

No. 765,046.

PATENTED JULY 12, 1904.

P. E. & P. B. SHEE.
GRIPPING DEVICE.

APPLICATION FILED NOV. 13, 1903.

NO MODEL.

Fig. 1.

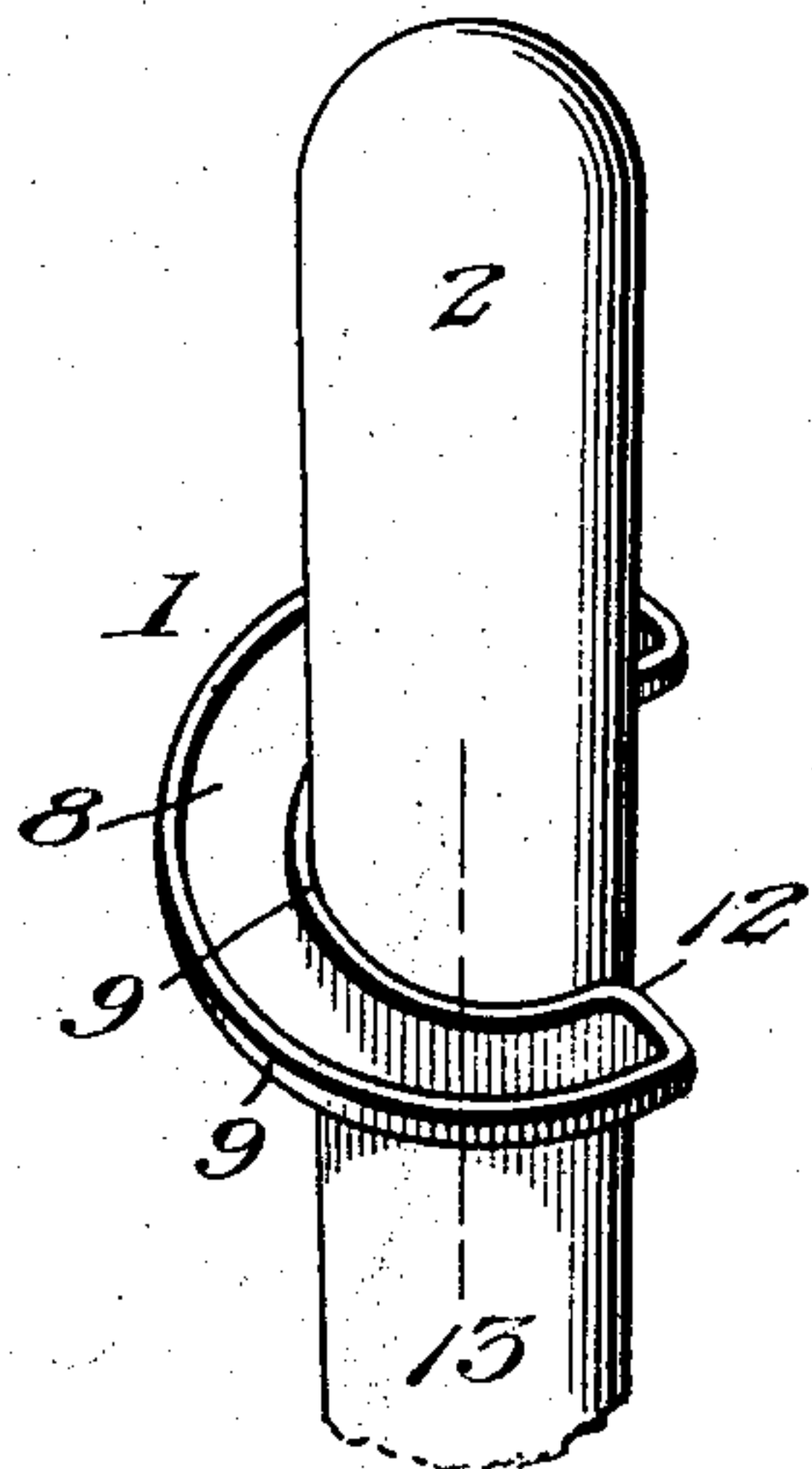


Fig. 2.

