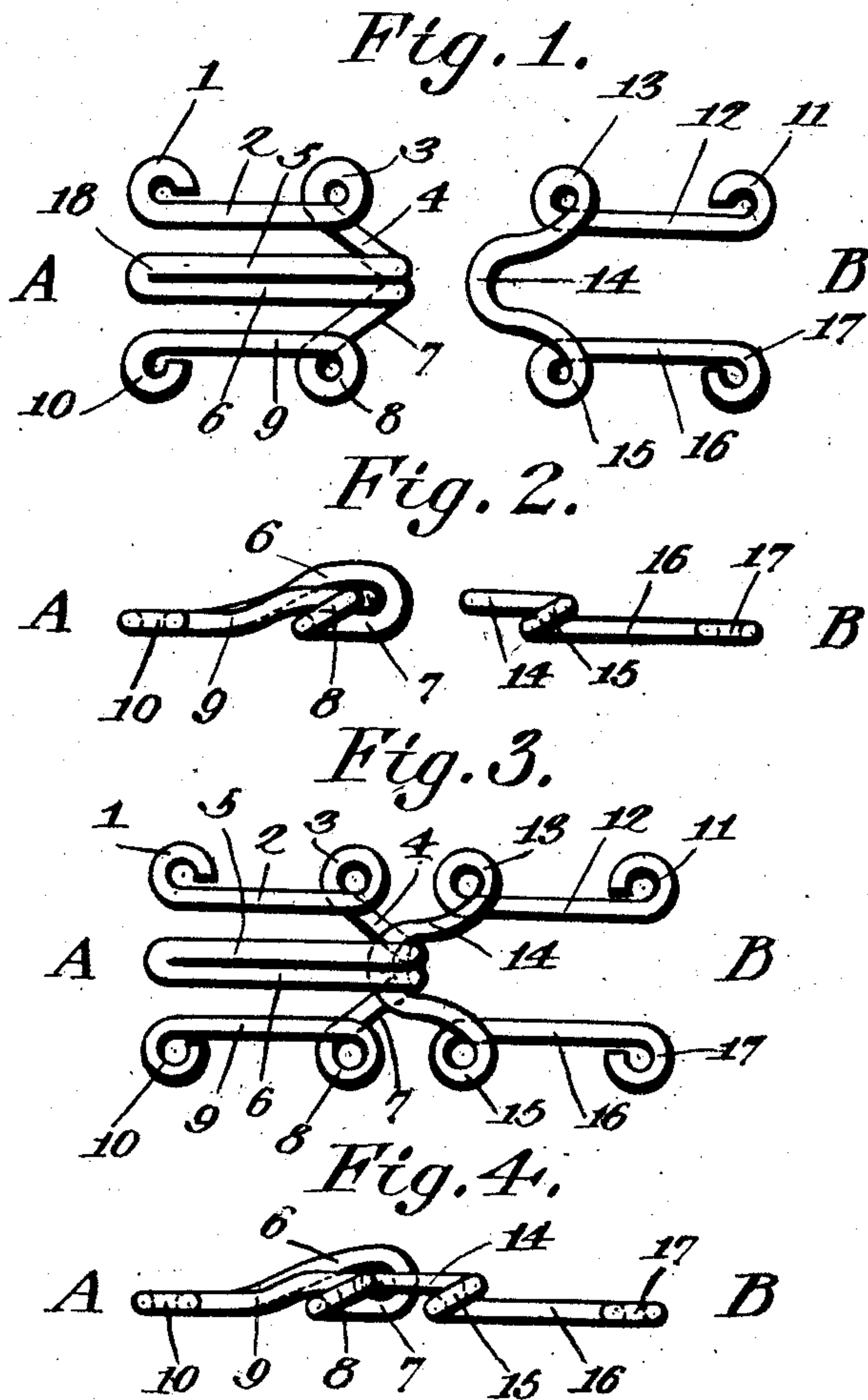


M. G. BUNNELL.  
 HOOK AND EYE.  
 APPLICATION FILED JULY 23, 1906.

905,825.

Patented Dec. 1, 1908.



Witnesses:  
 Albert J. Sauer.  
 S. Lewis

Inventor:  
 Morton G. Bunnell  
 By Buldy & Dixons attys



# UNITED STATES PATENT OFFICE.

MORTON G. BUNNELL, OF PORTER, INDIANA.

## HOOK AND EYE

No. 905,825.

Specification of Letters Patent.

Patented Dec. 1, 1908.

Application filed July 23, 1906. Serial No. 327,300.

