A. T. PETERSEN.

GLIDE CASTER.

APPLICATION FILED JUNE 3, 1914.

1,155,269.

Patented Sept. 28, 1915.

2 SHEETS—SHEET 1.

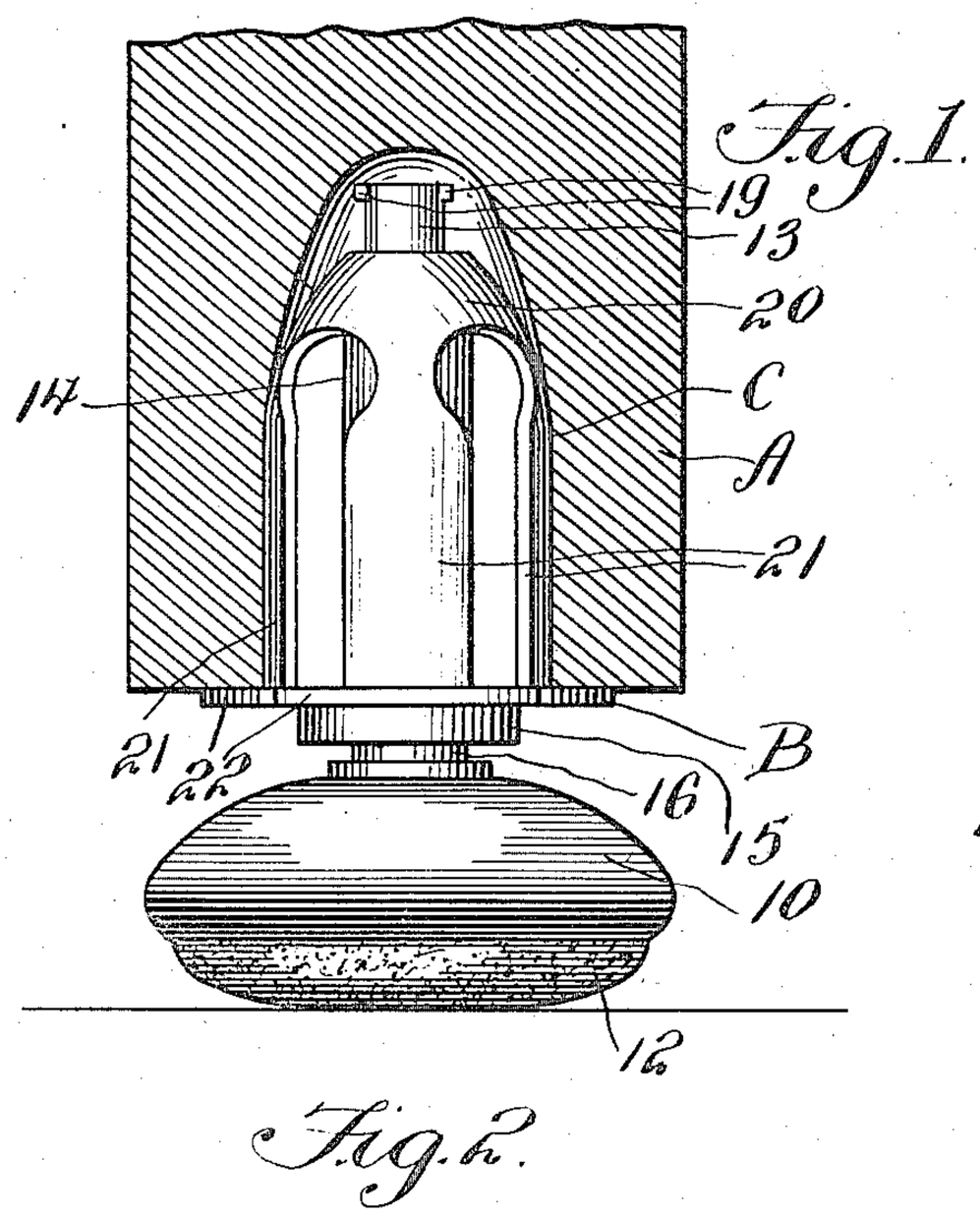


Fig. 1.

Fig. 2.