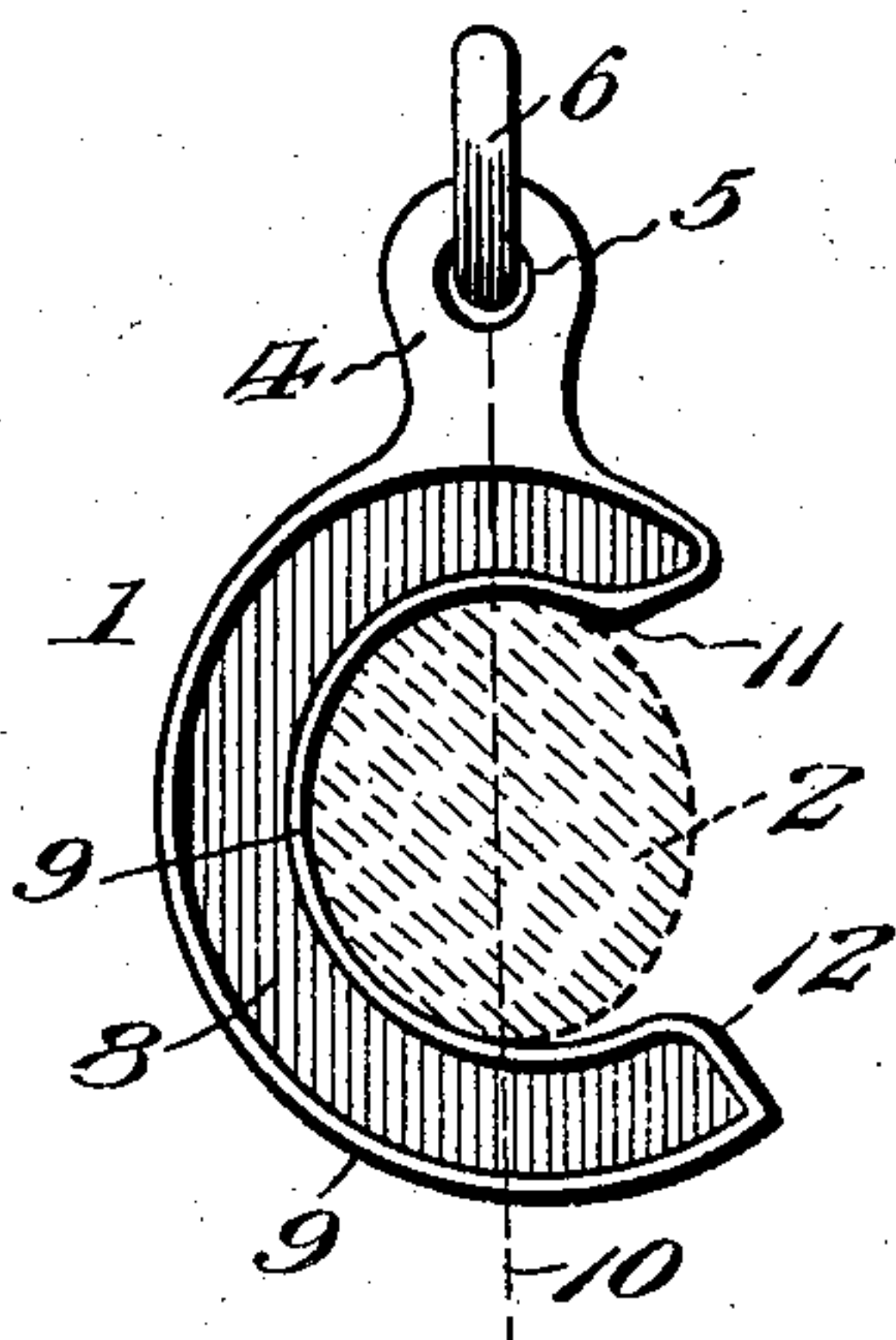


Fig. 3.