*To all whom it may concern:*

Be it known that I, MORTON G. BUNNELL, a citizen of the United States of America, and resident of Porter, Porter county, Indiana, have invented a certain new and useful Improvement in Hooks and Eyes, of which the following is a specification.

My invention contemplates an improved hook-and-eye which will not be liable to catch in the hair or clothing of the wearer and which will not be liable to be injured or impaired by laundering machinery.

In the accompanying drawings—Figure 1 is a plan of my improved hook-and-eye in a separated condition. Fig. 2 is a side elevation of the same. Fig. 3 is a plan of the same hooked together. Fig. 4 is a side elevation of the same hooked together.

As thus illustrated, the hook A is composed of a single length of wire bent to provide the following portions: an attaching loop 1; a side portion 2; an attaching loop 3; a front portion 4; a top portion 5; another top portion 6; another front portion 7; another front loop 8; another side portion 9; and another rear loop 10. It will be seen that the front portions 4 and 7 extend from underneath the side portions 2 and 9, and that the end of the hook formed by the parallel portions 5 and 6 is in the plane of the rear attaching loops 1 and 10. This reduces the liability of the hook catching in the hair or clothing, and also reduces the liability of the hook being bent out of shape by laundering machinery, as it is nearly flat.

The eye B is formed of a single length of wire bent to provide the following portions: a rear attaching loop 11; a side portion 12; a front attaching loop 13; a cross piece or eye 14; another front attaching portion or loop 15; another side portion 16; and another rear attaching loop 17. It will be seen that the cross piece or eye 14 extends from above the side portions 12 and 16. With this construction and combination the portions 1, 4, 7, 10, 11, 12, 16, and 17, as well as the rear ends of the portions 2 and 9, the rear end of the hook formed by the portions 5 and 6, the rear sides of the loops 3 and 8, and the front sides of the loops 13 and 15, are all in the same plane and against the cloth when the hook and eye are hooked together. The portions 14, the front sides of the loops 3 and 8, and the front ends of the portions 2 and 9, are at such time in the same plane just above, while the front ends

of the portions 5 and 6 are in a still higher plane. The whole, however, presents a substantially flat condition, and the tip or end 18 of the hook does not tend to catch in the hair or clothing.

It will be seen that all of the thread-loops 1, 3, 8, 10, 11, 13, 15 and 17 project outwardly, and that both the eye and the hook are adapted to rest flat upon the cloth or fabric to which they are secured. It will also be seen that the hook A consists of a single piece of wire bent centrally of itself to provide a single hook-portion or bill 18 the end of which is disposed in the plane of the thread-loops 1 and 10, and straightened to lie flat on the cloth. It will also be seen that the eye B consists of a single piece of wire bent centrally of itself to provide an eye-portion 14 adapted to rest upon the portions 4 and 7 of the hook A, as shown more clearly in Figs. 3 and 4. In this way the eye-portion of bill-loop 14 is in a plane above the thread-loops 1 and 10, 11 and 17, and in the plane of the upper or inner portions of the thread-loops 3 and 8, 13 and 15, as shown in the drawings. With this arrangement the hook-and-eye is not liable to catch in the hair or clothing of the wearer, and is not liable to be mashed or destroyed by laundering machinery. The sharp downward dip or bend of the bill composed of the portions 5 and 6 prevents the eye from moving up closer—that is, prevents slack between the hook and the eye, and the straightened end portion of the bill lies flat on the cloth and makes hooking easy. Preferably, about half the length of the bill is straightened to lie flat on the cloth, as shown in the drawings. This not only makes hooking easy, but also prevents catching of the hook in the hair and clothing of the wearer. The sharp downward bend of the bill prevents unhooking, and the location of the straight portion of the bill in the plane of the side portions of the hook prevents catching of the same in the hair or clothing. Furthermore, it will be seen that the side portions 2 and 9 and the rear thread loops 1 and 10 serve to guard the tip or end of the bill—that is to say, it is obvious that the sides of the hook practically embrace the tip or end of the bill, thus preventing said tip or end of the bill from catching in the hair or the clothing of the wearer. This, of course, would not be the case should the tip or end of the bill be lengthened to ex-



tend rearward beyond the ends of the side portions, and for this reason the said side portions of the hook must extend rearward at least as far as the tip or end of the bill.

