

No. 805,481.

PATENTED NOV. 28, 1905.

P. MEYER.

MEANS FOR SECURING HANDLES TO BROOMS, BRUSHES, AND THE LIKE.

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Fig.1

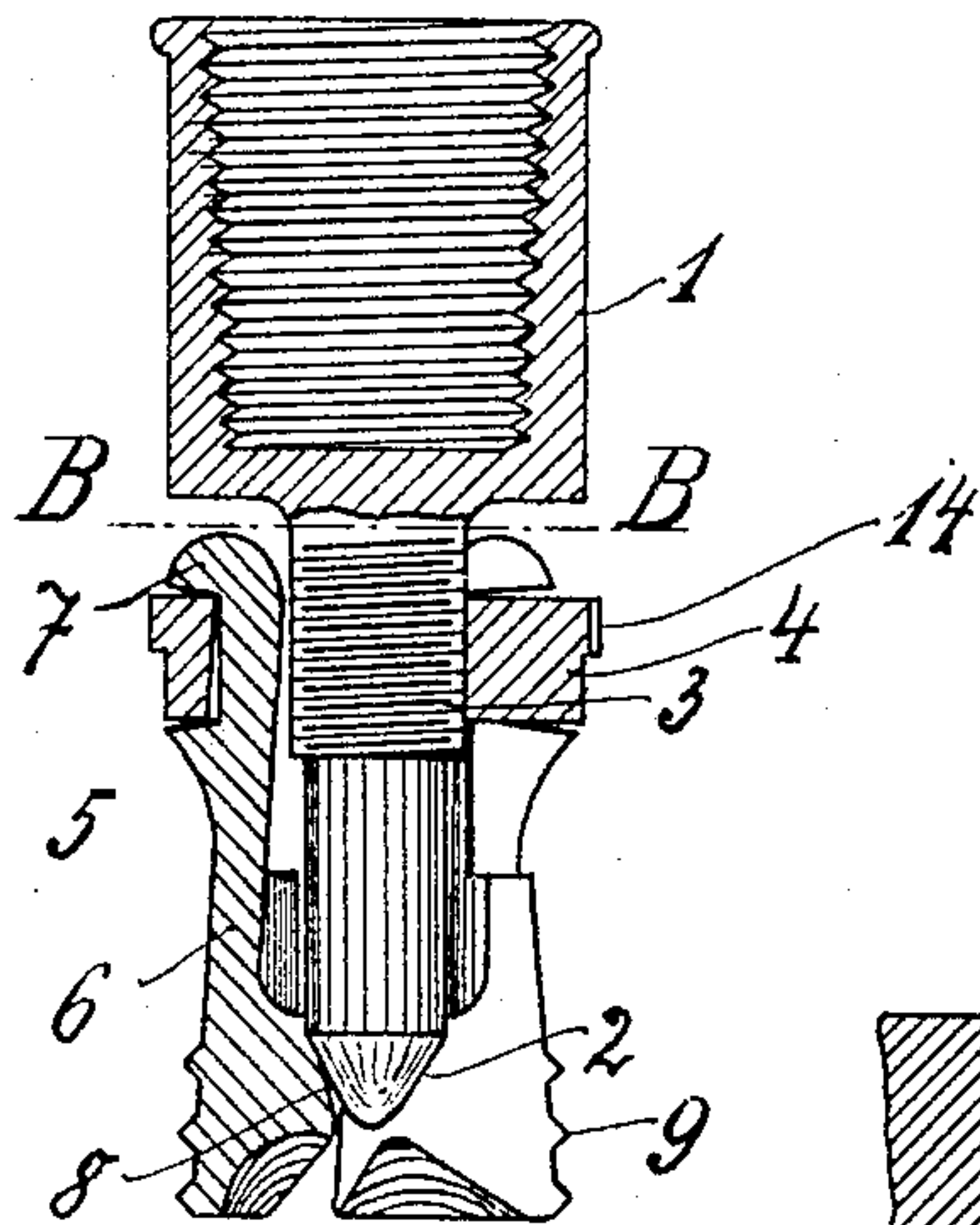


Fig.3

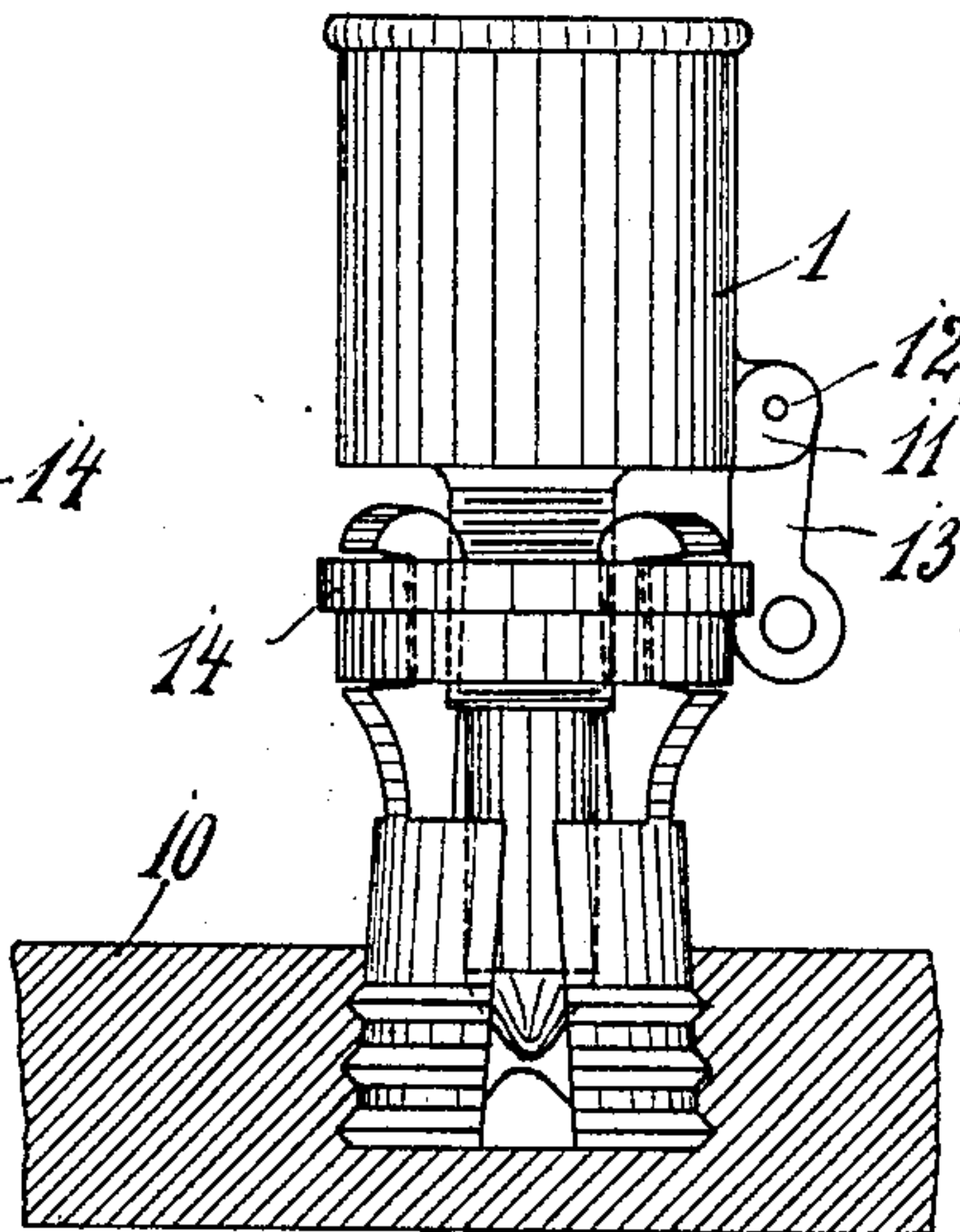


Fig.2

