

G. W. DUVALL.

BROOM.

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915,164.

Patented Mar. 16, 1909.

Fig. 1.

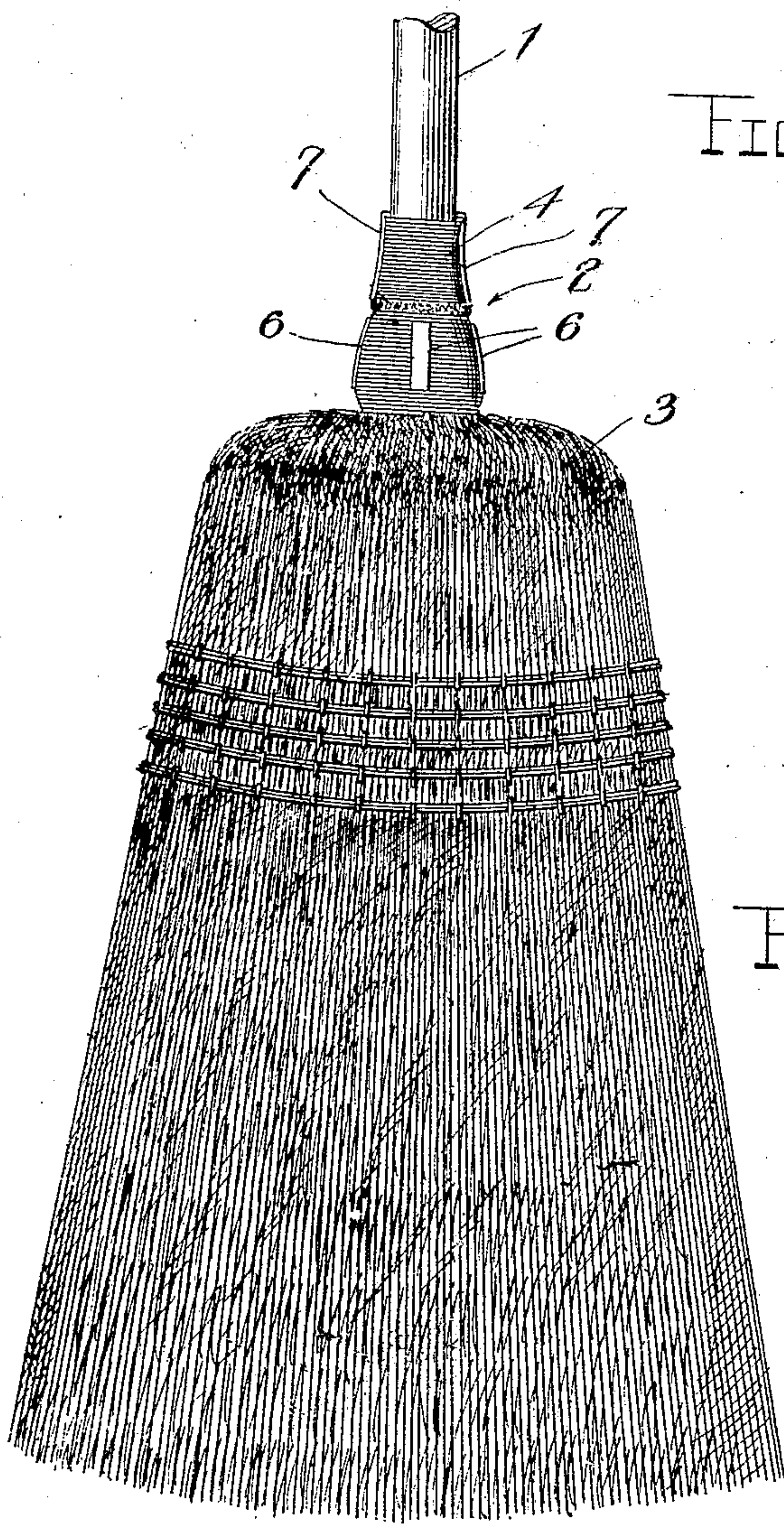


Fig. 2.

