(No Model.)

J. D. R. LAMSON.
HOOK AND EYE.

No. 509,815.

Patented Nov. 28, 1893.

Fig. I.

BOR'S ANDRY

Fig. 3.

B' 6

B' 6

Fig.4.

Fred Josephine.

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JOHN D. R. LAMSON, OF TOLEDO, OHIO, ASSIGNOR TO LAMSON BROTHERS, OF SAME PLACE.

HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 509,815, dated November 28, 1893.

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To all whom it may concern:

Be it known that I, John D. R. Lamson, of Toledo, in the county of Lucas and State of Ohio, have invented a new and useful Im-5 provement in Hook and Eye Fastenings, of which the following is a specification.

My invention is an improvement in hook and eye fastenings and consists in the novel construction and combination of parts as 10 will be hereinafter described and pointed out | in the claims.

In the drawings—Figure 1 is a perspective view showing the hook and eye fastened. Fig. 2 is a similar view illustrating the un-15 fastening of the hook, and Figs. 3 and 4 are

detail views respectively of the eye and hook. The hook A and eye B may be made of wire and of suitable size and strength to serve the particular purpose for which they are in-20 tended. The hook A is of wire and is bent to form the end loops A' A' and the hook proper A² said loops and hook proper all lying in the same plane as shown. The hook being formed of two strands of wire bent one 25 within the other is greatly strengthened, much firmer and will stand much more strain than when the strands are arranged side by side as is usual. This formation of the point of the hook also forms a blunt round point 30 and facilitates the inturning of the extremity of the hook. This inturning of the point is advantageous as it avoids the catching of said point into the garments and also forms a simple means of furnishing the spring de-35 sired in snapping the hook into engagement with the eye as presently described. This inturned point of the hook may be readily effected in a short hook so that there is less difficulty in connecting the hook and eye 40 than if the hook were longer and at the same time the inturned point operates to prevent any accidental unfastening of the hook and renders it perfectly secure. The eye B has its end or bow b arranged in a plane at right an-45 gles to that of its loops B' B' to adapt it to receive the hook A² which is in the same plane

as its loops A' and the said end or bow b is

made of a cross section slightly greater than

the opening between the point or extremity

hook may be snapped or sprung into the eye but will not readily become detached as the tension of the dress or other garment will snap the hook into engagement with the eye but there is no strain exerted to snap it out 55 of the eye. In the ordinary use of such hooks it requires as much force to release as to engage the hook which is objectionable as will readily appear. Now to avoid this I make the side of the eye at b' thinner than the 60 opening into the hook, preferably making both sides or arms of the loop of such thickness, and necessarily thinner than the bow or extremity, so that by pushing the hook back slightly into the eye the point may readily es- 55 cape over the reduced side. It is usual in detaching hooks and eyes to push them together and it will be seen that this operation serves to disconnect my hook and eye as before described.

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

1. The combination of the hook having its inturned end adapted to form a snap and the 75 eye having its end or bow made larger than its sides, the bow being slightly larger and the side slightly smaller in the direction of the plane of the bow than the opening into the hook whereby the bow of the eye may be 80 snapped into the hook and its side may be slipped out thereof when such side is turned to position to escape below the point of the hook all substantially as and for the purposes set forth.

2. The improved hook and eye fastening herein described consisting of the hook bent from wire and having its loops and hook in the same plane and having the point of its hook turned in, and the eye having its end or 90 bow made slightly larger than the opening into the hook and adapted to be snapped into engagement therewith and its sides slightly smaller than the opening into the hook whereby the side may freely escape through said 95 opening when turned to register therewith all substantially as set forth.

3. The improved hook and eye fastening herein described consisting of the hook, and 50 of the hook and the hook shank so that the I the eye having its bow made in cross section 100 larger than but approximating the size of the opening into the hook and its side of a thickness less than the opening into the hook the hook bow and thin side being arranged substantially as described whereby the hook and eye when connected may be conveniently detached by pushing them together and then turning the hook to move its opening over the thin side of the eye all substantially as and for the purposes set forth.

4. In a hook and eye fastening a hook having its hook proper bent from wire with portions doubled one in the other as distinguished from lapping the same side by side and having its point of extremity turned in whereby

such point is adapted to form a snap and to be protected from catching in the fabric of the garment substantially as set forth.

5. In a hook and eye fastening an eye hav-20 ing its eye proper formed with its round end

portion or bow of a greater thickness than its flattened side and having such side flattened in the direction of the plane of the bow in combination with a hook which may be snapped over the end or bow and may be freely removed over the side of the eye substantially as set forth.

6. A hook and eye fastening consisting of the hook having the inturned point, the eye having its bow of a cross section too large to 3° freely enter said hook in any adjustment of said bow the latter being adapted to be forcibly sprung into the hook, the side of the eye being flattened and adapted to freely pass out of the hook when properly adjusted there- 35 to substantially as set forth.

JOHN D. R. LAMSON.

Witnesses:

JULIAN G. LAMSON, EDGAR B. LAMSON.