

No. 652,903.

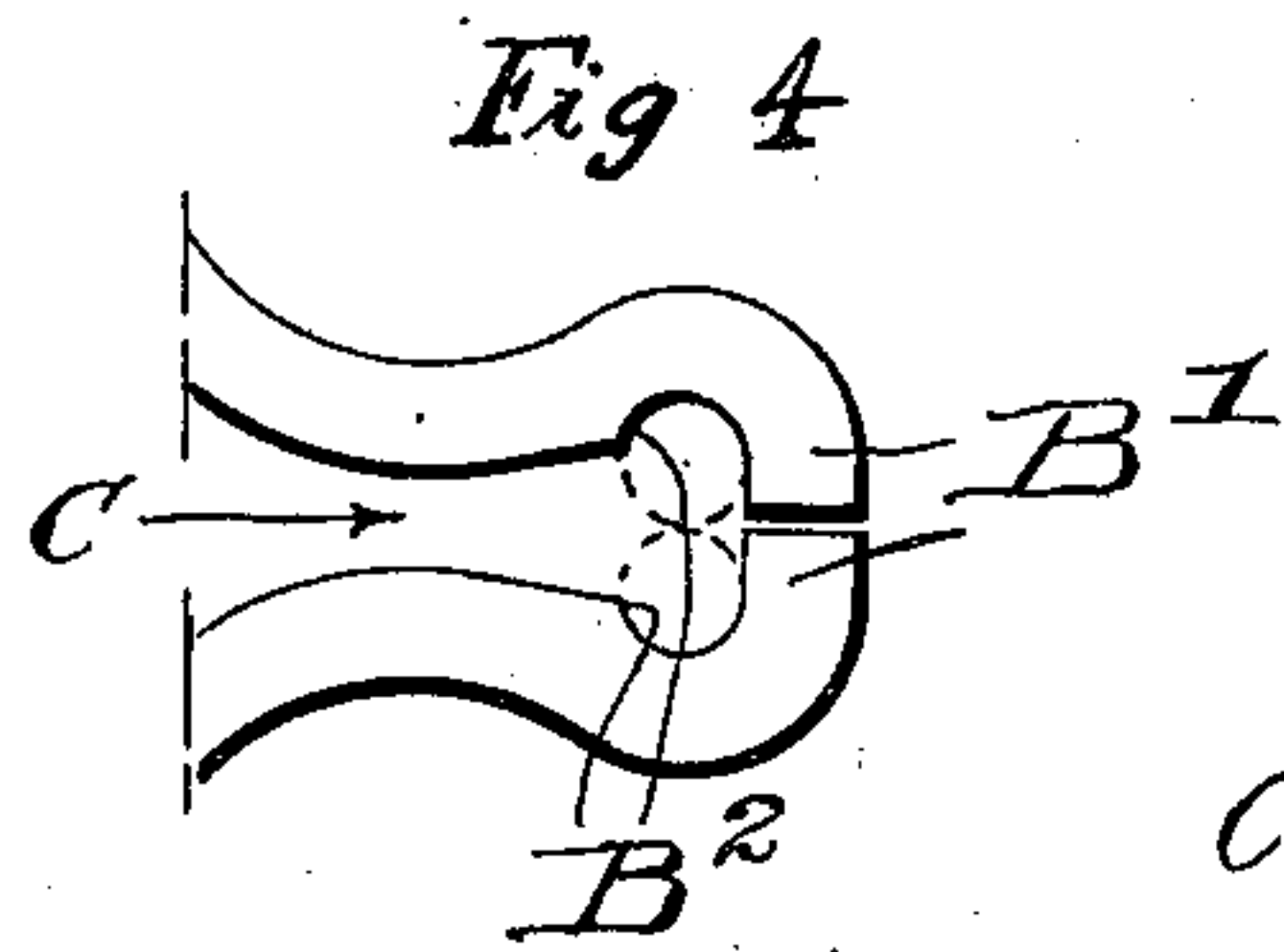