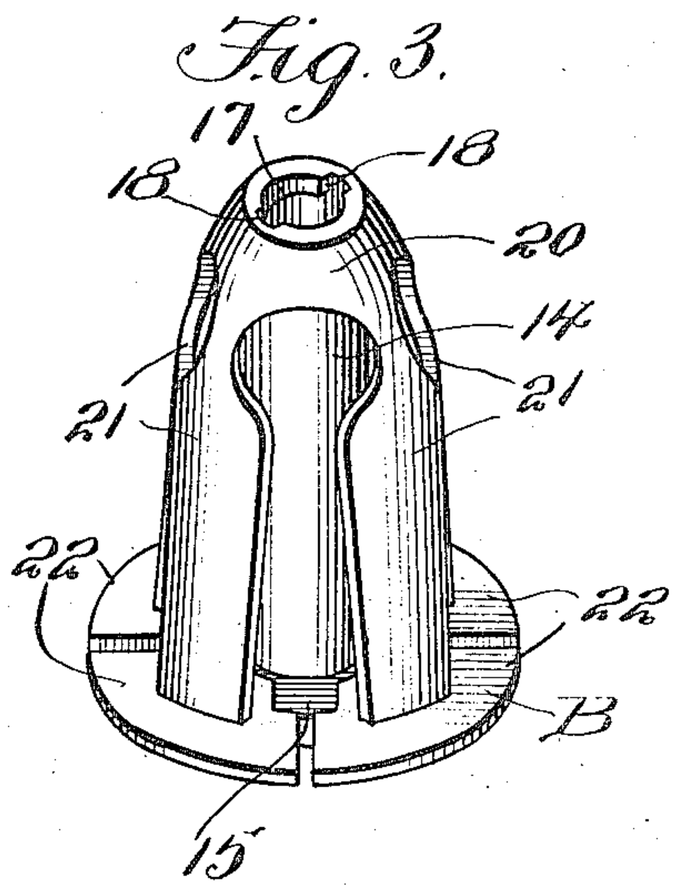
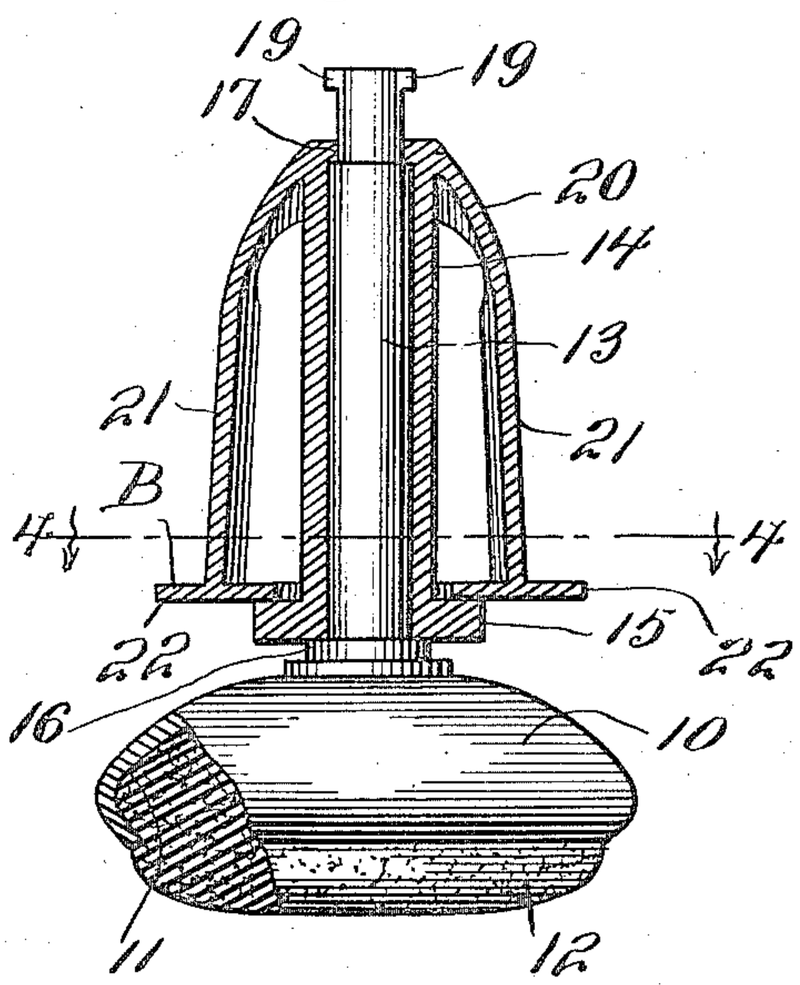


Fig. 3.



