

W. R. GREEN.

BANDAGE.

APPLICATION FILED NOV. 30, 1907.

907,785.

Patented Dec. 29, 1908.

FIG. 1.

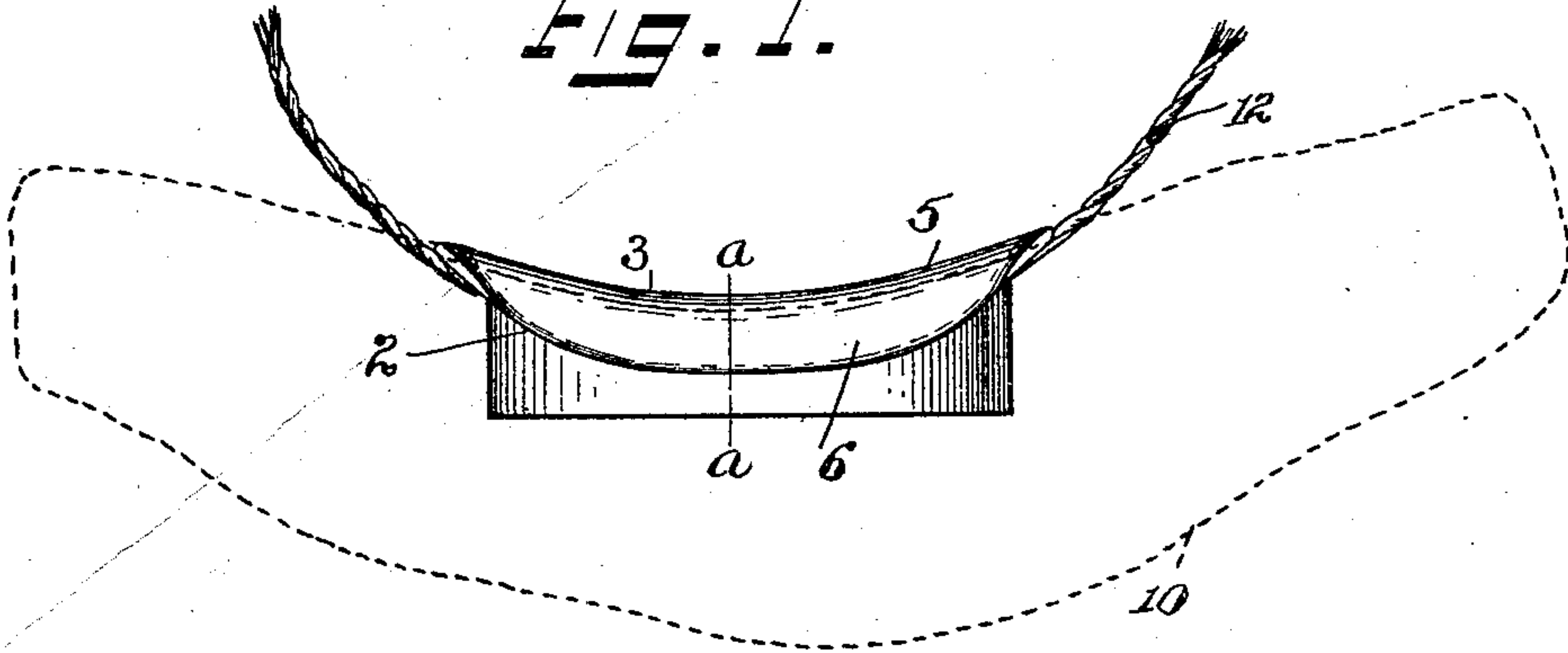


FIG. 5.