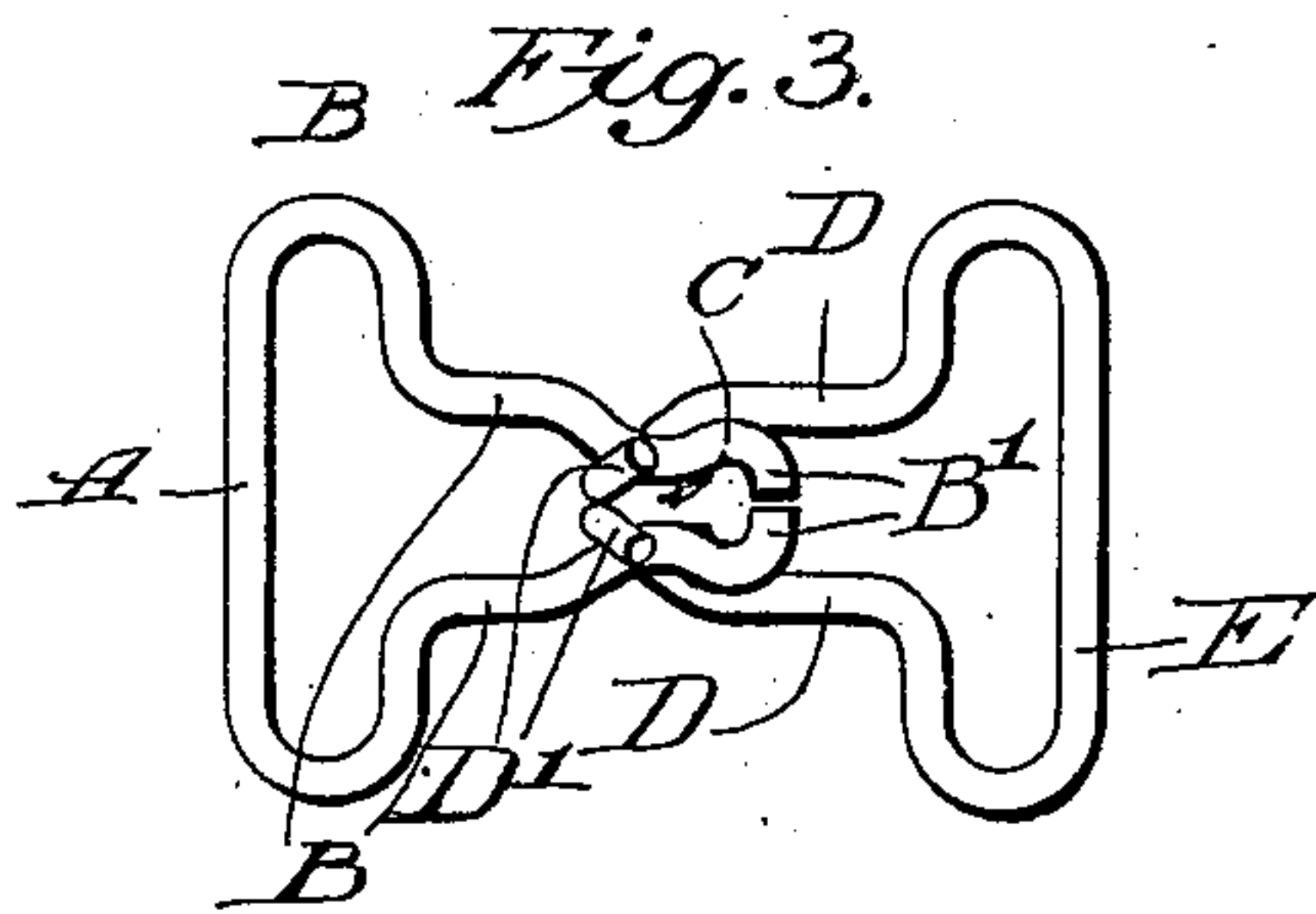
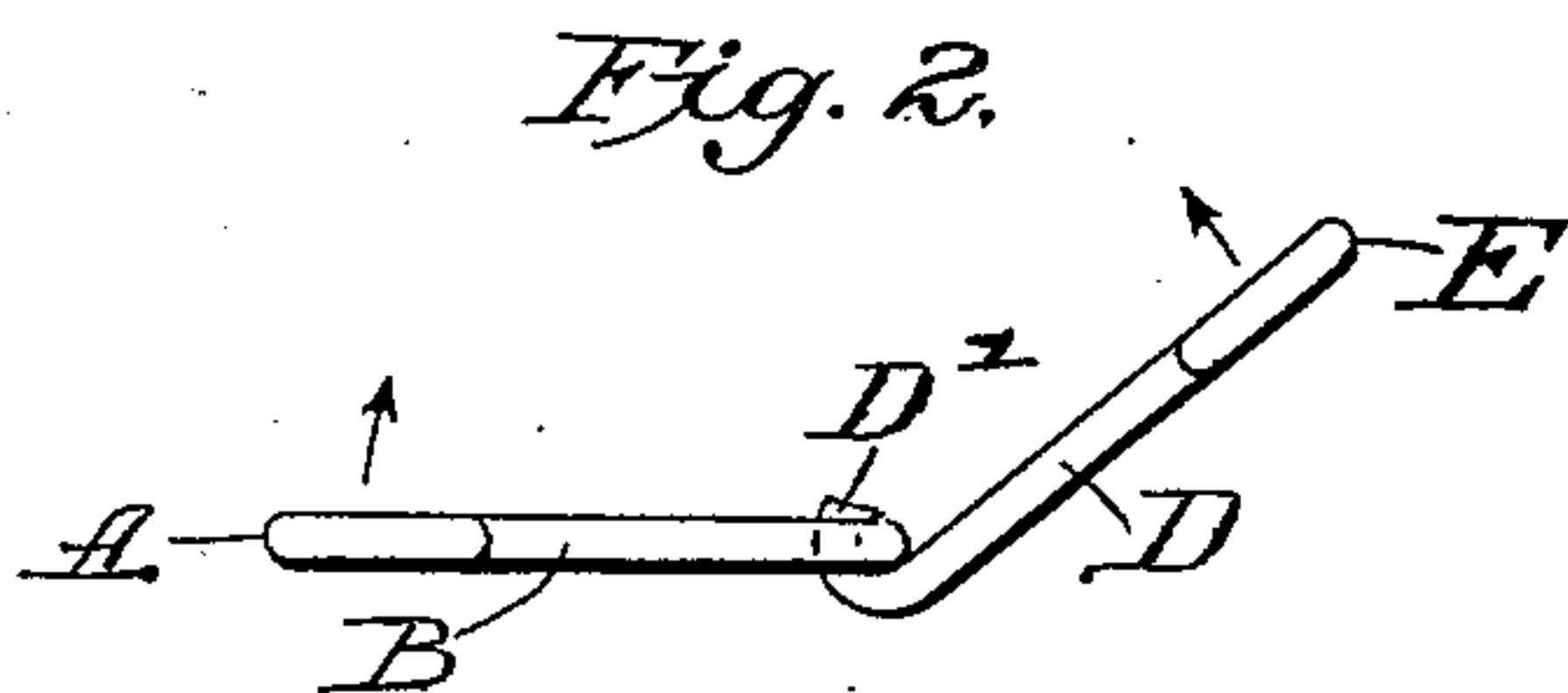
