

No. 847,660.

PATENTED MAR. 19, 1907.

A. E. FREEMAN.

BUTTON.

APPLICATION FILED MAR. 7, 1906.

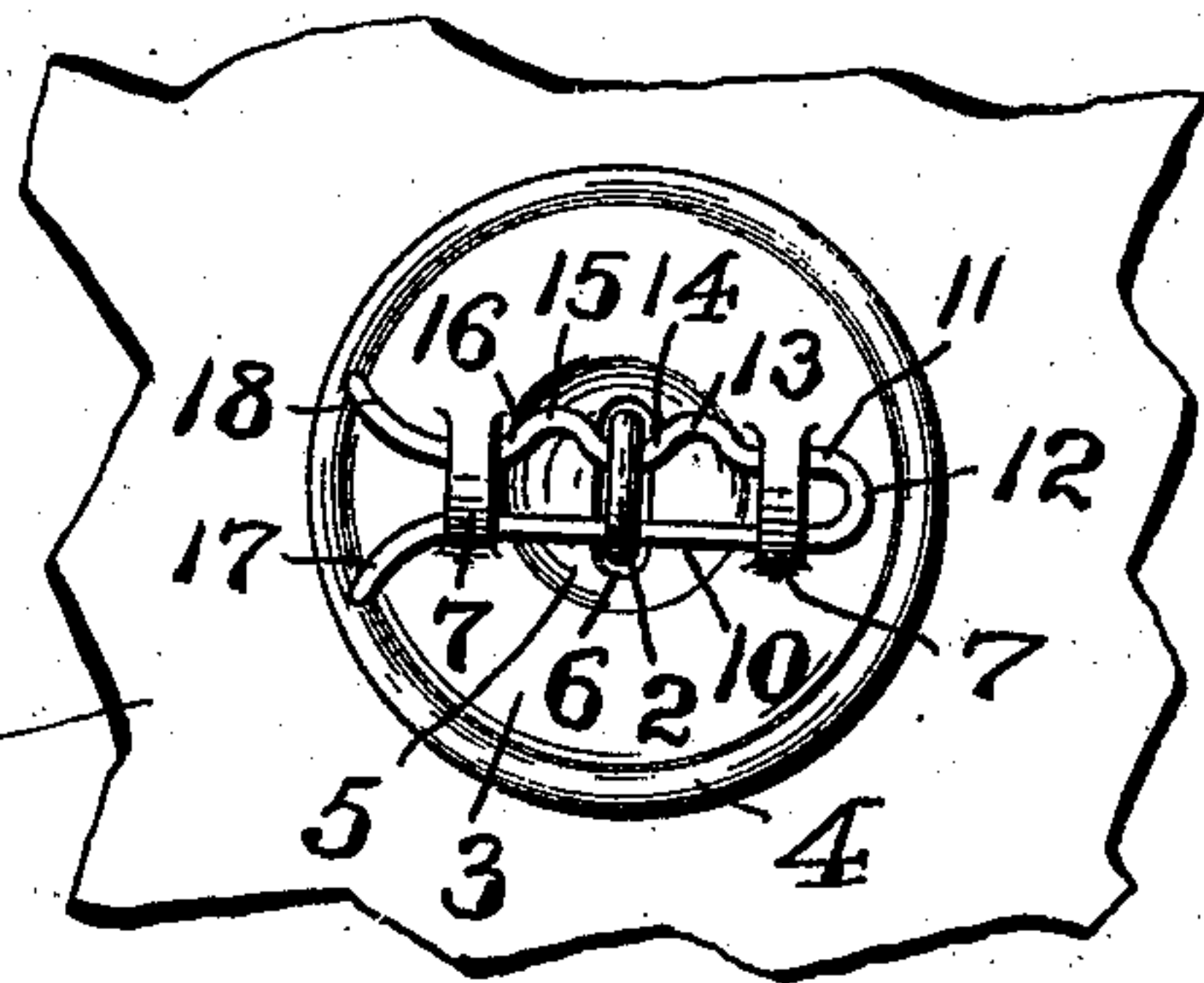
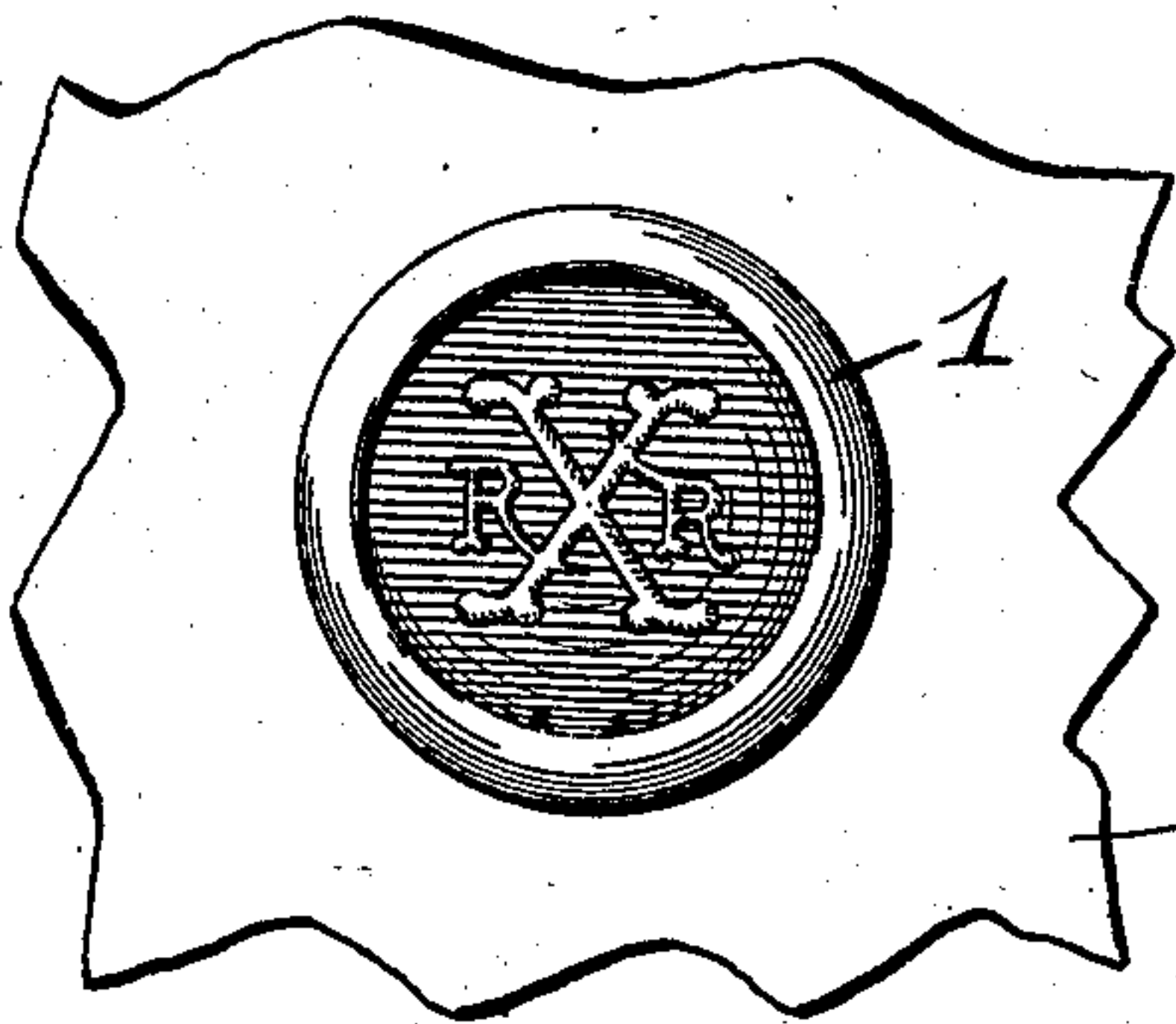