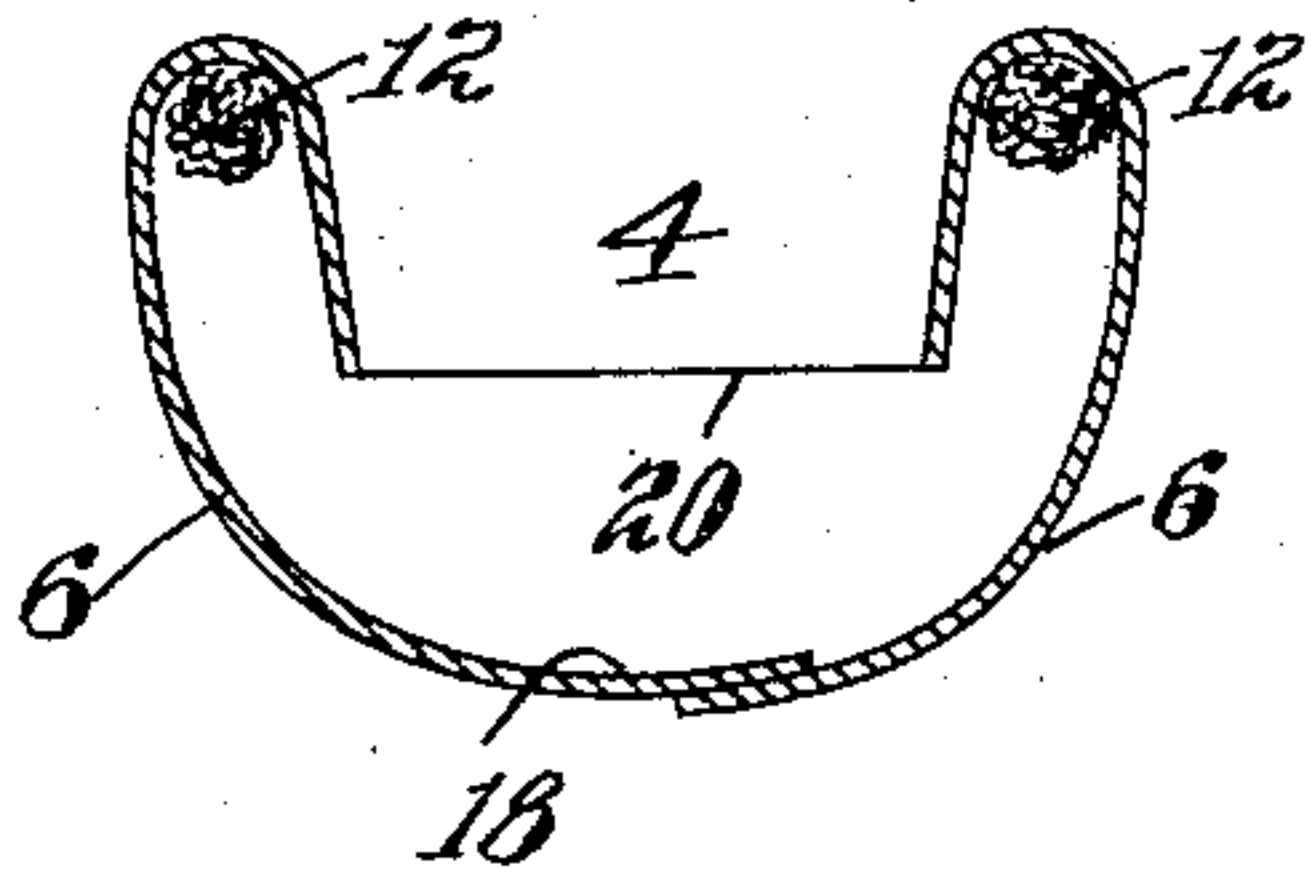


FIG. 2.