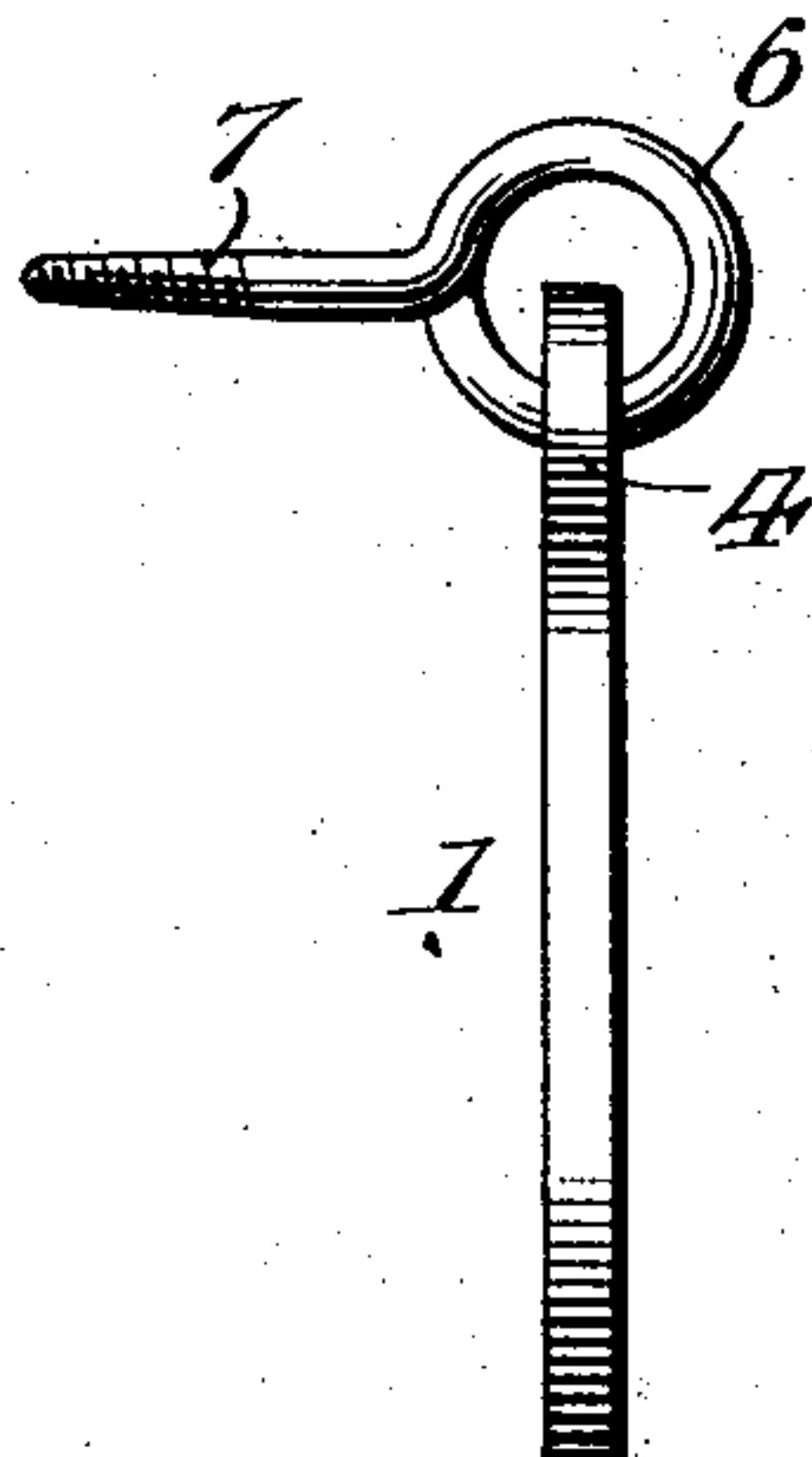


Fig. 4.