Fig 1

Fig 2

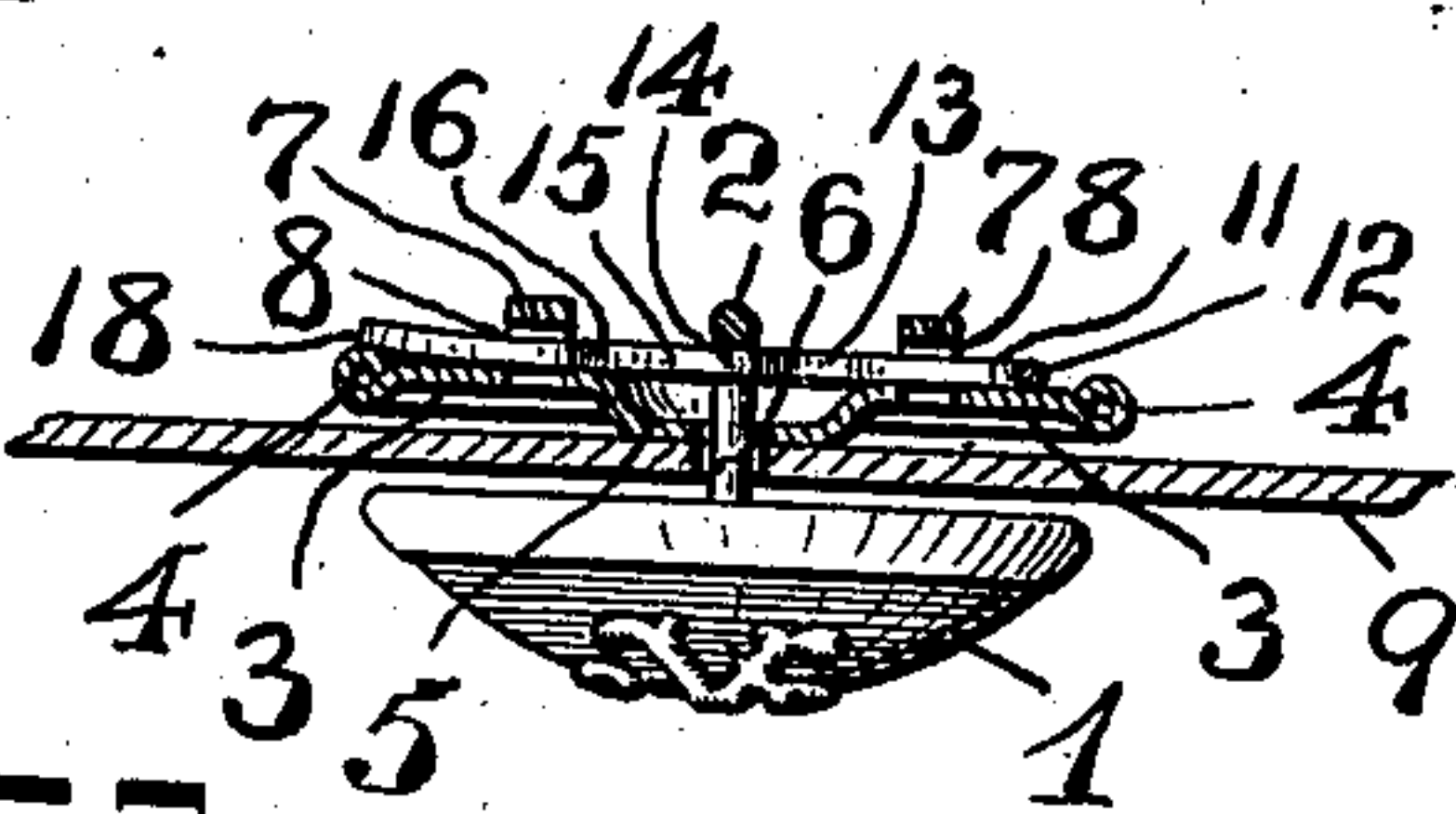


Fig 3

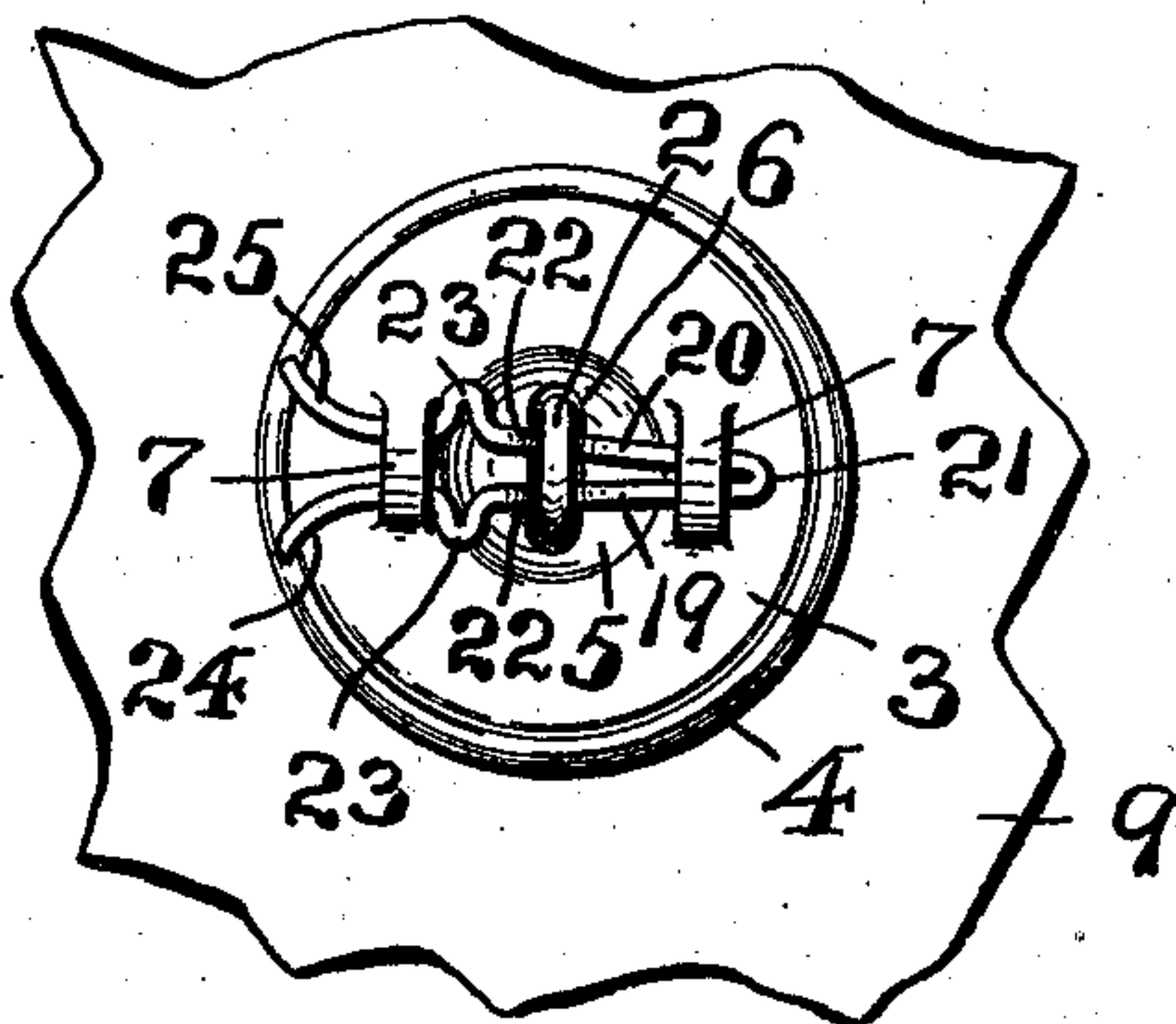