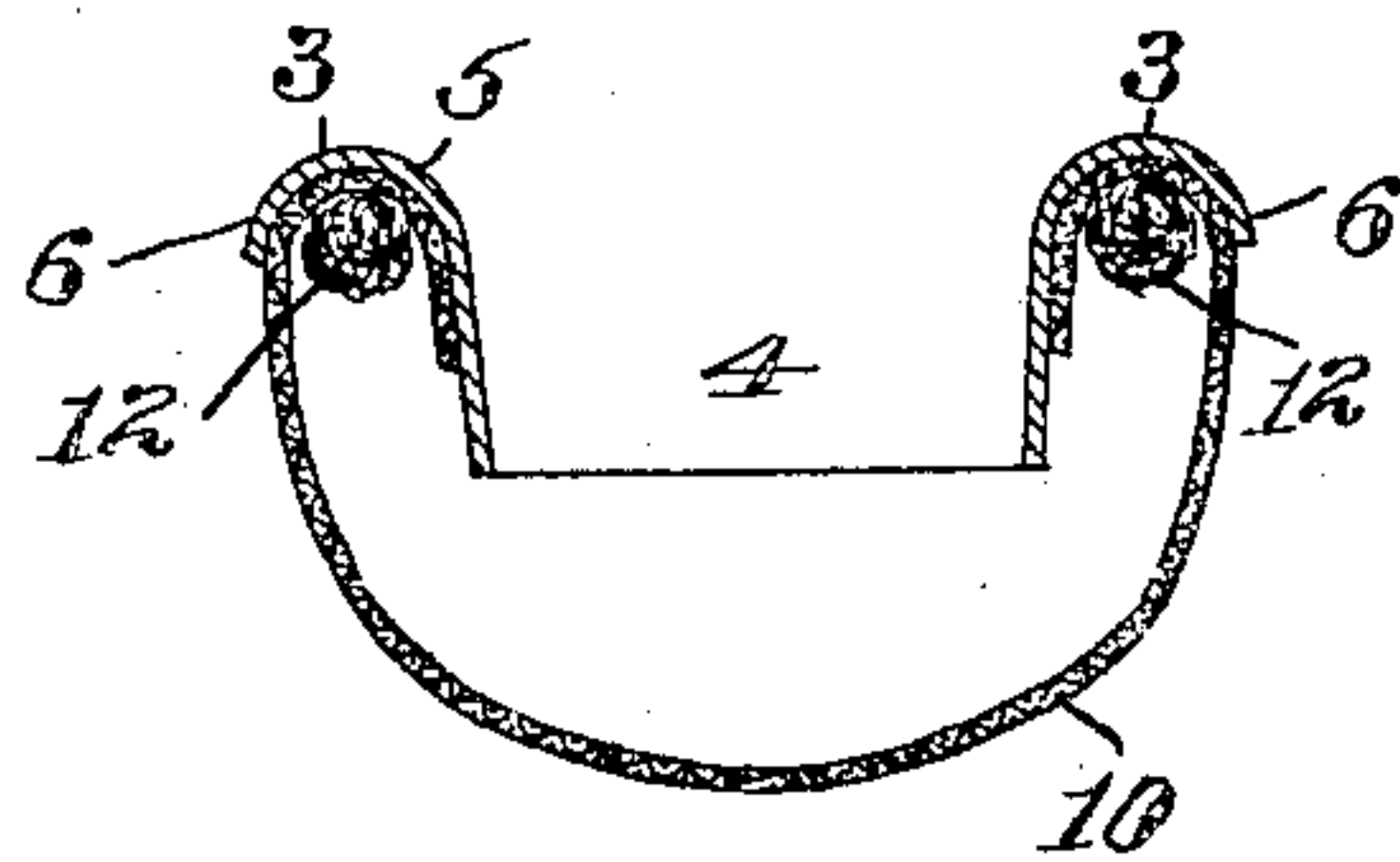


FIG. 3.

