

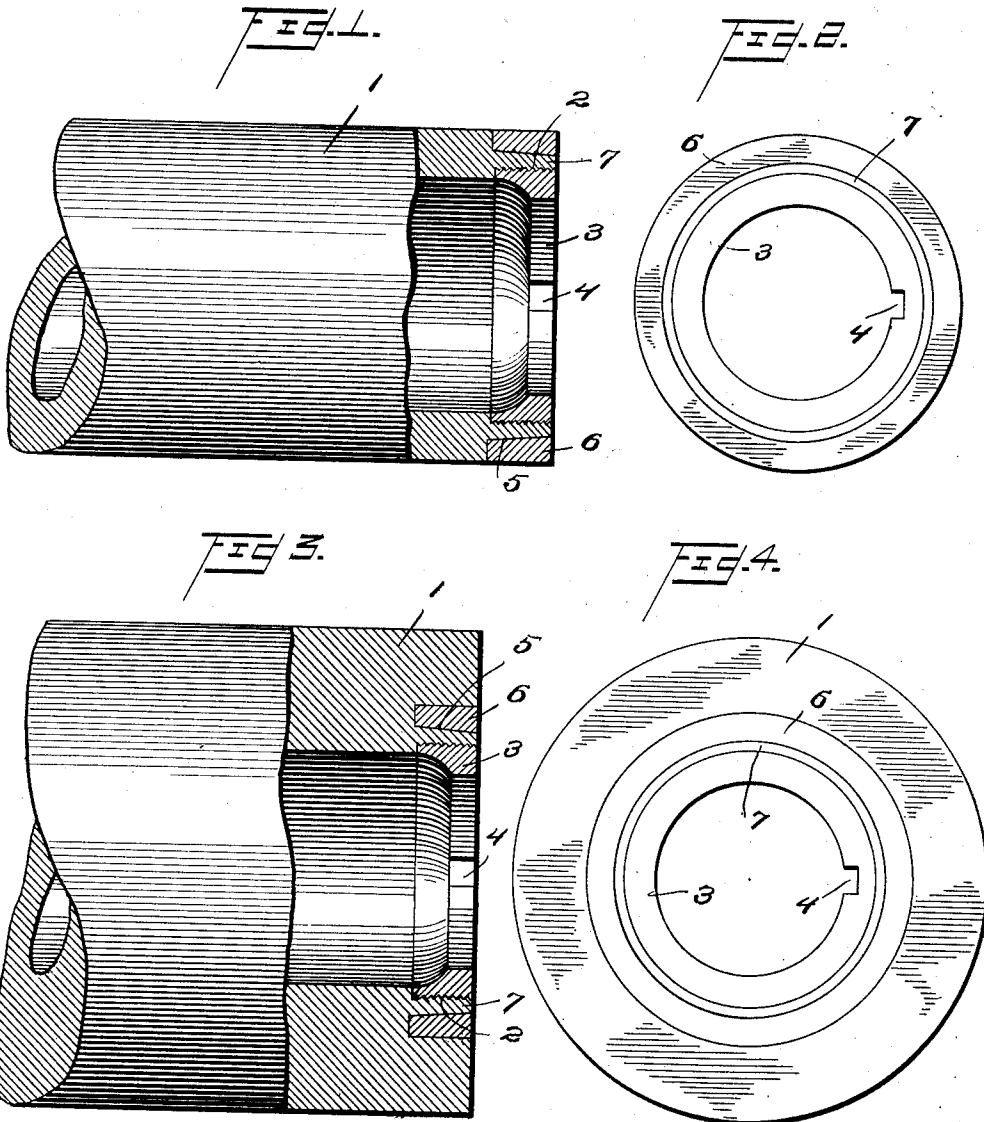
F. A. VIESER.

ROLL.

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1,018,457.

Patented Feb. 27, 1912.



Witnesses

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FREDERICK A. VIESER, OF CAMDEN, NEW JERSEY.

ROLL.

1,018,457.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERICK A. VIESER, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Rolls, of which the following is a specification.

My invention relates to improvements in rolls, designed primarily for use in the manufacture of wall paper, the object of the invention being to provide an improved end construction for said rolls, which will securely lock a shaft engaging collar within the hollow end of the roll, without the employment of screws of any sort, and which will securely hold the collar and lengthen the life of the roll.

A further object is to provide improvements of this character which are of extremely simple inexpensive construction, strong and durable in use.

Heretofore in the manufacture of rolls of this character, it has been common to secure a metal ring to the end of the roll by means of screws which are driven into the wood, and this ring constitutes an interlocking part for the key of the shaft. In the course of time, the screws will work loose, and where the roll is small, such screws are apt to, and frequently do, split the wood of the roll. To overcome these objections, and to provide a roll which is stronger in its end construction than heretofore made, is the primary object of my invention, and consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a broken view partly in elevation and partly in longitudinal section illustrating my improvements when applied to a relatively small roll. Fig. 2, is an end view of Fig. 1. Fig. 3, is a view similar to Fig. 1, showing my improvements applied to a larger roll, and Fig. 4, is an end view of Fig. 3.

1 represents a roll which is of wood, and of a construction desirable for the manufacture of wall paper. This roll is hollow, at least in its end portions, and is provided with an internal annular recess 2 to receive a metal collar 3. This metal collar is provided with a notch 4 to receive the key of

the shaft to compel the roll to turn with the shaft.

In the construction shown in Figs. 1, and 2, in which a relatively small roll is shown, said roll is made with an annular external groove 5 for the reception of a wedge ring 6. This groove 5, while it appears in the drawings as having its inner wall inclined, as a matter of fact such wall is at right angles to the end wall, and it only assumes this shape when the wedge ring 6 is driven onto the end of the roll. The outer wall of the wedge ring lies flush with the outer wall of roll 1, while the inner wall is inclined, so that the wedge ring is driven onto the roll, and that portion of wood illustrated at 7 is forced tightly against the outer face of a collar 3. Collar 3, as well as the ring 6, are preferably cast, and the outer face of collar 3 is milled or turned so as to provide annular grooves into which the wood is forced by the wedge ring 6. In other words, this collar 3 has its outer face so constructed that the wood when driven thereagainst will securely bind and in effect, lock the collar 3 against any independent movement whatever, either rotary or longitudinally of the roll. A structure of this kind provides a smooth finish at the end of the roll, insures a strong end on the roll, and prevents any possibility of the roll splitting or the collar becoming loose.

In the construction shown in Figs. 3, and 4, as the roll 1 is of greater diameter than the wedge ring 6, a circular groove is cut into the end of the roll, and the wedge ring 6 driven therein. This forces the wood against the collar 4, and the construction is the same in all other respects.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A roll having a circular recess in its end, a collar positioned in said recess, and a wedge ring of appreciably greater diameter than the collar having its inner face

beveled, and forced against the roll, pressing the wood of the roll inwardly against the collar, said collar having annular grooves on its outer face and into which the material
5 of the roll is forced by said ring, substantially as described.

2. A roll having an internal and an external groove at its end, a collar fitting within the internal groove and having its outer face
10 rough, and a wedge ring having its inner face beveled and forced into the external

groove pressing the wood between said ring and said collar, into tight engagement with said collar, substantially as described.

In testimony whereof I have signed my
15 name to this specification in the presence of two subscribing witnesses.

FREDERICK A. VIESER.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."