

No. 688,109.

Patented Dec. 3, 1901.

S. G. McCLAIN.

SAFETY PIN,

(Application filed Mar. 30, 1901.)

(No Model.)

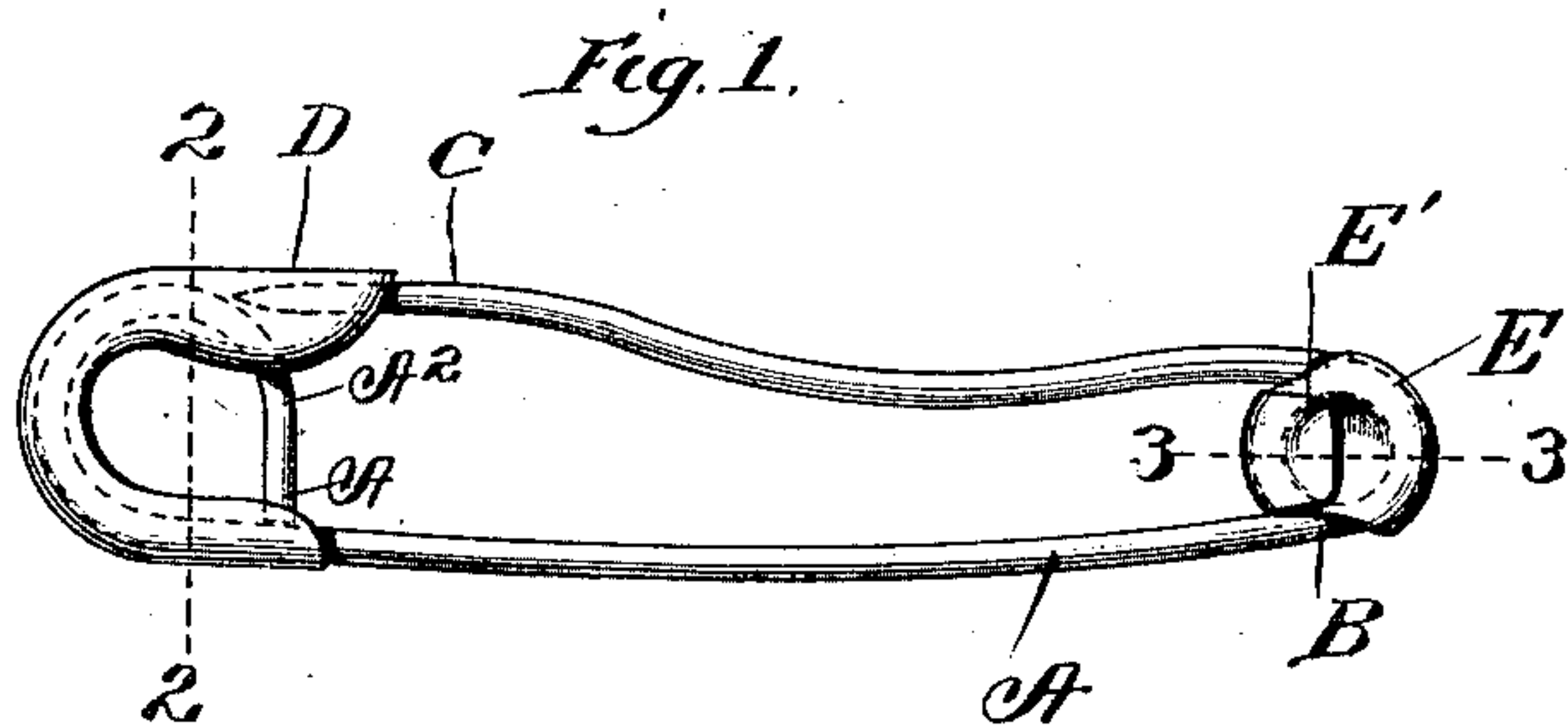


Fig. 2.