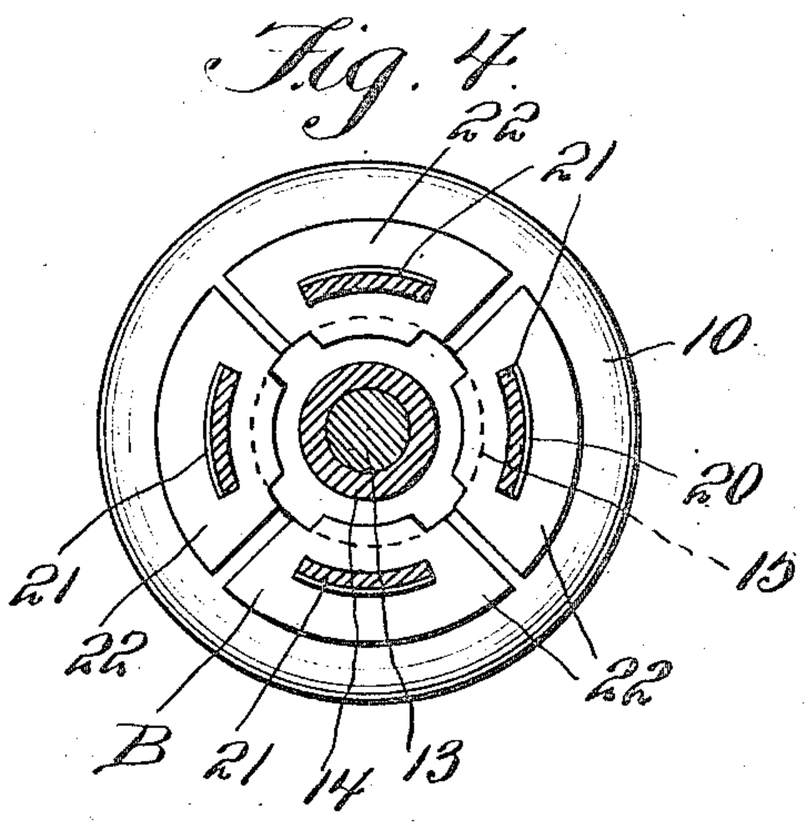


Fig. 4.

Witnesses

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2 SHEETS—SHEET 2.