Fig 4

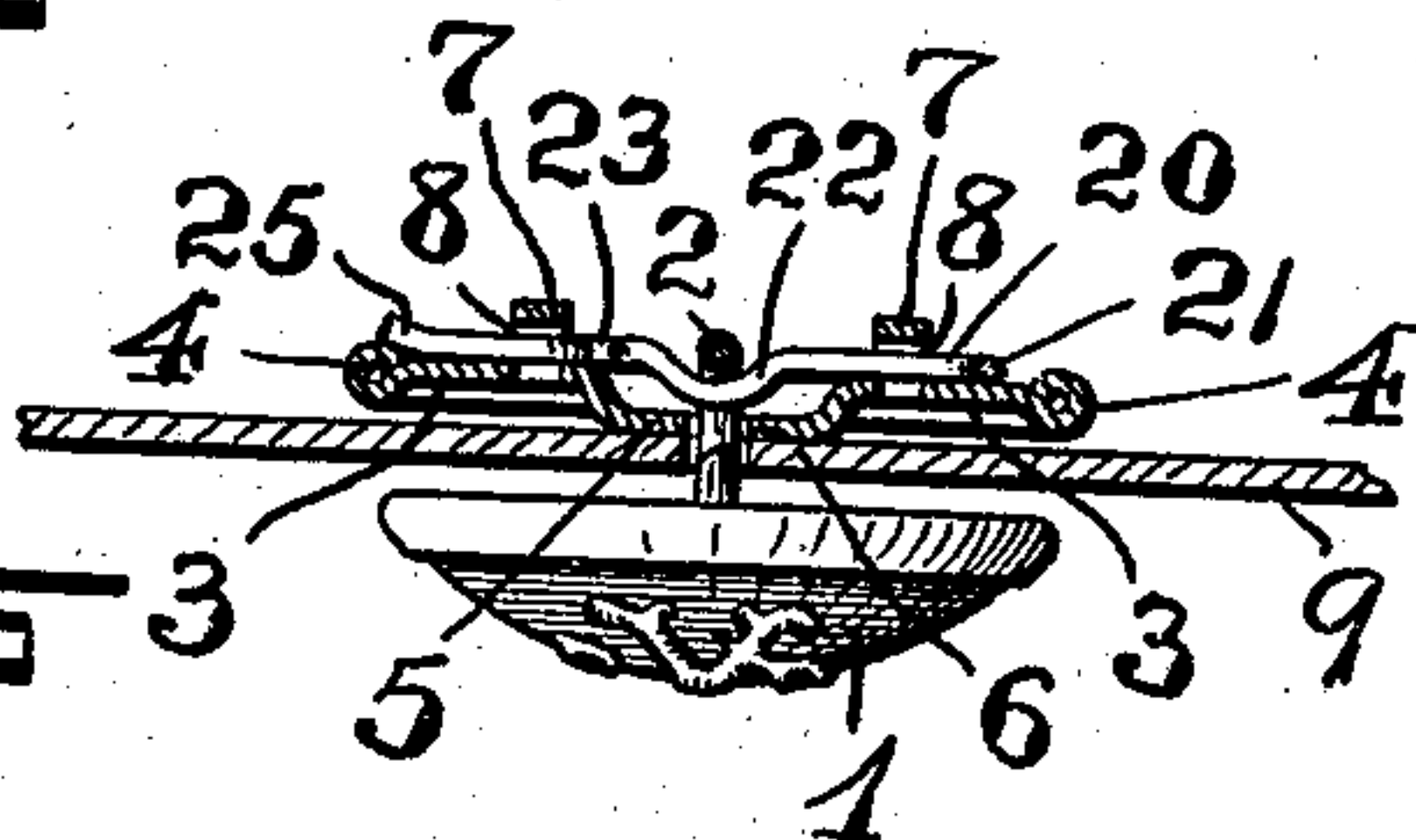


Fig 5