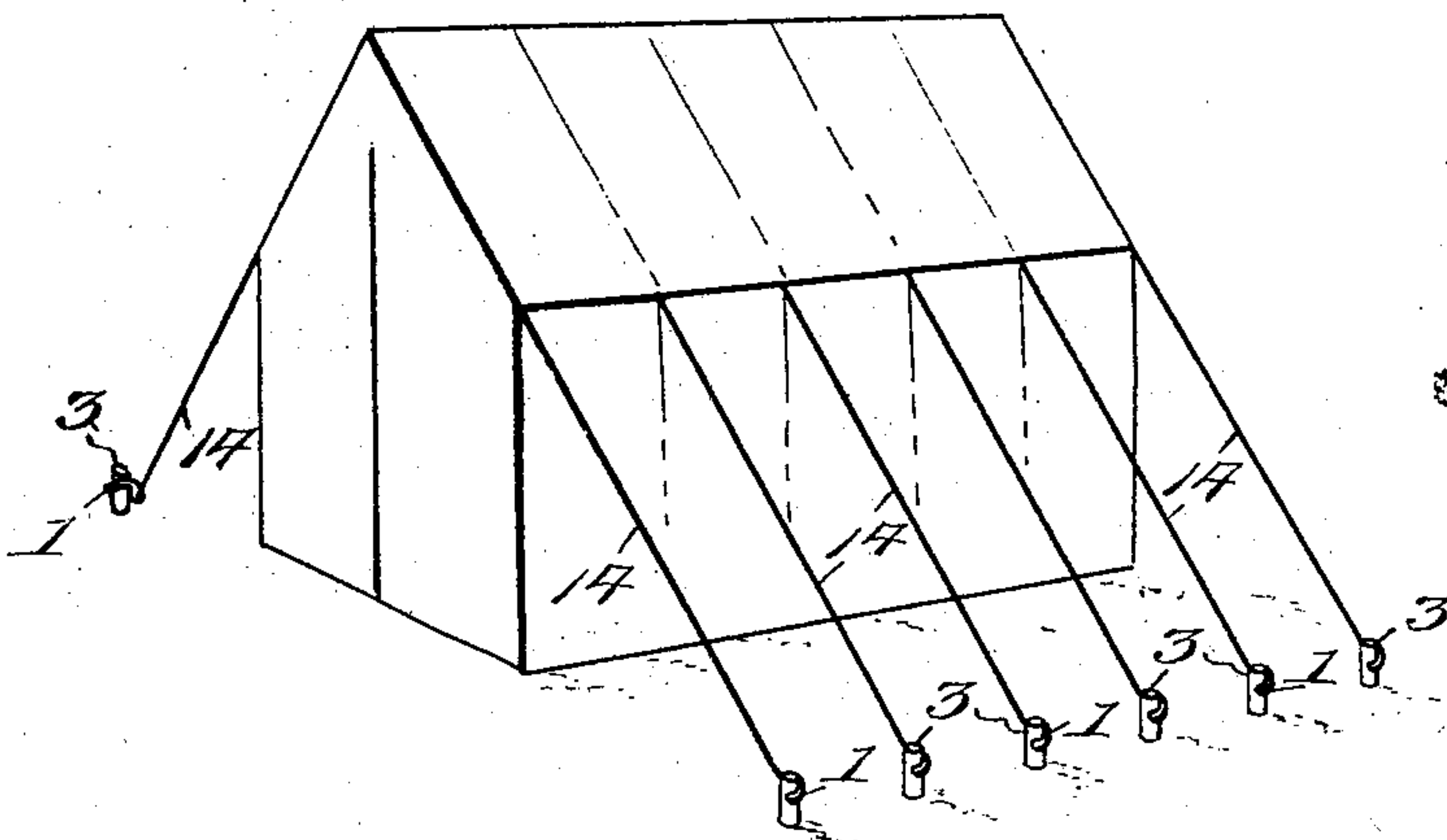