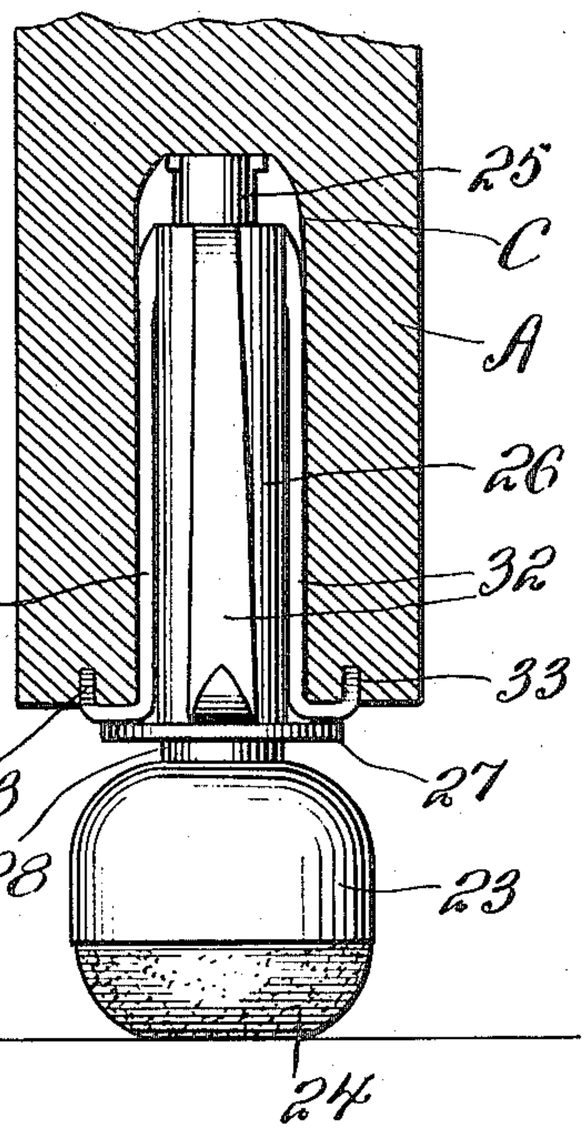

Fig. 5

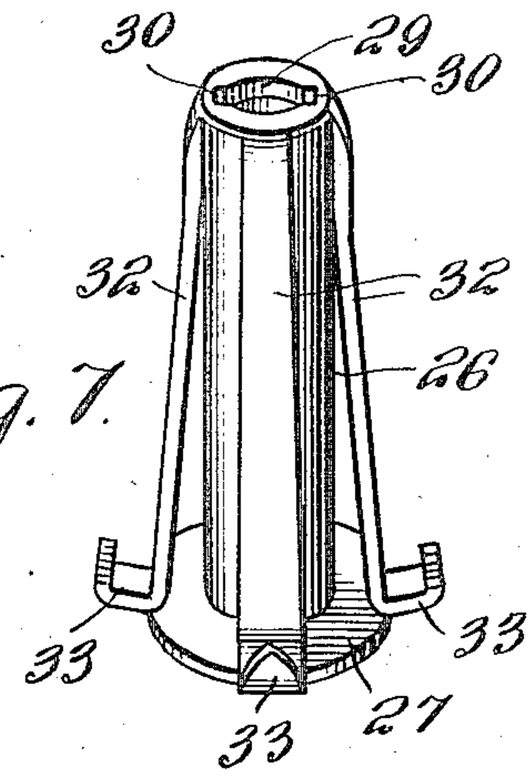

Fig. 7.