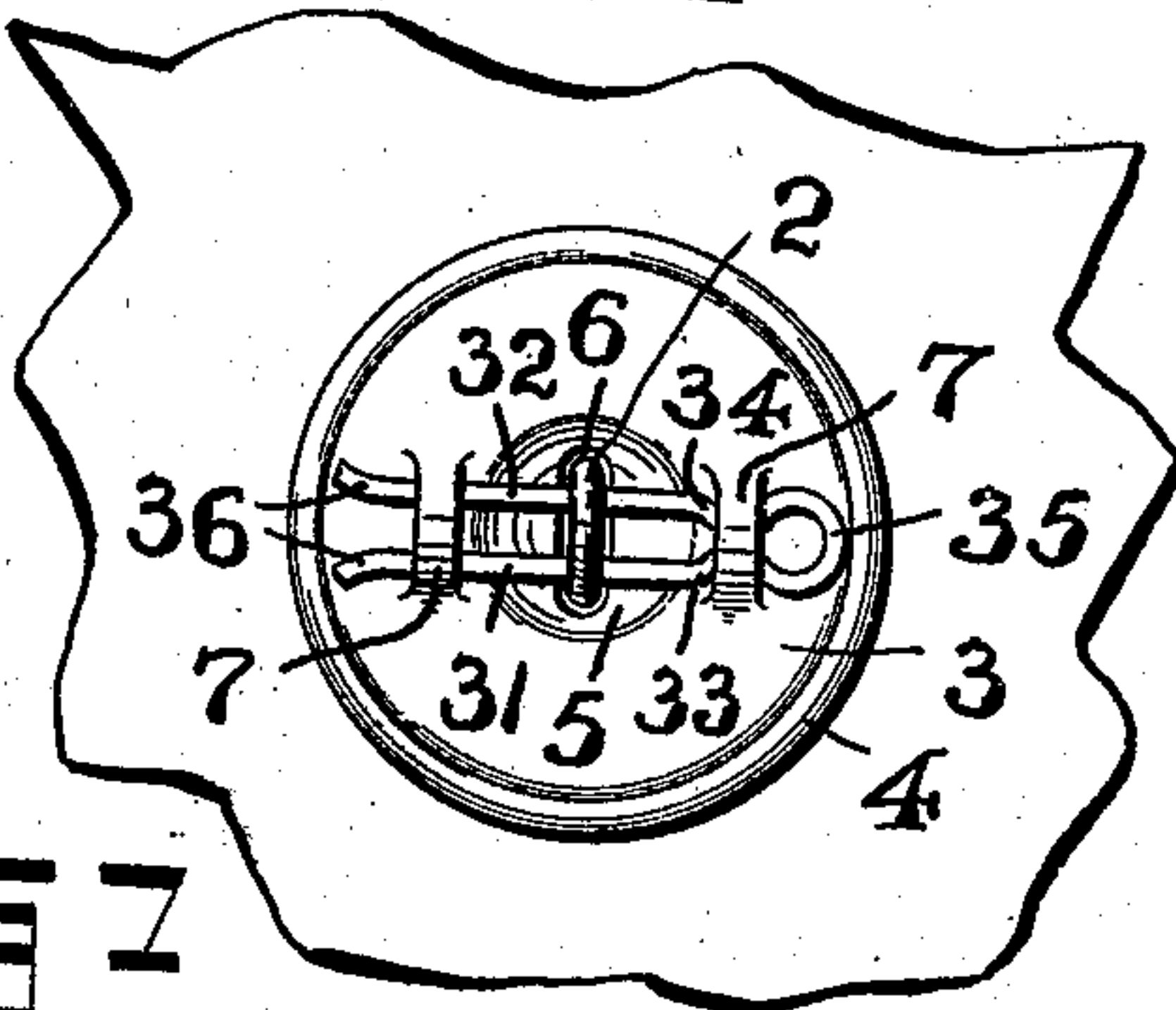


Fig 6

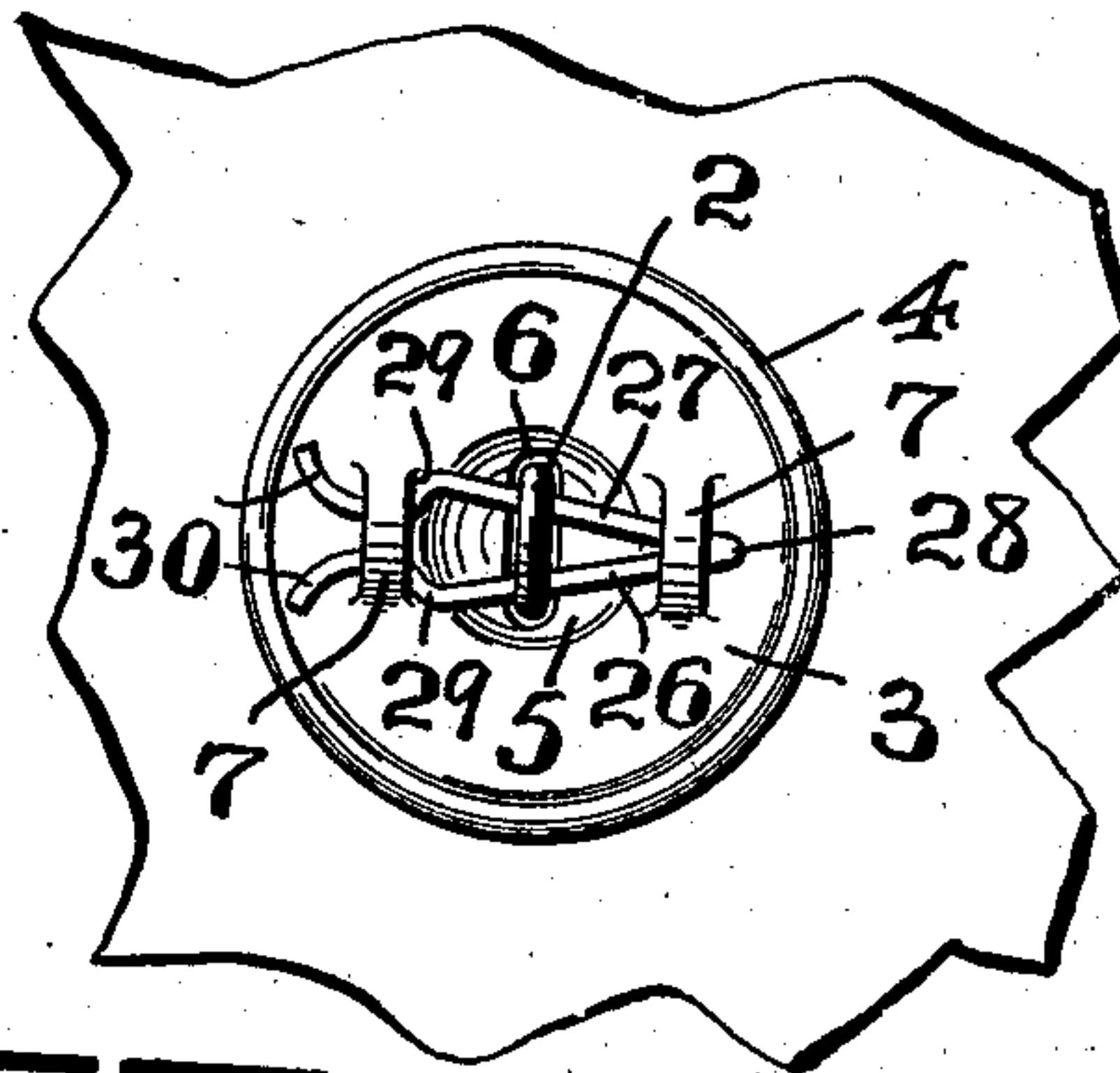


Fig 7

WITNESSES:

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UNITED STATES PATENT OFFICE.