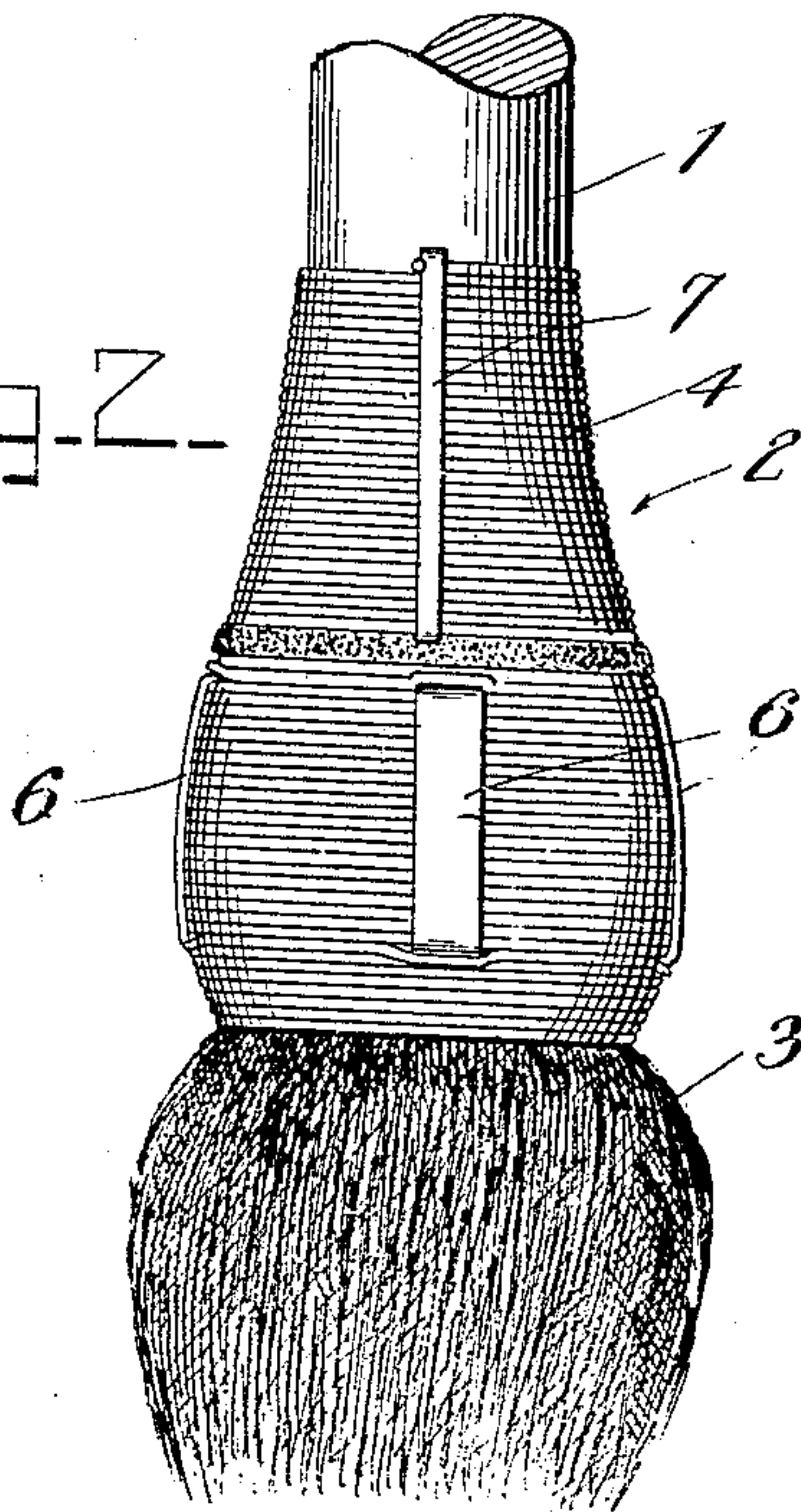