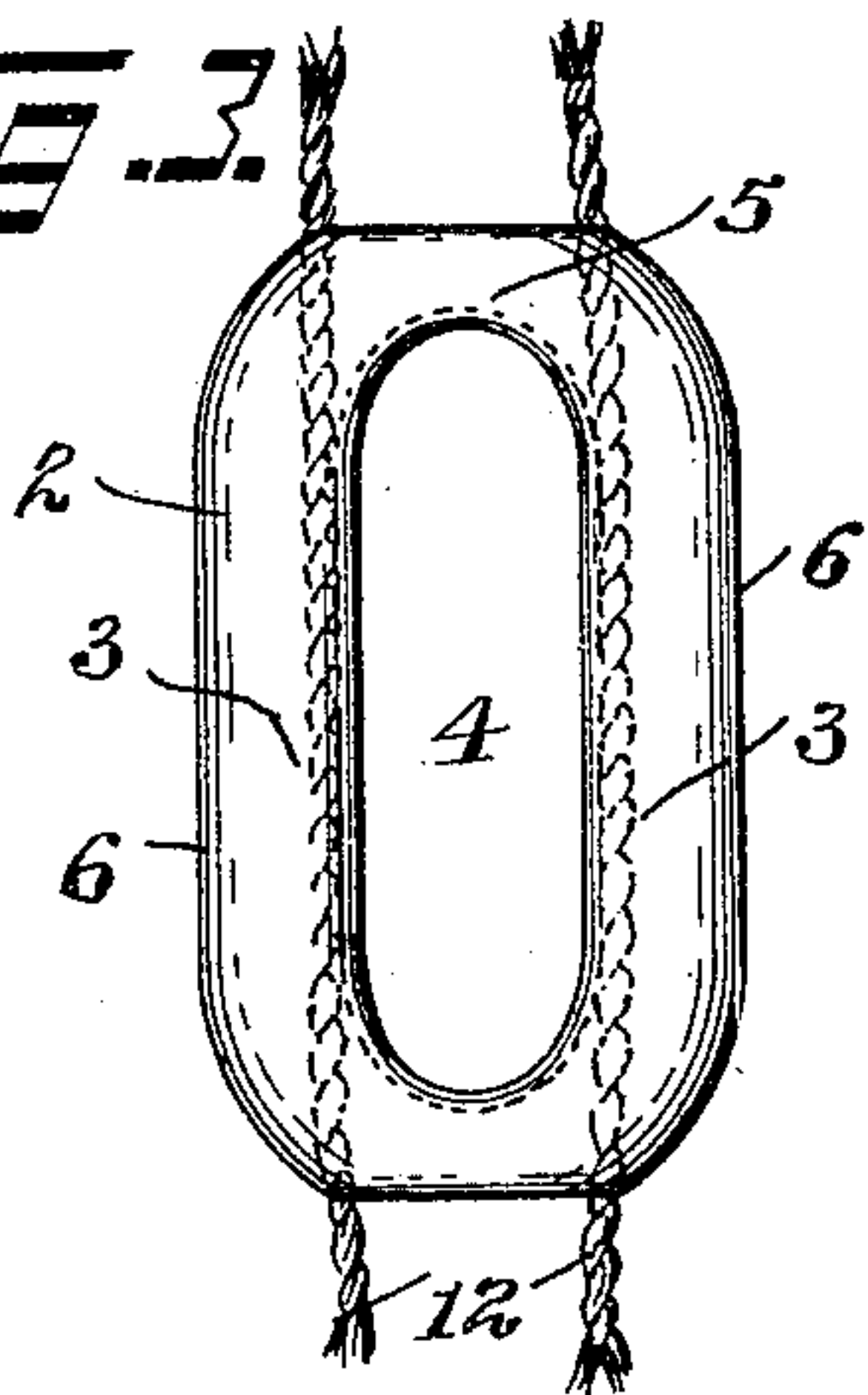


FIG. 6.