ALEXANDER E. FREEMAN, OF ORANGE, NEW JERSEY, ASSIGNOR OF ONE-HALF TO ALEXANDER EFFENBERGER, OF ORANGE, NEW JERSEY.

BUTTON.

No. 847,660.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed March 7, 1906. Serial No. 304,636.

To all whom it may concern:

Be it known that I, ALEXANDER E. FREEMAN, a citizen of the United States, residing at Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Buttons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention has reference generally to improvements in that class of buttons known in the art as "military" or "bachelor" buttons; and the invention relates more particularly to a novel construction of button and means for detachably securing the same in its fixed position upon the face of an article of wear without the use of the usual thread.

The invention has for its principal object to provide a button and button-fastener of this character and one which shall be of a very simple construction and may be quickly and easily secured in its fastened position upon the face of a garment by the most unskilled and when fastened cannot accidentally become displaced or separated from the garment.

Other objects of this invention not at this time more particularly mentioned will be clearly understood from the following detailed description of the device.

The invention consists, therefore, in the novel button and button-fastener hereinafter set forth; and, furthermore, the present invention consists in the various novel arrangement and combinations of devices and parts, as well as in the details of the construction of the same, all of which will be more fully described in the following specification and then finally embodied in the clauses of the claims which are appended to and which form an essential part of this specification.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a face view, and Fig. 2 a rear view, of a button and button-fastener embodying the principles of my present invention, the button and button-fastener being shown in their relative positions on opposite faces of the garment; and Fig. 3 is transverse

sectional representation of the various parts shown in said Figs. 1 and 2, except the button-head, which is represented in side elevation. Fig. 4 is a rear view of a button-fastener of a modified form of construction, and Fig. 5 is a transverse sectional representation similar to that shown in Fig. 3 of the said parts shown in Fig. 4. Figs. 6 and 7 are rear views of two other modified forms of button-fasteners, but still made to embody the principal features of my present invention.

Similar characters of reference are employed in all of the above-described views to indicate corresponding parts.

Referring now to the drawings, the reference character 1 indicates any suitably-shaped button-head, and 2 the usual eye extending from the back thereof.

The button-head shown in the drawings is of the form and construction known in the trade as a "military" button, but it will be evident that the novel form of button-fastener to be presently described may be used with any other suitably-formed button-head provided with a rearwardly-extending loop or eye, as 2.

The button-fastener shown in the said Figs. 2 and 3 consists, essentially, of a plate 3, made from sheet metal, and preferably provided with a marginal bead or curl 4 and a centrally-disposed depression or hub 5, having a centrally-arranged slot or elongated opening 6, through which the loop or eye 2 of the button-head can be inserted. While the said plate 3 is made with the said rearwardly-extending depression or hub 5, it is also made with a pair of forwardly-extending loops 7, which are pressed out of the sheet-metal body or plate and form receiving portions 8.

When the eye or loop 2 of the button-head has been forced or passed through the body of cloth 9 and has been inserted through the elongated hole or opening 6 in the plate 3, a holding-pin, comprising a pair of spring-arms, which normally tend to separate in opposite directions, is passed into and through the respective loops 8 and 2 of the plate 3 and button-head 1. These arms of the said pin, by means of their spring-like action, are brought into frictional engagement with the interior surface portions of the said loops, and thereby securely retain the parts in their operatively-connected relation without danger of separation by accident or becoming

loose and lost, but being capable of separation by the operator, substantially as will be presently more fully described. One form of such holding-pin is represented in Figs. 2 and 3 of the drawings, the said pin comprising a straight arm 10 and a sinuously-bent arm 11, which said arms are connected by means of a looped or curved end portion 12. The sinuous portions of the said arm 11 are indicated by the reference characters 13, 14, 15, and 16, and the respective end portions of said arms 10 and 11 curve outwardly in opposite directions, so as to provide a pair of finger-pieces 17 and 18. In inserting the said pin in its operative position in the respective loops 7 and 2 by means of the finger-pieces 17 and 18 the said arms 10 and 11 are pressed together. This, as will be understood, permits the ready insertion of the pin in the various loops and upon the release of the pressure from the oppositely-extending curved parts or finger-pieces 17 and 18 the outward movements of the said arms 10 and 11 will bring these parts in engagement with the inner side edges of one of the loops, substantially as shown in Fig. 2, with the sinuous portions 13, 14, 15, and 16 arranged as shown, and thereby retaining or locking the holding-pin in its positive holding engagement with the said loops and at the same time securing the button-head upon the face of the material against all danger of being pulled off and lost.