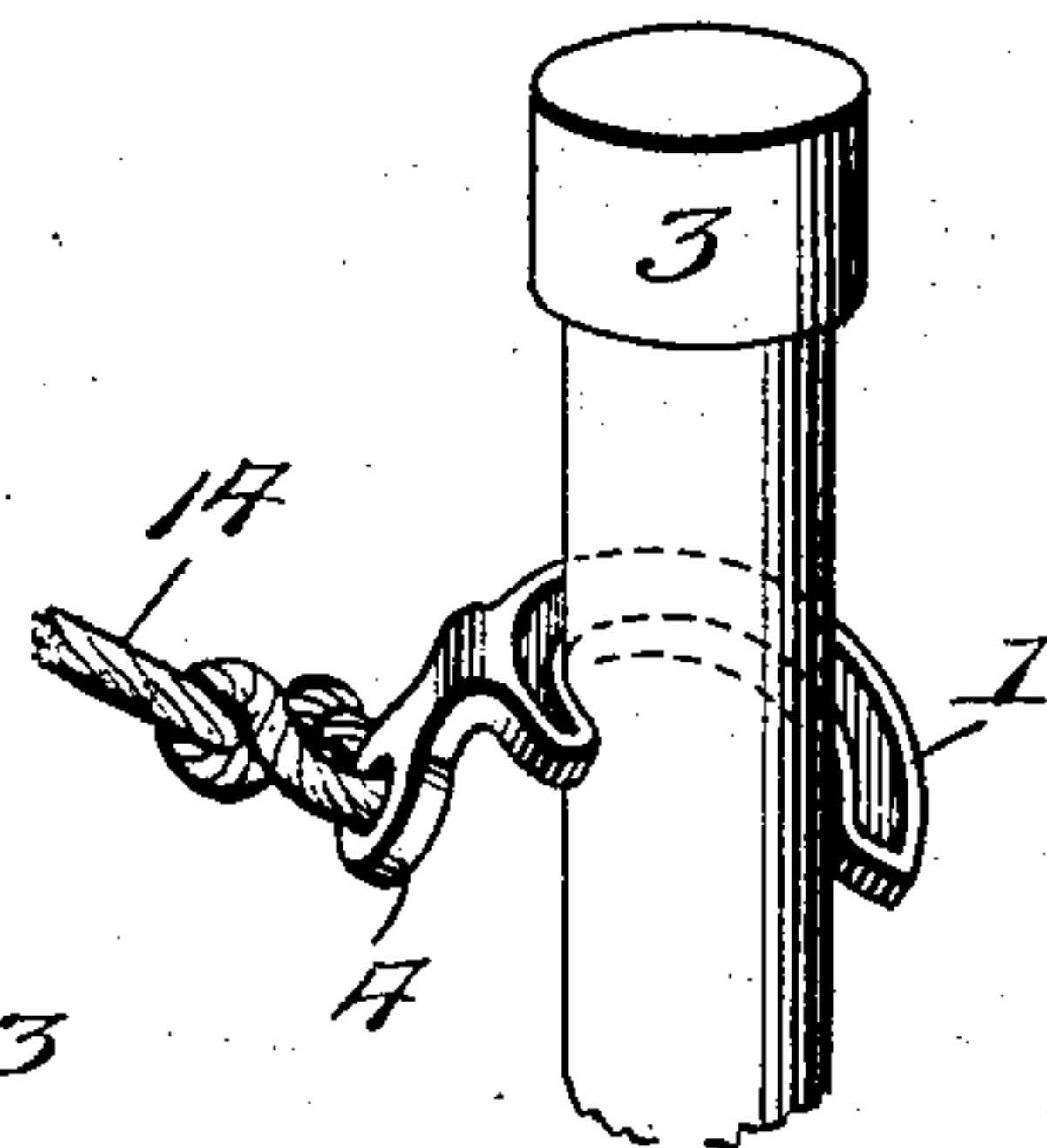