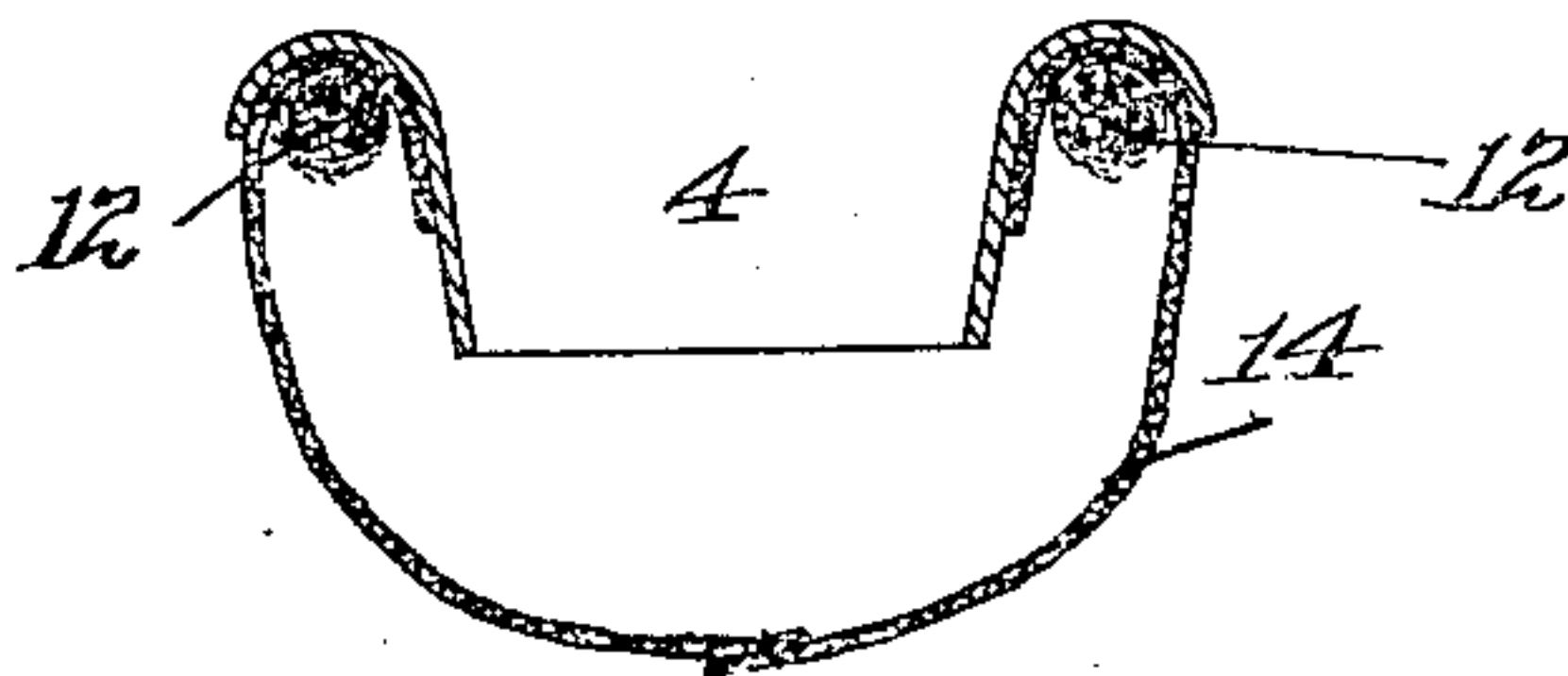
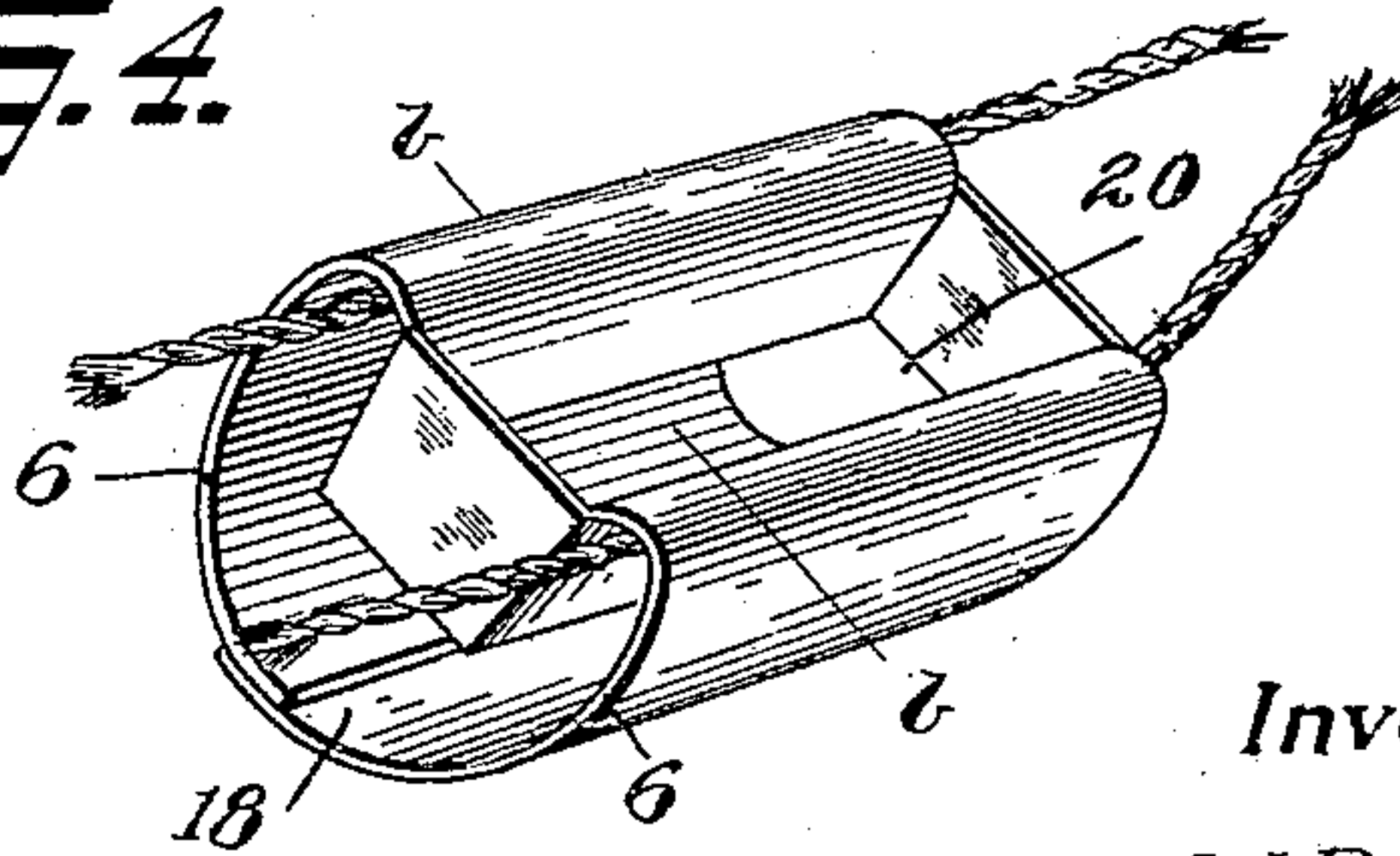


FIG. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

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BANDAGE.