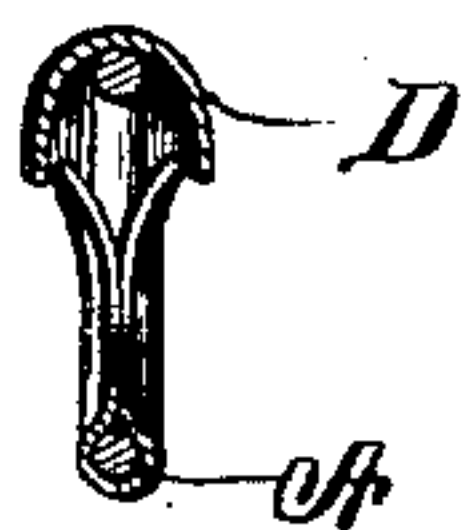
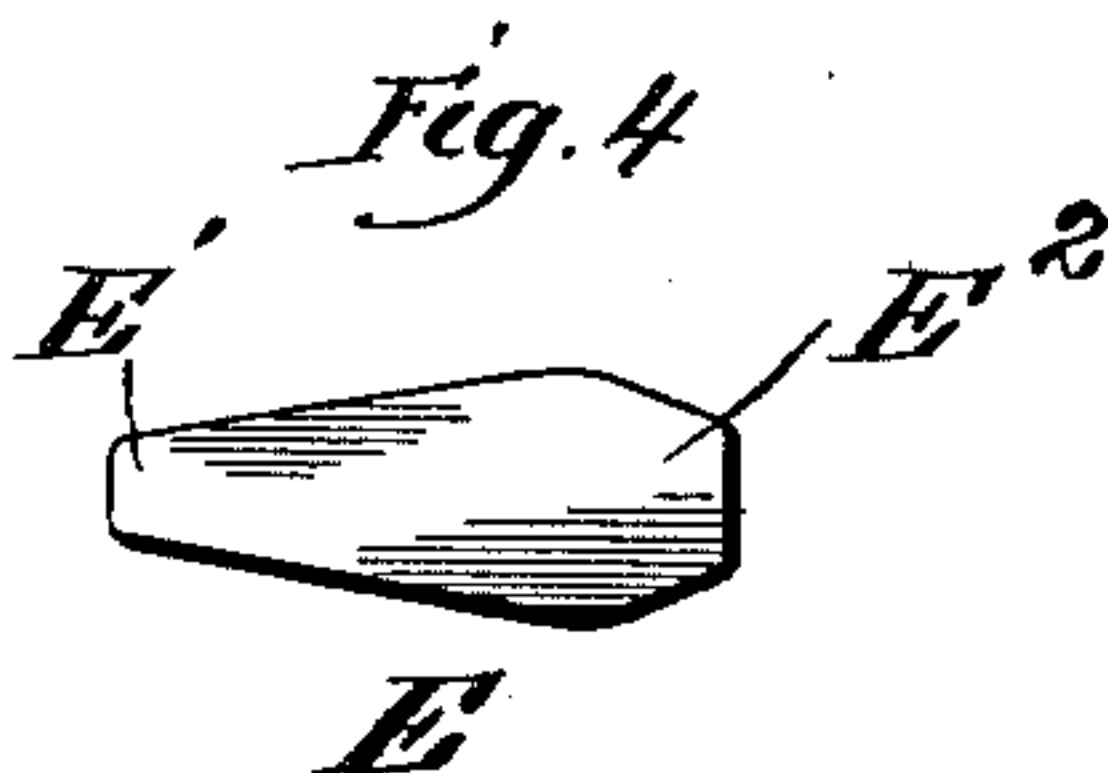


Fig. 3.



Witnesses:

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SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 688,109, dated December 3, 1901.

Application filed March 30, 1901. Serial No. 53,611. (No model.)

To all whom it may concern:

Be it known that I, SALLIE G. McCLAIN, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Safety-Pins, of which the following is a specification.

My invention relates to a new and useful improvement in safety-pins, and has for its object to provide a safety-pin in which the pointed member of the pin proper is formed with an inward curve, so that it will present greater resistance to any strain put upon the same when in use.

A further object of my invention is to form the end of the pin upon which the sheath is fastened in such a manner that it will be simple in construction and yet strong and durable.

Another object of my invention is to provide a covering for the spring-coil which will prevent the fabric from becoming entangled therewith.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of the pin closed. Fig. 2 is a section on the line 2 2 of Fig. 1. Fig. 3 is a section on the line 3 3 of Fig. 1, and Fig. 4 is an elevation of the covering for the coil in its blank form.