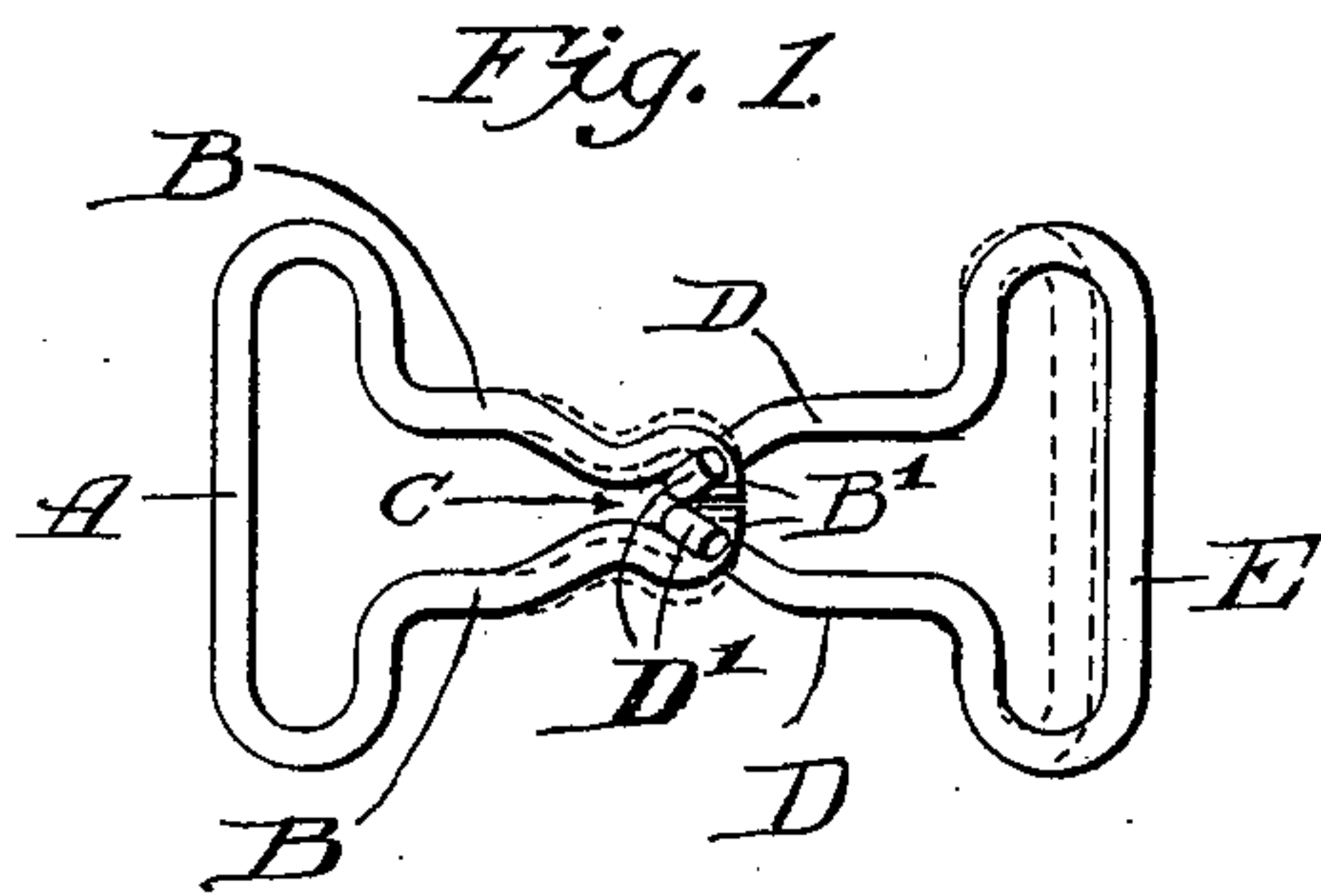
Patented July 3, 1900.