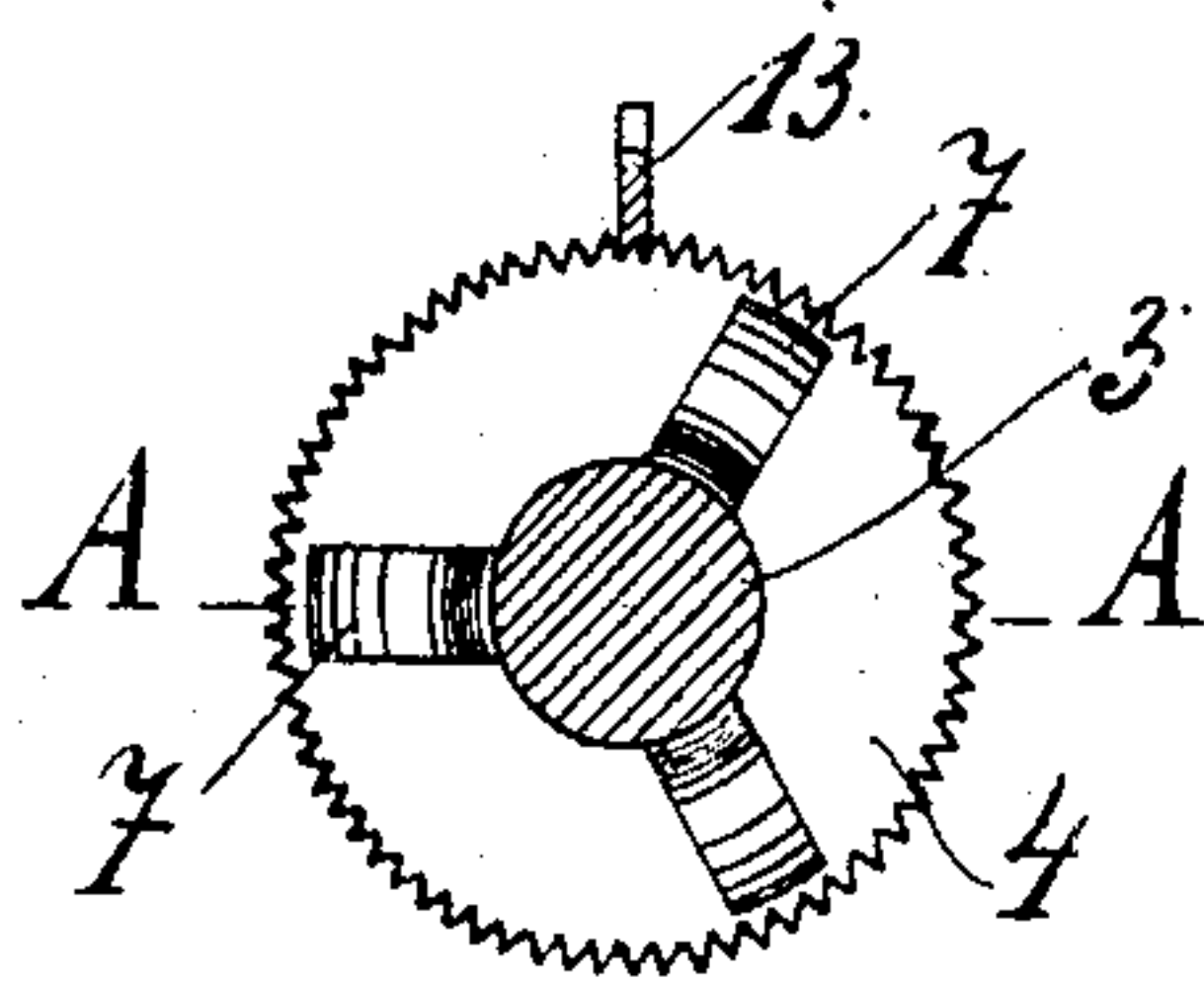


Fig.4

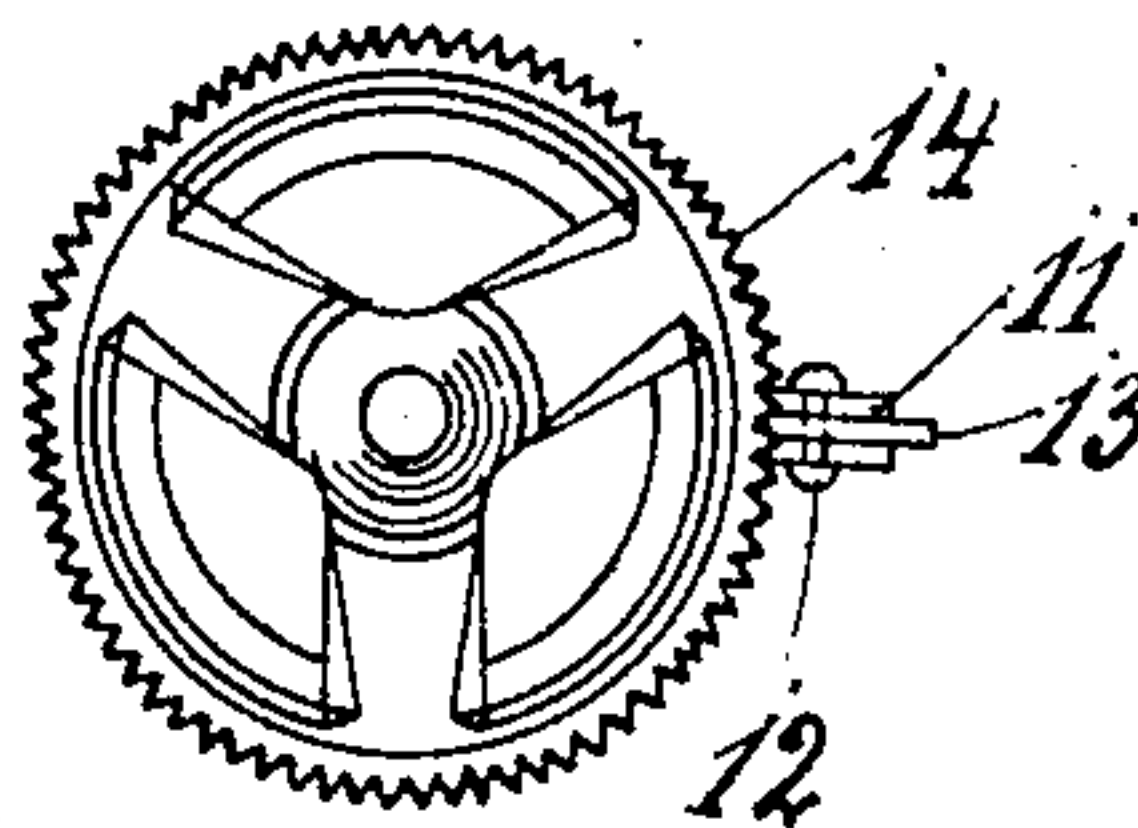
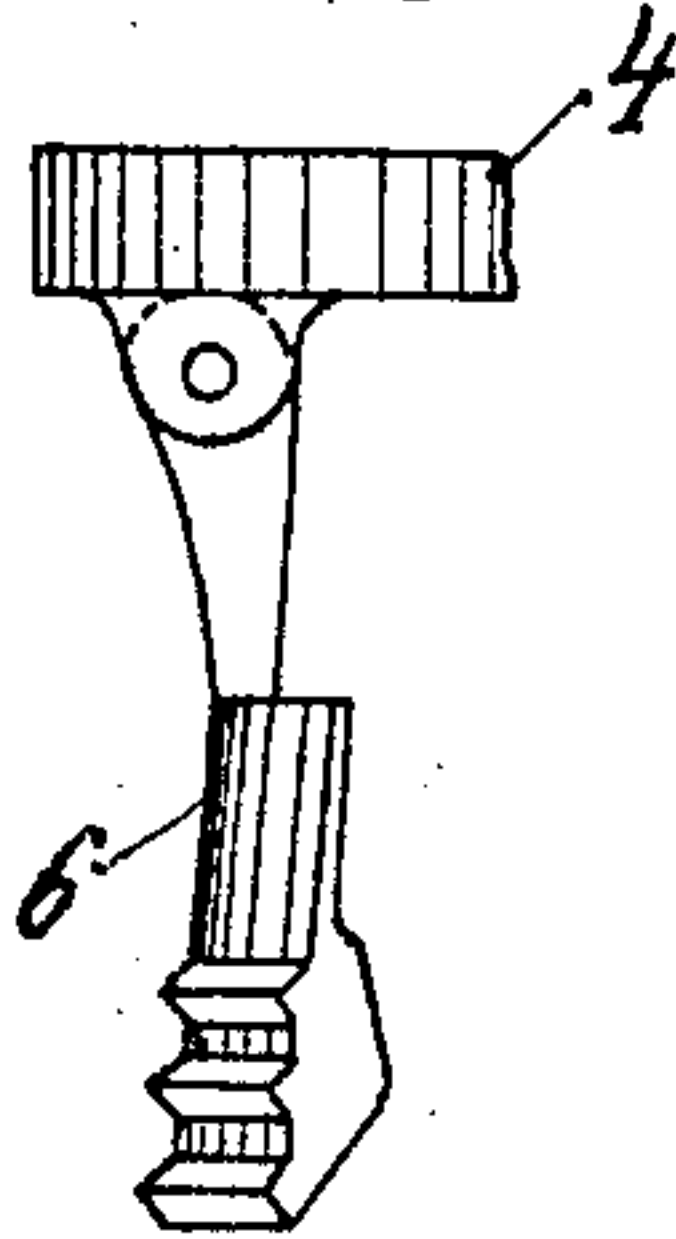


Fig.5



Witnesses:-

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MEANS FOR SECURING HANDLES TO BROOMS, BRUSHES, AND THE LIKE.

No. 805,481.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed November 7, 1904. Serial No. 231,756.

To all whom it may concern:

Be it known that I, PETER MEYER, engineer, a subject of the King of Prussia, German Emperor, residing at Nordstrasse 27, Cologne-Nippes, in the Rhineland, Prussia, German Empire, have invented certain new and useful Improvements in Means for Securing Handles to Brooms, Brushes, and the Like, of which the following is a specification.

My invention relates to improvements in detachable unions or handle-holders for uniting handles with the body portions of brushes and the like.