In carrying out my invention as here embodied, A represents the shank of the pin; B, the usual spring-coil; C, the pointed member or pin proper, the point of which is adapted to be held when the pin is closed by the sheath D. The shank A at this sheath end of the pin is coiled upon itself, as represented at A², so as to describe nearly a circle, the end A' meeting and lying in contact with the shank A. The sheath D is formed around this coil formed in the end of the shank A and incloses the wire, except at the end which receives the point of the pin. This portion is made wider,

so that when the point of the pin passes up either side of that portion of the coil A² which is directly under this widened portion of the sheath the pin will be received therein and held against displacement. The point of the pin when it is within the sheath will be out of contact with the coil A² and lie in front of the same by reason of the curvature of the said coil; but when the pin is pressed downward to disengage the same from the sheath it will first come in contact with the rounded surface of the coil, and it will select its own passage either one side or the other of the downwardly-extending portion of the coil.

The pin proper, C, I form with a curve bent inward toward the shank A, as the strain upon a safety-pin is generally outward. This curvature in the pin C is for the purpose of offering greater resistance to any such strain, for the pin would have to be bent outward so that it would be in a straight line from the spring-coil B to the sheath before it would be bent in a curve outward, so that the point of the pin would be drawn from the sheath.

It is obvious that it will take a greater strain to bend the pin outward to a straight line than it would to curve the pin outward if it were originally made straight. Of course the curvature of the pin could be more or less than that shown in the drawings without affecting the spirit of the invention at this particular point. For the protection of the spring-coil B, I provide a covering E, which in its blank form will be of the shape shown in Fig. 4. This will be bent around the coil, and the end E' passing between the pin C and the shank A will lap over the end E², and this covering will be pressed into the coil B, so as to form a depression upon each side thereof and hold the same securely in place. This covering E will prevent the coil B at every point from catching in the fabric through which the pin is inserted.

The advantages of my invention are that by bending the wire at the sheath end of the pin so that it will coil back upon itself and then in covering said coil with a covering of thin metal, one end of which acts as the sheath for the point of the pin, I cause a portion of the coil A² to act as a divider, so that the point of the pin can be inserted in the sheath from either side, and by using

this coil A² as a divider it presents a rounding surface for the point of the pin to come in contact with when the said pin is depressed for the purpose of removing it from the sheath. Thus a much simpler construction is employed, which will reduce the cost of manufacture and also will overcome the disadvantage of dividers which terminate within the sheath. Such dividers sometimes present a surface to the point of the pin in its downward travel upon which the same can lodge, and thus dull said point and retard the operation of the same.

Another advantage of my invention is that by forming the pin C with an inwardly-bent curve I cause the same to withstand a greater strain, so that it is less liable to be bent outward, so as to withdraw the point of the pin from the sheath.

A further advantage of my invention is in entirely covering the spring-coil B and thus preventing danger of fabric being caught in said coil and damaged.

Having thus fully described my invention, what I claim as new and useful is—

1. As a new article of manufacture, a safety-pin composed of a body portion and a pin proper, one end of the body portion being coiled upon itself, a sheath arranged above this coiled portion, a spring-coil connecting the pin proper with the body portion, a covering for said coil adapted to inclose the same,

a curvature formed in the pin proper, said curvature extending from the spring-coil to a point near the point of the pin, and said curvature being curved inward toward the body portion of the pin, the pin-point when lying within the sheath adapted to be out of contact with the coil formed with the body portion, but when pressed downward adapted to pass upon either side of the coil, substantially as described and for the purpose specified.

2. In combination in a safety-pin of the character described, a spring-coil connecting the pin-point with the body of the pin, a covering for said spring-coil consisting of an elongated strip of metal which is wrapped entirely around the coil and passing between the spring member and the body portion so as to protect the coil upon both sides, said covering after being wrapped around the coil indented into the center of the coil upon both sides for the purpose of holding the covering in place, substantially as and for the purpose set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

SALLIE G. McCLAIN.

Witnesses:

MARY E. HAMER,
L. W. MORRISON.