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Specification of Letters Patent.

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Application filed November 30, 1907. Serial No. 404,594.

To all whom it may concern:

Be it known that I, WILLARD R. GREEN, a citizen of the United States, residing in Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Bandages, of which the following is a specification.

The present improvement relates to absorbent bandages, the object of the invention being to provide an improved bandage which is simple in construction, inexpensive to manufacture, and of such form and construction that it can be readily applied and when in position will fit around the source of discharge and have a receiving chamber spanning such source of discharge; and to provide a bandage which, when in position, will maintain its shape and deliver the discharge within such chamber, thus avoiding,—as in the ordinary bandage,—having a surface, which receives the discharge and quickly becomes slimed over, in contact with the body, so that this improved bandage may be worn with ease and comfort and without causing those pains and discomfort which invariably attend the wearing of all ordinary forms of bandage.

A further object of the invention is the provision of a bearing member which may be used either with a specially prepared bandage or with a towel or other form of bandage, as may be desired, and in the use of which all the advantages just pointed out may be obtained.

The present form of bandage is in part an improvement upon that shown and described in my contemporaneously pending application, Serial No. 404,592, filed November 30, 1907, and is intended to provide a bandage which can be worn with comfort and which will not obstruct the passage or impede the discharge; and the object of the invention is to provide a means which may be applied to ordinary forms of bandage, or used with a specially formed bandage, which will have side bearing portions to rest against the body of the wearer at the sides of the source of discharge or wound and maintain in the bandage an open receiving chamber between such side bearing portions, and thus prevent any obstruction at the source of discharge.

The ordinary bandage is composed of more or less soft, yielding and compressible material, without much or any attempt to give it

a characteristic form or shape of its own to be maintained in use. Because of this lack of form the bandage, when in use, almost at once takes a form resembling that of a peaked or gable ended roof; in other words, shaping itself into a ridge along the central longitudinal portion and sloping toward the sides of the bandage throughout its length. Because of this shape the discharges which are applied along the peaked edge of the bandage have a tendency to pass down the two sides of the bandage more quickly than they can be absorbed by the bandage itself, which is furthermore quickly rendered unfit for use by reason of the fact that the surface at once slimes over and becomes matted, and thus becomes more or less impervious to further penetration or absorption. The creation of this moist condition of the bandage along the sides thereof and against the limbs is frequently the cause of some of the pains and discomfort which attend the wearing of all ordinary forms of bandage.

The object of the present invention, therefore, is to avoid the creation of the conditions which are themselves the cause of some of the troubles attending the use of the ordinary bandage, and to overcome and prevent their existence; and, by keeping the parts of the body adjacent to which the bandage is used in a dry condition, render the body non-sensitive to the presence of the bandage and enable it to be worn with comfort.

To accomplish these objects, the present improvement is provided, and consists in a means which will form in connection with the ordinary bandage when properly applied thereto, or in connection with a specially formed bandage, a means providing side bearing portions and a chamber receiving portion, so that the bandage will take its bearings under any desired pressure upon the two sides longitudinally of the bandage and against the limbs of the wearer at points provided by nature to give place to and support the bandage, and thus enable the bandage to properly span the source of discharge. This natural formation of the body tends to retain positively and comfortably in place the side bearing portions of the bandage and to give a sense of comfort and security to the wearer. When so placed and supported, the side bearing portions are out of all contact with the source of discharge, which is spanned by a chamber always maintained

open, and the connecting portions of the bandage come together a sufficient distance below the center of discharge to avoid all contact with it. Furthermore, the fact that
 5 pressure is at the sides of the source of discharge tends to keep free and open the passage of the discharge and prevents the formation of blood clots or other obstructions frequently the cause of great pain. It is there-
 10 fore a fact that the mere form of this bandage has in itself sanitary and medicinal advantages very acceptable to the wearer and also imparts a sense of safety and certainty of being in position.