5 In other words, the tip or end of the bill must not extend beyond the rear ends of the two side portions of the hook. But the bill does not necessarily extend rearward as far as the side portions. The front portion of the hook or bill extends beyond the thread loops 3 and 8, and for this purpose the said loops are connected with the bill by means of the forwardly converging portions 4 and 7. The four thread loops for the hook serve to hold it firmly upon the cloth and prevent it from tilting or rocking thereon when subjected to the strain or pull of the eye. It will be seen that the cloth when stitched to the loops 1 and 10 is firmly supported directly beneath the tip or end 18 of the bill, so that it is necessary to press the cloth down from the tip of the bill in inserting the eye. With such construction it will be seen that the tip or end 18 of the bill will have no tendency to tilt up or leave the cloth when subjected to the pull of the eye. In other words, the tip or end of the bill will rest on the cloth, and pulling or straining does not raise the tip or end of the bill away from the cloth. In fact, as the cloth is stretched or supported by and between the side portions 2 and 9 for the full length of the bill, and even more, the cloth only leaves the bill when forcibly pressed down to insert the eye. These and other advantages will be obvious to those skilled in the art. It may be stated, however, that the engaging portion of the eye is disposed in a plane above the tip or end of the bill, and above the sides of the hook, so that both the eye and the hook are flat on the bottom and have no downward projections. Furthermore, the attaching loops 3 and 8 are so close to the loops 13 and 15 that a minimum of cloth is left loose between the hook and the eye, in closing together the edges of two pieces of a garment. Also with the arrangement shown, the hook is held down at both ends, and this is also true of the eye.

50 What I claim as my invention is:—

1. A hook-and-eye comprising a hook composed of a single length of wire bent centrally and doubled back on itself to provide a single hook-portion or bill, front and rear thread-loops at each side of said hook-portion or bill, side portions connecting the front loops with the rear loops, having forwardly converging front portions bent under the said side portions and connecting the front loops with said hook-portion or bill, so that the forward or front portion of the bill extends beyond the front loops, the central bend forming the tip or end of the hook-portion or bill being depressed to the plane of the said rear loops, said rear loops extend-

ing rearward at least as far as the tip or end of the bill, and an eye consisting of a single length of wire bent centrally of itself to provide an eye-portion or bill-loop adapted to engage the said hook-portion or bill, front and rear thread loops for the eye-portion, portions bent under the eye-portion or bill-loop and connecting the front thread-loops thereof with the rear thread-loops of the same, the said thread-loops of the hook-and-eye all projecting outwardly and laterally, substantially as and for the purpose set forth.

2. A hook-and-eye comprising a hook composed of a single length of wire bent centrally and doubled back on itself to provide a single hook-portion or bill, thread-loops disposed in the plane of the tip or end portion of said bill, said thread-loops extending rearward at least as far as the tip or end of the bill, and an eye consisting of a single length of wire bent centrally of itself to provide an eye-portion or bill-loop adapted to engage the said hook-portion or bill, the said engaging portion of the eye being disposed in a plane above the tip or end of the said bill, said eye being also provided with thread-loops disposed in the plane of the thread-loops on the hook, and the tip or end of said hook-portion or bill pointing rearward and being straightened to lie flat on the cloth, substantially as set forth.

3. A hook-and-eye having the bill thereof bent down and provided with an end portion adapted to rest on the cloth between and in the plane of two side portions, the tip or end of said bill pointing rearward, and said side portions being at least as long as said bill, whereby the bill does not project rearward beyond the ends of said side portions the hook being flat on the bottom, and the eye having an engaging portion raised above the plane of the end or tip of the bill.

4. A hook-and-eye comprising a hook provided with front and rear thread loops forming side portions, a bill bent down to rest on the cloth at a point within the area between the four thread loops, the tip of the bill pointing rearward, and an eye adapted to be inserted between said side portions to engage underneath the bill, said front and rear loops cooperating to hold the bill on the cloth, and to prevent either end of the hook from leaving the cloth.

5. A hook comprising side portions and a bill all lying in the same plane for approximately half their length and curved upwardly at their inner ends with the bill lying in a plane above the side portions, loops at each end of the side portions, those at the upwardly curved or inner end of the bill formed by turning the side portion outwardly and under and end portions connecting the under side of the loops and bill.

6. In a device of the class described a



hook comprising side portions, a bill lying  
in the same plane with said side portions  
at one end thereof, said side portions and  
bill raised at their opposite ends with the  
5 bill on a slightly higher plane than the  
raised ends of the side portions and end por-  
tions connecting the bill and the loops at  
one end lying in the same plane as the loops  
at the opposite end.

10 7. A hook comprising side portions and a

bill lying in the same plane for half their  
length and curved gently upwardly with the  
bill on a different plane sufficiently to re-  
ceive an eye.

Signed by me at Chicago, Cook county, 15  
Illinois, this 19th day of July 1906.

MORTON G. BUNNELL.

Witnesses:

ALBERT JOHN SAUSER,  
SARAH LEWIS.