C. E. SMITH.

FASTENING DEVICE.

(Application filed May 11, 1900.)

(No Model.)



WITNESSES:

George T. Hackley.
L. Ireland

INVENTOR

Clarence E. Smith.

BY
R. C. M. M. M.
ATTORNEY

UNITED STATES PATENT OFFICE.

CLARENCE EDWARD SMITH, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO
THE NORTH & JUDD MANUFACTURING COMPANY, OF CONNECTICUT.

FASTENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 652,903, dated July 3, 1900.

Application filed May 11, 1900. Serial No. 16,319. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE EDWARD SMITH, a citizen of the United States, residing at New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Fastening Devices, of which the following is a full, clear, and exact description.

This invention relates to a fastening device, and while it is especially applicable for use on horse-clothing it may with advantage be applied to articles of wearing-apparel in general—for instance, belts.

Prominent among the objects which are attained in this invention are simplicity of construction, effectiveness, and ease of operation.

Another important feature is the construction which may allow of the parts being flexibly engaged, so that although the members may freely partake of a limited independent movement they are held against accidental disengagement.

These objects are attained in the construction illustrated in the accompanying drawings, in which—

Figure 1 is a view showing the members engaged. Fig. 2 is a view showing the manner of disengaging the parts. Fig. 3 is a view showing the position of the members as they are about to be reengaged. Fig. 4 is a relatively-enlarged view of a portion of the eye member.