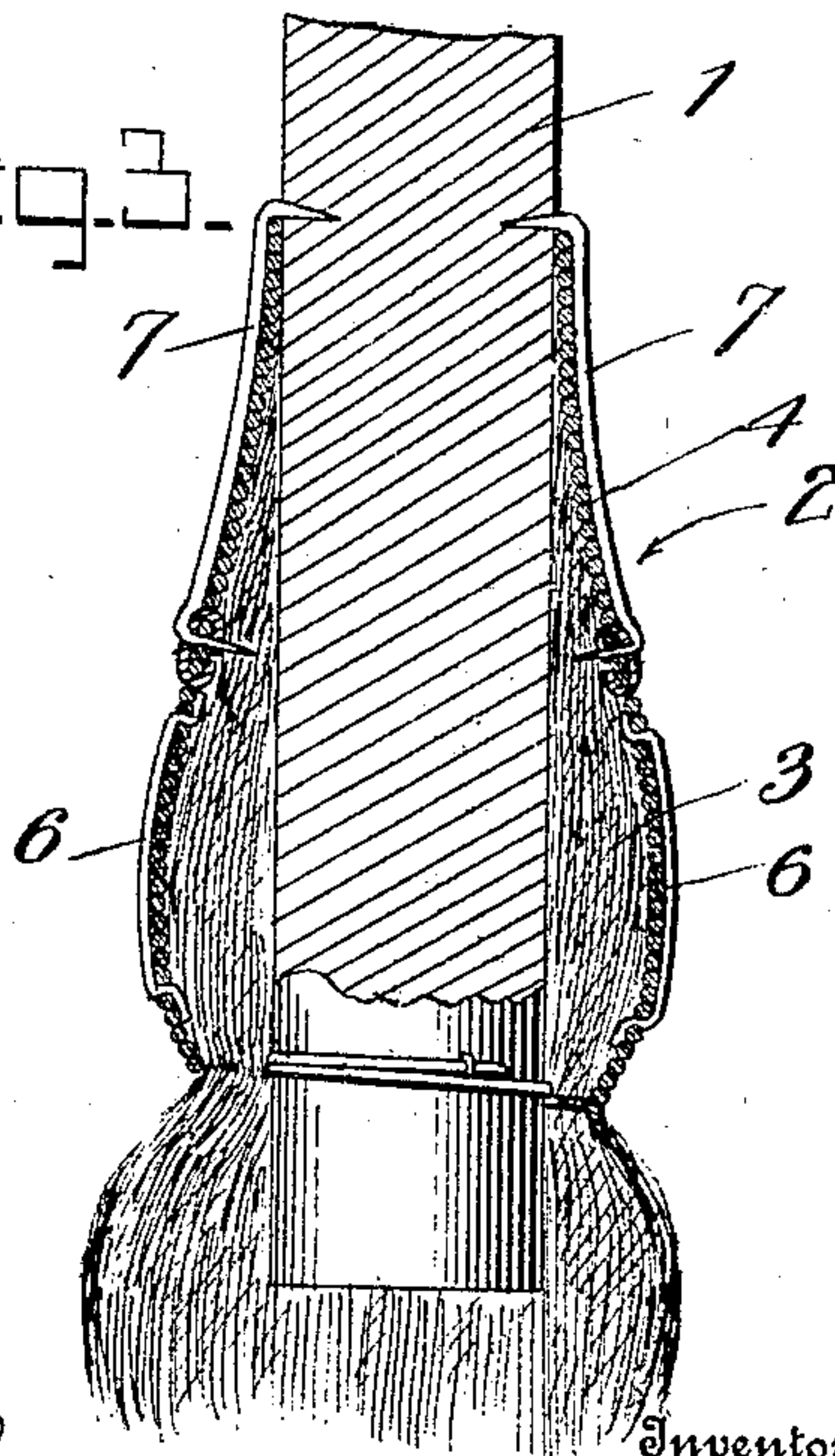