In Figs 4 and 5 I have shown a slightly-modified form of holding-pin, the same comprising a pair of straight arms 19 and 20, which are connected as at 21. The said arms 19 and 20 are each formed with a downwardly extending and curved holding portion 22, which holding portions 22 are adapted to become located in holding relation within the loop or eye 2 of the button. The said arms 19 and 20 are also made with outwardly and oppositely extending curved parts 23, being adapted to become located in holding and retaining engagement with one of the loops 7 of the plate 3, substantially as shown, and said arms 19 and 20 being respectively formed with the curved finger-pieces 24 and 25.

Another form of holding-pin is illustrated in Fig. 6 of the drawings, this pin comprising a pair of straight diverging arms 26 and 27, which are connected at 28. Each arm 26 and 27 is provided with an outwardly-curved portion 29, adapted to be brought in holding and retaining engagement with one of the loops 7 of the plate 3, as shown in said Fig. 6, and said arms 26 and 27 being provided at their free ends with finger-pieces 30 for the manipulation of the same.

In Fig. 7 of the drawings the holding-pin is shown with a pair of normally parallel arms 31 and 32, which are respectively provided with the inwardly-curved holding parts or members 33 and 34, adapted to be brought in holding engagement with one of

the said loops of the plate 3 and being connected back of said loop 7 by means of a substantially large eye or ring-shaped member 35. At their free end portions the said arms 31 and 32 are provided with the outwardly-curved finger-pieces 36, similar in construction to the finger-pieces of the other holding-pins and serving for the same purpose of compressing the two arms toward each other for the insertion of the said holding-pin within and beneath the several loops or eyes of the said plate 3 and the button 1.

I claim—

1. A button and button-fastener, comprising, in combination with a button-head and its loop, a perforated plate into and through which said loop is inserted, said plate having a pair of outwardly-extending receiving-loops, said loops forming pin-receiving guides, and a holding-pin consisting of a pair of spring-arms removably arranged beneath and in holding engagement with the loops of said plate and with said loop of the button-head, substantially as and for the purposes set forth.

2. A button and button-fastener, comprising, in combination with a button-head and its loop, a plate provided with a rearwardly-extending hub, said hub having a perforation into and through which the loop of said button-head is inserted, said plate having also a pair of outwardly-extending receiving-loops, said loops forming pin-receiving guides, and a holding-pin consisting of a pair of spring-arms removably arranged beneath and in holding engagement with the loops of said plate and with said loop of the button-head, substantially as and for the purposes set forth.

3. A button and button-fastener, comprising, in combination with a button-head and its loop, a perforated plate into and through which said loop is inserted, said plate having a pair of outwardly-extending receiving-loops, said loops forming pin-receiving guides, and a holding-pin consisting of a pair of spring-arms removably arranged beneath and in holding engagement with the loops of said plate and with said loop of the button-head, said spring-arms being provided with oppositely-extending curved parts in engagement with the side edges of one of the said loops of said plate, substantially as and for the purposes set forth.

4. A button and button-fastener, comprising, in combination with a button-head and its loop, a plate provided with a rearwardly-extending hub, said hub having a perforation into and through which the loop of said button-head is inserted, said plate having also a pair of outwardly-extending receiving-loops, said loops forming pin-receiving guides, and a holding-pin consisting of a pair of spring-arms removably arranged beneath and in holding engagement with the loops of said

plate and with said loop of the button-head, said spring-arms being each provided with a downwardly extending and curved holding portion 22, arranged directly beneath the loop of said button-head and extending through the hub of said plate, and means connected with said spring-arms for holding engagement with one of the said loops of said plate, substantially as and for the purposes set forth.

5. A button and button-fastener, comprising, in combination with a button-head and its loop, a plate provided with a rearwardly-extending hub, said hub having a perforation into and through which the loop of said button-head is inserted, said plate having also a pair of outwardly-extending receiving-loops, said loops forming pin-receiving guides, and a holding-pin consisting of a pair of spring-

arms removably arranged beneath and in holding engagement with the loops of said plate and with said loop of the button-head, said spring-arms being each provided with a downwardly extending and curved holding portion 22, arranged directly beneath the loop of said button-head and extending through the hub of said plate, and oppositely-extending curved holding parts connected with the said spring-arms for engagement with one of the said loops of said plate, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 3d day of March, 1906.

ALEXANDER E. FREEMAN.

Witnesses:

ALEXANDER EFFENBERGER,
FREDK. C. FRAENTZEL.