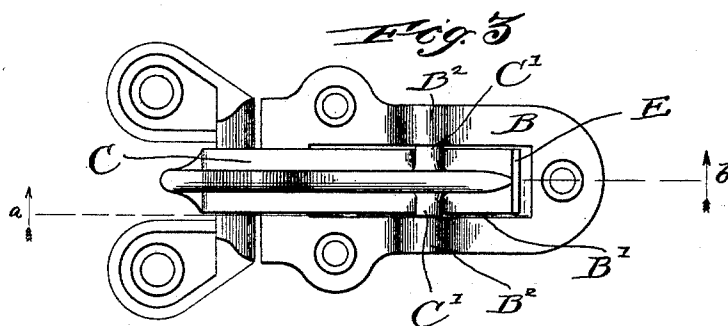
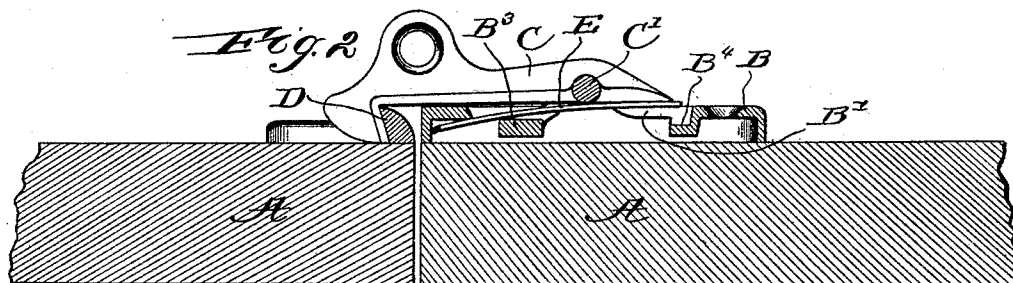
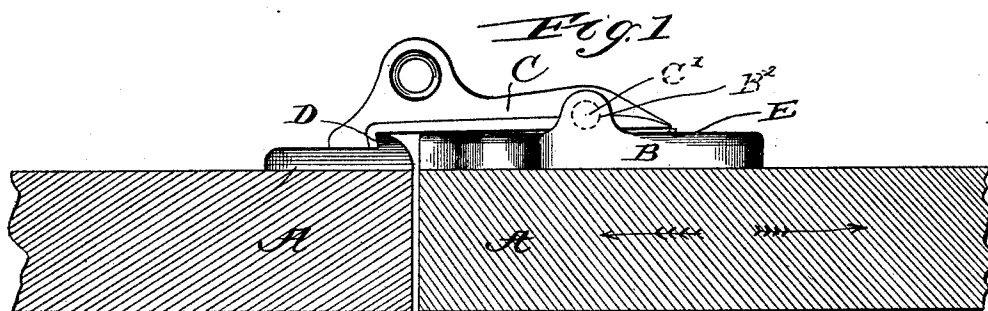


(No Model.)

C. F. PEASE.
LATCH.

No. 497,813.

Patented May 23, 1893.



Witnesses:

Ambrose Risdon
Oliver Lewis

By

Inventor:
Charles F. Pease
Cyrus Kehr Atty

UNITED STATES PATENT OFFICE.

CHARLES F. PEASE, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE AMES & FROST COMPANY, OF SAME PLACE.

LATCH.

SPECIFICATION forming part of Letters Patent No. 497,813, dated May 23, 1893.

Application filed October 22, 1892. Serial No. 449,605. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. PEASE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Latches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates particularly to lifting latches having hooked ends.

The object of the invention is to provide a latch which may be applied without mortising and which may be manufactured without machine work after the parts are cast.

In the accompanying drawings: Figure 1 is a side elevation. Fig. 2 is a vertical section in the line *a-b* of Fig. 3. Fig. 3 is a plan. Fig. 4 is a bottom view.

A, A are the parts to be joined by the latch.

B is the foundation of the latch.