Fig. 5.



Witnesses

Edmund G. McKee
J. W. B. Day

Inventors
Parke E. Shee and
Parke B. Shee

By

Rexford M. Smith,
Attorney.

UNITED STATES PATENT OFFICE.

PARKE E. SHEE AND PARKE B. SHEE, OF LANCASTER, PENNSYLVANIA,
ASSIGNORS TO PARKE MANUFACTURING COMPANY, OF LANCASTER,
PENNSYLVANIA.

GRIPPING DEVICE.

SPECIFICATION forming part of Letters Patent No. 765,046, dated July 12, 1904.

Application filed November 13, 1903. Serial No. 181,041. (No model.)

To all whom it may concern:

Be it known that we, PARKE E. SHEE and PARKE B. SHEE, citizens of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented a certain new and useful Gripping Device, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to gripping devices, the object in view being to provide a gripping device especially adapted for use as a broom-holder, a take-up for the guy-ropes of a tent, and other similar and analogous purposes.

One object of the present invention is to provide a gripping device of the character referred to which may be manufactured cheaply, which will effectively grip and retain itself in position upon the broom-handle, tent-stake, or other article with which it is used, and which may be associated with and disassociated from such handle, stake, or other article expeditiously.

25 With the above general objects in view and other minor objects, the nature of which will more fully appear as the description proceeds, the invention consists in the novel construction, combination, and arrangement of parts, as hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a front perspective view illustrating the gripping device in engagement with the handle of a broom or like article. Fig. 2 is a plan view of the gripping device, indicating the broom-handle in dotted section-lines. Fig. 3 is an edge view of the device when not in use. Fig. 4 is a perspective view illustrating the adaptation of the device to the guy-ropes of tents. Fig. 5 is an enlarged perspective view illustrative of the use shown in Fig. 4.

Like reference-numerals designate corresponding parts in all the figures of the drawings.

The gripping device contemplated in this invention comprises a flat body portion 1, which in plan view resembles the letter C or, in other words, is in the form of an open-sided

ellipse, the said body being adapted to embrace an article such as a broom-handle 2 or a tent-stake 3 or the like and when operatively engaged with such handle or stake to assume an inclined or oblique relation thereto, as indicated in Figs. 1 and 5.

At a suitable point the body is provided with an eye 4, the opening 5 of which is adapted to receive and interlock with the eye or head 6 of a screw-eye of ordinary construction provided with a screw-shank 7, adapting the same to be screwed into a wall, partition, or other similar support, whereby the device as a whole is sustained at the proper elevation.

That part of the device which comprises the body 1 and the eye 4 is formed in one piece and is preferably of uniform thickness throughout, as illustrated in the edge view in Fig. 3. The gripping device proper may be formed either by stamping or punching the same out of sheet metal, or it may be cast or forged, as may be preferred. For the sake of ornamentation and lightness the body of the grip may be channeled out or grooved on both sides, as indicated at 8, leaving marginal flanges 9, connected by the web which intervenes between the channels or grooves 8.