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE W. DUVALL, OF DAVENPORT, IOWA, ASSIGNOR TO LEE BROOM & DUSTER COMPANY,
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BROOM.

No. 915,164.

Specification of Letters Patent.

Patented March 16, 1909.

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To all whom it may concern:

Be it known that I, GEORGE W. DUVALL, a citizen of the United States, residing at Davenport, in the county of Scott and State of Iowa, have invented certain new and useful Improvements in Brooms, of which the following is a specification.

This invention relates to improvements in brooms, and more particularly to certain novel means for securely holding the binding wire that forms the finish to the neck or "girth" in position, and to protect the same against displacement, and it consists of the novel combination and arrangement of the several parts of the device as hereinafter described, illustrated in the drawing, and more particularly pointed out in the claim.

In the manufacture of brooms it is the usual practice to dampen the broom straw before winding it upon the broom-handle, to render it pliable, so that it may be easily bent or turned to any desired position without being broken. In this dampened condition the straw is placed in bunches upon the handle, and secured thereto by means of wire or otherwise, and this process is continued until the broom is finished, and when so finished the straw is tightly bound to the handle. The straw, however, being damp is considerably swollen when it is wound up into the broom, and as it dries out a greater or less shrinkage thereof occurs, thus permitting the wire binding it to the handle to loosen up, become displaced, and permits the said straw portion of the broom to loosen up rendering the broom defective and objectionable.

By means of my present invention this displacement of the wire, although it may become loose, will be prevented by means of suitable plates or strips that cover and hold it in place, and at the same time protects the wire wound upon the neck or "girth" of the broom. These strips are secured in position by having their respective ends secured beneath one or more of the wire wrappings while the portions of the strips or plates between their ends rest tightly upon the intermediate wire wrappings and hold the same firmly in the position in which they were originally wound, and prevent any slipping or displacement thereof, either by reason of

the shrinkage of the straw, or from knocks or blows against said wrappings during the use of the broom. 55

In the drawing: Figure 1 is a side elevation of my improved broom. Fig. 2 is an edge elevation of the same, and Fig. 3 is a longitudinal central section of the neck or "girth" portion of the broom, showing my improvement applied thereto. 60

Referring to the several views, the numeral 1 indicates the handle; 2 the neck or "girth", and 3 the straw-portion of the broom.

In the practice of my invention, the broom-straw is secured to the handle in the usual manner. When the straw is firmly secured to the handle I cover the neck or "girth" 2 of the broom with a closely coiled wire which practically forms a solid covering. In placing this coil of wire 4 on the neck or "girth" of the broom I also combine therewith strips or plates 6. The plates 6 are held on the neck or "girth" of the broom by having their respective ends secured under some of the coils thereof, thus allowing the intermediate portions of said plates to rest on the surface of said coiled wire of said neck or "girth", to securely hold the same against displacement should the straw of the neck or "girth" shrink. The end of the wire forming the cover for the neck or "girth" is secured in position by a nail, staple, or other suitable means. The strips or plates 6, as before stated, are designed to securely hold the coils of wire on the neck or "girth" to the position in which they were originally wound, and to protect them against displacement. These plates, while serving the purpose of holding the coiled wire in position on the neck or "girth", may contain the name of the manufacturer, or the trade-names of the brooms, or any other desired inscription. The wire coils of the neck or "girth" are continued down onto the handle of the broom for the purpose of providing a neater finish to the broom. That portion of the wire wrapping that is continued upon the handle may be provided with a plurality of stays or braces 7, preferably two in number, and made of metal. These stays or braces are arranged vertically and are secured in position with their inward bent ends, which are forced into the 95 100

handle, as shown in Fig. 3. These braces serve to protect the coils on the handle, and to hold them in position.

Having thus described my invention what
5 I claim is:

In a broom, a closely wire-coiled covered neck or "girth", having in combination therewith metallic strips or plates setting over and tightly against the intermediate coils

and having their respective ends secured 10 under coils above and below said intermediate coils, as and for the purpose set forth.

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

GEORGE W. DUVALL.

Witnesses:

J. W. KINNEMANN,
WM. C. BURRMANN.