15 In the formation of such a bandage it is essential that it be so made that the bandage will have the function of maintaining a chamber or open condition at the source of discharge and against side pressure from the
 20 limbs when sitting or in a recumbent position. This resistance to side compression may be obtained in various ways, and various forms of devices may be provided for not only acting as a lateral spreader to the band-
 25 age, but also providing a cavity through the center of the bandage throughout its longitudinal extent, offering a free receiving space or chamber for receiving all discharges and also insuring positive avoidance of any con-
 30 tact with the wearer except around the source of discharge, and which means may also serve as a depressor for the absorptive or fibrous material which may be used in the receiving space, below the transverse por-
 35 tion or portions of the spreader. The absorbent material may be carried in a suitable cover in one form of this improvement, or may consist merely of a towel in another form of the improvement. When in the
 40 form of a cover filled with absorbent a great variety of ordinary materials of which to form such cover is practicable in use, for the reason that through the functions possessed by this bandage the limbs and other portions
 45 of the body likely to come in contact with the bandage cover are free from discharge or irritating acids, and for this reason are able to bear contact with the material of the bandage without discomfort, this latter fact re-
 50 sulting from the dry state in which they are kept.

In the drawings accompanying and forming part of this specification, Figure 1 is a side view of the present improved bandage, the cover being shown in dotted lines; Fig. 2
 55 is a cross sectional view thereof taken in line *a-a* Fig. 1; Fig. 3 is a top or plan view thereof; Fig. 4 is a perspective view of one form of bearing member adapted for use with an
 60 ordinary towel as the absorbent material; Fig. 5 is a cross sectional view thereof taken in line *b-b* Fig. 4; and Fig. 6 is a cross sectional view of a modified form of the improvement shown in Figs. 4 and 5.

65 Similar characters of reference indicate

corresponding parts throughout the different figures of the drawings.

The present embodiment of the improvement comprises a bearing member 2 having side bearing portions 3 and a chamber forming portion 4. This bearing member 2, which will be of comparatively small size, for instance approximately the size of a small or pocket size match-box, in other words, just sufficiently large to fit around the wound
 75 or source of discharge, may be made of any suitable material, such for instance as suitably treated paper, whereby it will maintain its shape and be moisture or water proof, or it may be made of some suitable inexpensive
 80 metal of a character to properly maintain its shape, while preferably being somewhat yielding under pressure, and comprises, in the form shown in Figs. 1, 2 and 3, a curved rim 5 forming a pair of side wings or flaps 6
 85 of the proper form and shape to fit against the body of the wearer at each side of the source of discharge, and shown as concaved to conform to the parts against which they are to bear. The inner edge of such wings
 90 has a depending portion or wall adapted not only to prevent the compression of the bandage, and thus enable it to span the wound or other source of discharge, but also to form a proper receiving chamber for the discharge.
 95 In other words, this bearing member acts not only to keep the bandage in such condition that the receiving chamber will span the source of discharge, but it prevents that por-
 100 tion which absorbs the discharge from coming into contact with the body and consequently prevents the irritation of the skin, while at the same time keeping it in a more cleanly condition. This bearing member, however,
 105 may be made up in various ways. For instance, in Figs. 1, 2 and 3, it is shown of that construction more particularly adapted for use with a specially formed bandage contain-
 110 ing some suitable absorbent, such for instance as those of my prior patents. In this form the edge of the cover sheet 10 is turned over under the flaps 6 of this member, the supporting means, preferably in the form of
 115 cords 12 adapted for attachment to a belt, running under the turned over edge of the cover and the flaps of this member, thus acting not only as a means for attaching the bandage in place but also to keep the bearing member and cover together. The bearing
 120 member will be of sufficient stiffness to maintain its proper shape and the receiving chamber in its proper open condition, and this may be assisted by the supporting means, since two of the cords at one end are usually spread apart for attachment to the belt, and
 125 this will assist in maintaining the chamber of the bandage open.

In another form of this improvement, Fig. 6, the cover sheet 14 may be made of some suitable material glued or otherwise secured
 130

to the bearing member, with its undersides also glued or otherwise attached, and this may be done by the user after filling the same with an absorbent material, when ready for use; the supporting means or cords in this case also running under the turned over side edges of the cover and of this improved member, the edges of the cover being inwardly turned, while the edges of the bearing member are outwardly turned.

