

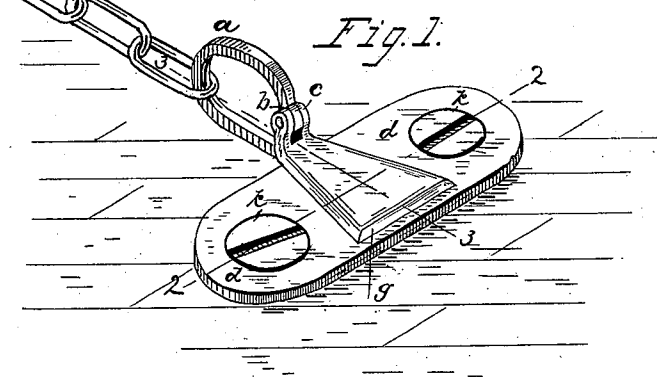
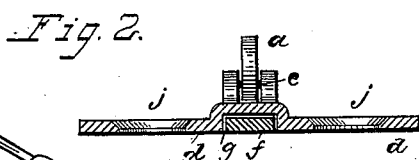
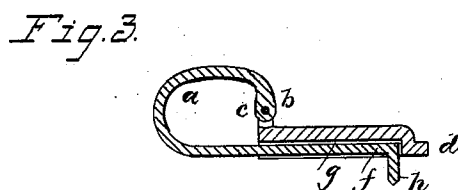
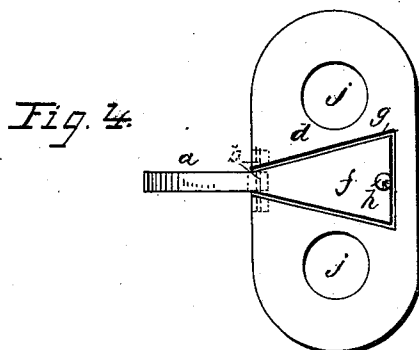
(No Model.)

P. W. DOHERTY.

STAPLE.

No. 308,473.

Patented Nov. 25, 1884.



Witnesses

W. J. Doherty
Geo. W. M. Kinn.

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UNITED STATES PATENT OFFICE.

PATRICK W. DOHERTY, OF BOSTON, MASSACHUSETTS.

STAPLE.

SPECIFICATION forming part of Letters Patent No. 308,473, dated November 25, 1884.

Application filed April 16, 1884. (No model.)

To all whom it may concern:

Be it known that I, PATRICK W. DOHERTY, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Staples, of which the following is a full, clear, and exact description.

This invention relates to improvements on the staple described and shown in the Letters Patent of the United States issued to me, dated September 13, 1881, No. 247,023; and it consists in connecting the bow portion of the staple to the plate which is fastened to the support, to which the staple is attached by a hinge or other joint, rendering it capable of being readily opened; and, again, it consists in providing the staple at its part which sets into or interlocks with the said plate with a prong or spur or spurs, which, being entered into the support to which the staple-plate is attached, thereby the better secures the staple in place, and relieves its fastening-screws or other devices of strain, and also tends to obviate the liability of said part to work out of its proper position of interlock with said plate should the latter become loosened in its fastenings.

In the accompanying plate of drawings, Figure 1 is a perspective view of the present improved staple. Fig. 2 is a section on line 2 2, Fig. 1. Fig. 3 is a cross-section on line 3 3, Fig. 1; and Fig. 4 is a plan view of the under face of the fastening-plate portion of staple.

In the drawings, *a* is a bow-shaped piece of metal at one end, *b*, connected by a hinge, *c*, to a plate, *d*, projecting beyond either side thereof, and at the other end, *f*, made of a wedge shape, fitting within and thus interlocked with a depression, *g*, of the under side of the plate *d*, and this wedge-shaped piece *f* at its farther end is provided with a prong or spur, *h*, projecting at right angles therefrom and sharpened at its outer end. The plate *d*, at either end, has a hole, *j*, for receiving a screw, *k*, or other device by which to fasten it in position, and when it is so fastened the prong *h* of the bow-shaped piece *a* is driven

into the support for the staple, making an additional means of fastening.

The hinging of the bow-piece *a* to the fastening-plate allows the staple detached from its support to be opened for the attachment of a seamless ring or link of a chain or other device, and the prong or spur *h* of said bow-piece, of which there may be more than one, if so desired, not only secures additional means of fastening for the staple, but also serves to relieve the strain upon the fastening-screws *k*, and tends to obviate the liability of escape of the bow-piece from the fastening-plate should the latter from any cause become loosened.

The bow-piece *a*, in its portion fitting within the plate *d*, may be made straight instead of a wedge shape; but the wedge shape is preferable. Again, other connections than the hinge *c* may be employed so long as the staple is thus adapted to facilitate the opening of its bow-piece in the suspending of a chain, &c., therefrom. The depression *g* in the plate *d* may be dispensed with, and in lieu thereof a depression made in the surface of the fixture to which the plate is attached, to receive the end of the bow-shaped piece *a*, which passes under the plate *d* and between it and the fixture.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A staple composed of a fastening-plate, *d*, and a separate bow-shaped piece, *a*, attached at one end to the plate, and detachably connected at its other end with said plate, whereby it can be opened and closed, substantially as and for the purposes described.

2. The within-described staple, composed of a fastening-plate, *d*, and of a separately-made bow-shaped piece, *a*, attached to said plate *d* to be opened and closed, and provided with a prong or prongs, *h*, substantially as described, for the purpose specified.

3. The within-described staple, composed of a fastening-plate, *d*, and of a separately-made bow-shaped piece, *a*, attached to said plate, and made with a taper end, *f*, to enter

a recess, *g*, substantially as and for the purpose specified.

4. The within-described staple, composed of a fastening-plate, *d*, and of a separately-made bow-shaped piece, *a*, attached to said plate, and made with an end, *f*, to enter a recess, *d*, and with a prong or prongs, *h*, substantially as described, and for the purpose specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

P. W. DOHERTY.

Witnesses:

WM. S. BELLOWS,
ALBERT W. BROWN.