Referring to the drawings, there are two main members, the eye member and the hook member, each of which parts coöperates with the other to secure an effective result. The eye member comprises laterally-yielding side bars B B, connected at their rear ends by a suitable holding-bar A, to which a belt or garment may be attached. The side bars B B are provided at their opposite or free ends with inturned noses B', which are caused to normally press toward each other. These noses form a duplex hook at the forward end of the eye member, whereby the other member of the fastening device, hereinafter described, is securely held. Intermediate the duplex hooks B' and the holding-bar A the side bars B are bent toward each other, so as to form a constricted passage C for the hook

member, the passage of which being permitted by the momentary springing apart of the side arms B and the duplex hooks B'. The frame of the hook member preferably comprises side bars D D, connected at their rear ends by a holding-bar E, whose function corresponds to that of the holding-bar A of the eye member. The side bars D D have their free ends D' D' offset and bent back to form a hook. These hooked ends D' D' are staggered outwardly in opposite directions, as best seen in the drawings, Figs. 1 and 3, to form an enlarged bill.

In operation the members are placed in the position indicated in Fig. 3, in which the hooked end of the hook member is first passed into the space between the side arms B B of the eye member, to the rear of the constricted passage C therein. It is then drawn through said constricted passage down to its seat against the duplex hooks B' B', the laterally-yielding side arms B spreading sufficiently to allow the hook to go through said passage. The instant, however, the hooked end of the hook member B' passes said constricted opening the side bars B spring together and capture the hooked end of the hook member between the side arms and the before-mentioned duplex hooks B' on the eye member, as best shown in Fig. 1. This view shows both members of the hook and eye in their operative position, and the line of draft is such that both members are held in practically the same line and plane, and consequently cannot be disengaged. Assuming the pull on the hook members is relaxed, they will not become accidentally disengaged, because the duplex hooks B' and the spring side bars B yieldingly clamp the hooked end of the hook member and retain it in substantially the same position. When it is desired to detach the hook member from the eye member, the parts may be rocked out of the same plane, the inturned hooks B' forming a fulcrum for the hook member—for example, as shown in Fig. 2, which indicates the position of the two members when they are partially disengaged. By continuing to rock the same members shown in Fig. 2 in the direction indicated by arrows therein the enlarged bill of the hooked member will wedge the side bars B apart

sufficiently to permit complete disengagement of the parts. If desired, slight notches B²B² may be formed on the inner side of the side bars B adjacent the abrupt bend which forms the constricted passage C. These notches are shown clearly in the enlarged detail view Fig. 4.

It will be observed that at all times the parts are flexibly engaged and may partake of a considerable limited independent movement without endangering the accidental disengagement of said parts, which disengagement may be effected as above described, or, if desired, it may be effected by swinging the parts at right angles to each other in the same plane and then freely unhooking one part from the other instead of rocking them out of the same plane, as indicated in Fig. 2. Inasmuch as the hook member does not have to yield in either the process of attaching or the process of detaching, it is not necessary to provide it with a flexible frame; but the same may be made in any convenient way.

It is obvious that the particular design shown in the drawings is immaterial to the invention.

What I claim is—

1. In a fastening device in combination, a hook member comprising a holding-bar, a frame carrying an offset hook having an enlarged bill, an eye member cooperating therewith and comprising a holding-bar, a pair of laterally-yielding side arms and inturned hooks at the free ends of said arms, said hooks being located in substantially the same plane with said arms, and a constricted passage between said side arms near said hooks.

2. In a fastening device in combination, a

hook member comprising a holding-bar, a frame carrying an offset hook having an enlarged bill integral therewith, an eye member cooperating therewith and comprising a holding-bar, a pair of laterally-yielding side arms integral therewith and inturned hooks at the free ends of said arms, said hooks being located in substantially the same plane with said arms, and a constricted passage between said side arms near said hooks.

3. In a fastening device in combination, a hook member comprising a holding-bar, a frame carrying an offset hook having an enlarged bill, an eye member cooperating therewith and comprising a holding-bar, a pair of laterally-yielding side arms and inturned hooks at the free ends of said arms, said hooks being located in substantially the same plane with said arms, and abrupt shoulders forming a constricted passage between said side arms near said hooks.

4. In a fastening device in combination, a hook member comprising a holding-bar, a frame carrying an offset hook having an enlarged bill, an eye member cooperating therewith and comprising a holding-bar, a pair of laterally-yielding side arms and inturned hooks at the free ends of said arms, said hooks being located in substantially the same plane with said arms, and notches forming abrupt shoulders in turn forming a constricted passage between said side arms near said hooks.

Signed at New Britain, Connecticut, this 9th day of May, 1900.

CLARENCE EDWARD SMITH.

Witnesses:

DANA L. VIBBERTS,
PETER O'DONNELL.