In the form of the improvement shown in Figs. 4 and 5, the side flaps 6 of the bearing member are prolonged and carried downwardly, or lapped or otherwise attached together in any suitable manner, thus providing below the chamber forming space a bottom wall 18 adapted to act as a support for the absorbent material, which in this case may consist of an ordinary towel or any other suitable fabric which may be readily and quickly folded and inserted into the bearing member between the bottom wall 18 thereof and the bottom edge 20 of the open chamber forming space, the attaching or supporting means or cords passing under the side flaps from end to end, as hereinbefore described.

This improved member may be manufactured and sold separately for use, as hereinbefore stated, with the ordinary towel, or for use with a specially formed bandage, and when made of a suitable size and of suitable material it may consist of an integral structure adapted for quick attachment or application of a suitable absorbent material, and when applied will permit the bandage to be worn with comfort and without annoyance or irritation, since it will always insure a chamber receiving space with the absorbent located away from the source of discharge, where it will not tend to irritate and clog up the passage or impede the natural discharge of the fluid, while also insuring the proper application of the bandage and the bearing thereof at the sides and around the source of discharge and at points provided by nature for this purpose.

I claim as my invention:

1. A one-piece, relatively rigid bandage bearing member formed to bear directly against the body at the sides of and to span the source of discharge, and having means for carrying an absorbent.
2. A relatively rigid bandage bearing member, formed to bear directly against the body at the sides of and to span the source of discharge, and having means for overlapping the top edges of the cover.
3. A bandage comprising a bearing member formed to bear directly against the body at the sides of and to span the source of discharge, and an absorbent material attached to said bearing member, said member also having integral, relatively rigid, down-

wardly extending means for holding the absorbent away from the source of discharge.

4. A one-piece bearing member for a bandage, formed of relatively rigid material having side flaps adapted to form side bearing portions.

5. A relatively rigid bearing member for a bandage, having side flaps and a downwardly extending chamber forming portion.

6. A bearing member for a bandage, having side flaps adapted to form side bearing portions and to receive thereunder the attaching means for a bandage, and also having inwardly and downwardly extending chamber forming means.

7. A bearing member for a bandage, having integral therewith a downwardly extending chamber forming portion.

8. A relatively rigid bearing member for a bandage, having side bearing portions, connected to form a bottom wall below such side bearing portions.

9. A bearing member for a bandage, having a chamber forming portion and side bearing portions, the latter having its outer edges connected to form a bottom wall below such chamber forming portion.

10. A bearing member for a bandage, comprising a chamber forming portion having curved side bearing portions having its outer edges connected together.

11. An absorbent bandage comprising a bearing member having a chamber forming portion and side bearing portions, a cover, and bandage-attaching means extending under said side bearing portions.

12. An absorbent bandage, comprising a bearing member having a chamber forming portion and side bearing portions, a cover permanently attached to said bearing member, and bandage-attaching means extending under said side bearing portions.

13. An absorbent bandage, comprising an absorbent, a cover and a bearing member having body bearing portions overlapping the top edges of said cover and also having means for holding said absorbent away from the body.

14. A one-piece bandage, comprising a bearing member formed to bear against the body at the sides of and to span the source of discharge, an absorbent material attached to said bearing member, said member also having inwardly extending means for holding the absorbent away from the source of discharge, and means connected with said side bearing portions for attaching the bandage in position.

15. A bandage bearing member constructed to hold the chamber of a bandage against closure and having a depending inner wall and at its upper edge, at the sides thereof, a pair of outwardly extending wings.

16. A bandage bearing member con-

structed to hold the chamber of a bandage against closure and having a depending inner wall and at its upper edge, at the sides thereof, a pair of outwardly extending wings curved lengthwise thereof.

17. A bandage bearing member constructed to hold the chamber of a bandage against closure and having a depending inner wall and at its upper edge, at the sides thereof, a pair of outwardly extending wings curved lengthwise and crosswise thereof.

18. A bandage comprising a cover having a chamber, a bearing member constructed to hold the chamber against closure and having a depending inner wall and at its upper edge, at the sides thereof, a pair of outwardly ex-

tending wings overlapping the side edges of the bandage.

19. A bandage comprising a cover having a chamber, and a bearing member constructed to hold the chamber against closure and having a depending inner wall and at its upper edge, at the sides thereof, a pair of outwardly extending wings overlapping the side edges of the bandage, said wings being curved lengthwise and crosswise thereof.

Signed at 9 to 15 Murray St., New York, N. Y.

WILLARD R. GREEN.

Witnesses:

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F. E. BOYCE.