My invention consists of a socket or the like for the brush-handle, together with an expansible device adapted to be sunk in the body portion of a brush, which device is expanded and locked in position in the brush-body when it is connected with the handle.

My invention will be more fully described in connection with the accompanying drawings and will be more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a vertical sectional view on line A A of Fig. 2, showing one embodiment of my invention as the same appears detached from the handle and brush. Fig. 2 is a horizontal sectional view on line B B of Fig. 1. Fig. 3 is an elevation of the parts shown in Fig. 1, illustrating the manner of securing the device to the solid or body portion of a brush or the like. Fig. 4 is a bottom view of the holder shown in Fig. 3 as the same appears when detached from the brush. Fig. 5 is a detail view of a modification of the expansible device.

Like characters of reference designate similar parts throughout the different figures of the drawings.

As shown, my invention comprises a socket 1, provided with a threaded interior for the reception of the brush-handle. The socket 1 is provided with a shank having exterior screw-threads 3 and a lower conical portion 2. The socket 1 carries a locking-lever 13, which is pivotally mounted at 12 upon lugs 11, formed integral with the socket.

The remaining portion of the device, which is adapted for anchorage in the body portion of the brush, comprises an expansible member composed of three gripping-plates 6, provided on their lower ends with annular ribs 9. Each of said plates is provided with a periphery adapted for engagement with a

cylindrical recess formed in the brush-body 10. Said plates are also provided with interior tapering surfaces 8, adapted for engagement with the conical end 2 of the socket, whereby the plates 6 are expanded after being inserted in the brush. Said plates 6 are loosely connected to a locking-ring 4, provided with interior screw-threads adapted for engagement with the threaded shank of the socket 1. Radially-extending slots or recesses extending outwardly from the interior threaded wall of the ring are formed for the reception of the upper reduced ends 7 of the plates 6. Said reduced ends 7 are provided with recesses or jaws which loosely engage the ring on its upper and lower surfaces in a manner to permit movement of the plates 6 during the expansion thereof. It will be obvious that the plates 6 may be connected with the ring in any desirable manner—such, for instance, as the pivotal connection shown in Fig. 5. The ring 4 is provided on its periphery with locking-teeth 14, adapted for engagement with the locking-lever 13. A recess is formed, as shown in Fig. 3, in the brush-body for the reception of the expansible device.

When the handle has been secured to the socket 1, the shank of the latter is inserted within the ring 4, so that the threaded portion 3 engages the threaded interior of the ring. As the handle is turned and the shank travels downwardly in the ring the conical end 2 engages the tapering surface 8, whereupon the members 6 are expanded outwardly. The turning of the handle will be continued until the annular ribs 9 are embedded in the brush-body, whereupon by engaging the locking-lever 13 with the teeth 14 the parts will be effectively locked in their adjusted or anchored position.

The device of my invention provides a convenient means for readily detaching handles from brush-bodies and the like and rigidly secures the handle in place when the same is anchored. The various parts of the improved holder can be easily removed and replaced if broken or injured and form a structure which is cheaply manufactured and effective in operation.

What I claim, and desire to secure by Letters Patent, is—

1. A detachable union for brushes and handles comprising an expanding member, comprising a threaded shank having a tapering

end, an expansible device sunk in the brush-body comprising gripping-plates having interior tapering engaging surfaces, and a locking-ring to which said plates are loosely secured having interior threaded portions for engagement with said shank.

2. A detachable union for brushes and handles comprising an expanding member fastened to the handle and provided with a threaded shank having a lower tapering end, an expansible device sunk in the brush-body and comprising gripping-plates having interior tapering engaging surfaces, and a locking-ring to which said plates are loosely secured having interior threads for engagement with the shank.

3. A detachable union for brushes and handles comprising a socket provided with a threaded shank having a lower tapering end, an expansible device sunk in the brush-body and comprising gripping-plates having interior tapering engaging surfaces and exterior ribs, said plates having reduced upper ends provided with outwardly-opening jaws, and

a locking-ring provided with recesses receiving said jaws and interior screw-threads for engagement with said shank.

4. A detachable union for brushes and handles comprising a socket secured to the handle and provided with a threaded shank having a lower conical end, a locking-lever pivotally mounted on said socket, an expansible device sunk in the brush-body and comprising gripping-plates having interior tapering engaging surfaces and exterior ribs, said plates having reduced upper ends provided with jaws, and a locking-ring provided with radially-extending recesses for said jaws and interior screw-threads engaging said shank, said ring having exterior locking-teeth for engagement with said locking-lever.

In testimony whereof I affix my signature in presence of two witnesses.

PETER MEYER.

Witnesses:

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