The central opening within the body of the grip is elliptical, as clearly shown in Fig. 2, wherein it will be noted that the major axis of the ellipse extends through the opening in the grip-eye 4. The dotted line 10 represents the direction of strain or pull when the grip is in operation, and it will be seen that said dotted line or the line of pull passes through the opening 5, or, in other words, the point of connection between the gripping device and the screw-eye, and, further, that said line of pull coincides with the major axis of the open center of the body of the grip. It will be further observed that the open side of the ellipse, which constitutes the entrance-throat for the broom-handle, tent-stake, or other device, is located to one side of the major axis of the ellipse, the object being to obtain as wide an entrance-throat as possible without impairing the gripping efficiency of the device. It will further be noted that the heel 11 and the toe 12 of the gripping-body are at

a less distance from each other than the length of the major axis of the space within the grip-body. In other words, the width or distance across the entrance-throat is of less extent than the major axis of the open space within the gripping-body. As a result of said arrangement both the heel and toe are adapted to embrace the broom-handle or tent-stake or other device and establish a positive biting or binding engagement between the said heel and toe and the broom-handle or tent-stake, thereby insuring the retention of the gripping device in place and obviating the tendency of accidental displacement. In other words, the line of strain or binding effect between the gripping device and the broom-handle, for example, is in line with the major axis of the ellipse and the center of the broom-handle, as indicated by the line 13 in Fig. 1 and the line 10 in Fig. 2, and also in direct line with the point of connection between the grip-eye 4 and the head of the screw-eye, and as the heel and toe 11 and 12 project about equally beyond or to one side of said major axis and also approach each other after leaving the line of the major axis the said heel and toe in reality partially embrace the broom-handle, so that when the gripping device is disposed at an oblique angle to the broom-handle, as shown in Fig. 1, there will be no tendency for said handle to become dislodged, the weight of the broom or other device serving to cause a firm and secure biting or binding engagement between the angles or edges of the gripping device and the broom-handle at diametrically opposite points, which points are in line with the major axis of the ellipse and also the point of connection between the grip-eye and the screw-eye.

The head 6 of the screw 5 is passed through the grip-eye and bent to embrace the same, being of such size as to form a loose connection between the two members of the device, and the opening 5 in the grip-eye, through which the head of the screw-eye passes, is also larger than is necessary merely for the passage of the head of the screw-eye, so that provision is made for free relative movement in all directions between the body of the grip and the screw-eye. This enables the grip to be swung upward and downward or laterally in any direction whatever, so that the broom-handle may accommodate itself to the contour of the wall, partition, door, or other object into which the supporting-eye is screwed.

When the device is not in use, the grip proper swings downward and hangs vertically close to the wall, as indicated by Fig. 3.

The device hereinabove described is also adapted for connecting the guy-ropes of a tent to the stakes and for taking up slack in said guy-ropes. In this connection, however, it is preferred to bend the grip-eye 4 at an angle to the body 1 of the grip, as shown in Fig. 5, the said grip-eye in use extending downwardly and having the guy-rope 14 connected therewith, as shown. Under the arrangement last described, and illustrated in Fig. 5, the tension of the rope 14 operates to cant or tilt the gripping device on the stake, so as to cause the latter to obtain a firm hold thereon. By sliding the gripping device up or down on the stake 3 any desired tension may be placed on the guy-rope connected therewith. In all other respects the body 1 of the gripping device shown in Fig. 5 embodies the same novel features which distinguish the construction shown in Figs. 1, 2, and 3 from articles of a similar character heretofore used.

Having thus described the invention, what we claim as new is—

1. As an article of manufacture, a grip comprising a body having the shape of an open-sided ellipse with the center of the opening arranged in line with the minor axis of the open center of said body and of less extent than the major axis, and an eye projecting outward from the body and located in line with the major axis, substantially as described.

2. As an article of manufacture, a grip comprising a body having the shape of an open-sided ellipse with the center of the opening arranged in line with the minor axis of the open center of said body and of less extent than the major axis, an eye projecting outward from the body and located in line with the major axis, and a screw-eye having its head passed through the grip-eye and bent loosely around the same, so as to provide for free relative movement in all directions between the body of the grip and the screw-eye, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

PARKE E. SHEE.
PARKE B. SHEE.

Witnesses:

JOHN H. MYERS,
C. V. ROTE.