C is the hook-bolt.

D is the stop which the hook-bolt, C, engages. Said stop is not different from other stops heretofore used for the same purpose. The foundation, B, is applied flat-wise to one of the parts, A, while said stop is applied to the other part A. Said parts, A, A, move relatively toward and from each other in the direction of the arrows in Fig. 1. The foundation has a longitudinal central opening, B', a little wider than the width of the hook-bolt, C, and at each side of said opening, B', said foundation is raised and opened from below and adjacent to said opening, B', to form bearings B². Said hook-bolt has at each side a journal, C', resting in one of the bearings, B².

B³ is a bridge extending across the opening, B', a little below the hook-bolt, C, and between the journals of said hook-bolt and the end of said opening toward the hook of said bolt. A flat spring, E, extends beneath the base, B, from the end of the latter toward the hook of the bolt C, over the bridge, B³, and beneath said bolt a little way past the end of the latter opposite the hook thereof. Said spring is arranged under tension so as to bear

against said end of said hook-bolt and raise said end and tilt the hook-bolt on its journals so as to press the opposite end of said bolt toward the foundation, B, and parts, A, A. The base, B, is preferably recessed from below between its edges so as to make room for the whole of the spring, E, within said base and outside of the part, A, to which said base is attached.

At the end of the opening, B', opposite the bridge, B³, a bridge, B⁴, extends across said opening at such distance from the journals, C', as to allow the adjacent end of the hook-bolt to descend and clear said bridge, while the adjacent end of the spring, E, which extends a little beyond the adjacent end of said hook-bolt may not clear said bridge, but will make contact therewith and arrest the downward movement of that end of the hook-bolt. Thus the hook-bolt is prevented from rising farther than is necessary in engaging and disengaging the stop, B. Without this hindrance the hook-bolt might make a half rotation. The object in allowing the end of the hook-bolt, C, to clear the bridge, B⁴, is to make possible the insertion of said bolt with the journals, C', standing rigidly in place. In putting the parts together, the hook end of said bolt is passed from below upward through the base, B, and the journals, C', seated in the bearings, B². Then hook-bolt is rotated until it is substantially parallel to the base, B. Doing this, obviously requires that the end of the hook-bolt opposite the hook shall clear the bridge, B⁴. The spring, E, is then pushed into place from either end.

Both the base, B, and hook-bolt, C, may be cast complete from gates holding a large number of patterns, and the spring may be cut from ordinary ribbon steel. These facts are important from a standpoint of neatness and economy to apply the latch without mortising the part to which it is applied.

I claim as my invention—

1. In a latch, the combination of a base, B, having a central opening, B', and raised bearings, B², at each side of said opening, a hook-bolt arranged substantially parallel to said foundation above said opening and having near one end journals resting in said bearings and having at the other end a hook, and

a bridge, B³, extending across said opening below said hook-bolt and between said journals, and the end of the opening, B', adjacent to the hook of said bolt, and a spring, E, extending from beneath said foundation at the end of the latter toward said hook over said bridge and beneath the end of said hook-bolt opposite said hook and bearing against said end, substantially as described.

2. In a latch, the combination of a base, B, having a central opening, B', and raised bearings, B², at each side of said opening, a hook-bolt arranged substantially parallel to said foundation above said opening, and having near one end journals resting in said bearings and having at the other end a hook, and a bridge, B³, extending across said opening below said hook-bolt and between said journals

and the end of the opening, B', adjacent to the hook of said bolt, and a spring, E, extending from beneath said foundation at the end of the latter toward said hook through said bridge and beneath and a little beyond the end of said hook-bolt opposite said hook and bearing against said end, and a bridge, B⁴, extending across the opening, B', in such position as to be out of range of the adjacent end of the hook-bolt and in range of the adjacent end of said spring, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 11th day of October, in the year 1892.

CHARLES F. PEASE.

Witnesses:

W. E. KING,
CYRUS KEHR.