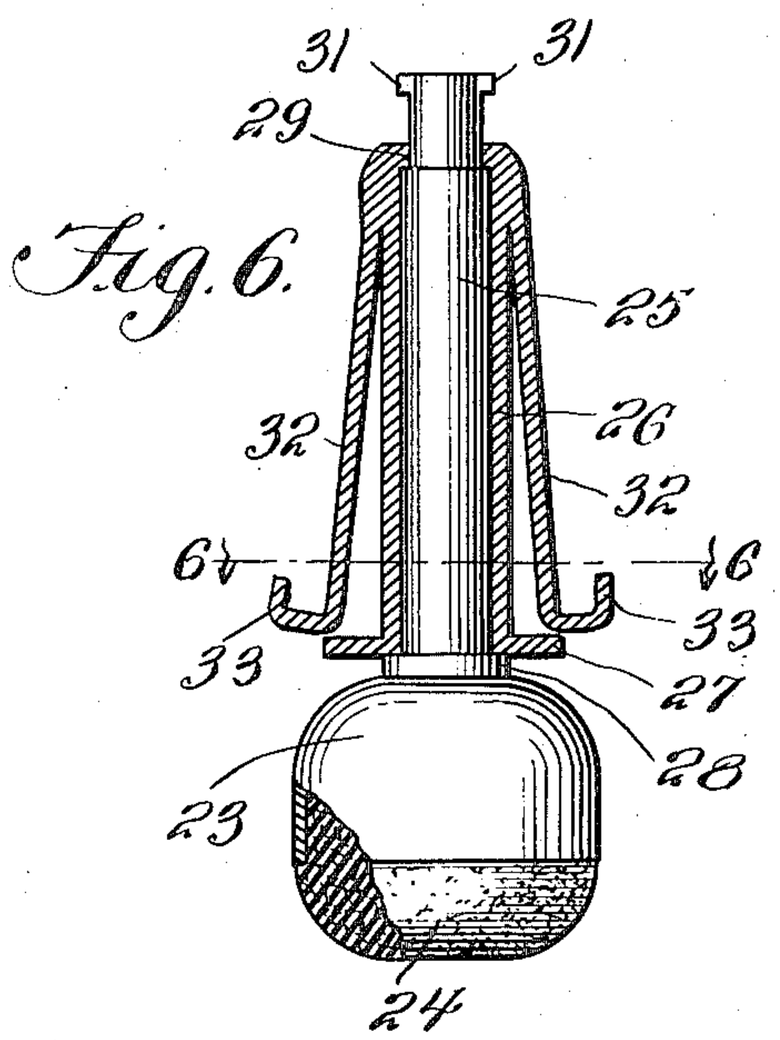

Fig. 6.

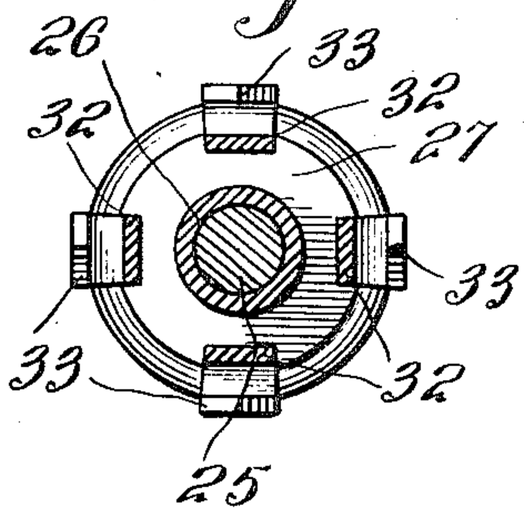

Fig. 8.

Witnesses

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UNITED STATES PATENT OFFICE.

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GLIDE-CASTER.

1,155,269. Specification of Letters Patent. Patented Sept. 28, 1915.

Application filed June 3, 1914. Serial No. 842,718.

To all whom it may concern:

Be it known that I, ANDREW T. PETERSEN, a citizen of the United States, residing at Colorado Springs, in the county of El Paso and State of Colorado, have invented new and useful Improvements in Glide-Casters, of which the following is a specification.

The invention relates to furniture casters, and more particularly to the class of glide casters for use in furniture.

The primary object of the invention is the provision of a caster wherein the tread thereof is constructed to prevent the scratching of the flooring or foundation when supporting an article of furniture, and which will enable the latter to glide thereover so that the article of furniture can be conveniently moved from one point to another irrespective of the unevenness in the flooring or foundation, and also which will obviate the wrinkling of a floor covering should the article of furniture be moved thereon.

Another object of the invention is the provision of a caster which can be readily fastened in an article of furniture so as to prevent the dropping of the castor therefrom when the article of furniture is lifted, yet the castor proper can be readily detached from the article of furniture without necessitating the removal of its holder therefrom.

A further object of the invention is the provision of a caster which will readily glide over a floor or foundation whether having a polished or roughened surface, and which will obviate the marring or scratching of the floor or foundation when the article of furniture supported by the casters is being moved, the casters being of novel construction to permit the automatic adjustment thereof in event of unevenness in the flooring or foundation, and the ready mounting thereof in position in an article of furniture or removed therefrom, the holder for the caster being constructed to permit the convenient fastening of the same in the article of furniture so as to avoid the possibility of the dropping of the caster or its holder when the article of furniture is lifted.

A still further object of the invention is the provision of a caster of this character which is extremely simple in construction, reliable and efficient in operation, strong, durable, and inexpensive in manufacture.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts as will be hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereunto appended.

In the drawings:—Figure 1 is a fragmentary vertical sectional view through the support of an article of furniture, showing the caster constructed in accordance with the invention mounted therein. Fig. 2 is a vertical sectional view through the caster. Fig. 3 is a perspective view of the holder. Fig. 4 is a sectional view on the line 4—4 of Fig. 2. Fig. 5 is a view similar to Fig. 1, showing a modified form of caster. Fig. 6 is a vertical sectional view thereof. Fig. 7 is a perspective view of the holder. Fig. 8 is a sectional view on the line 8—8 of Fig. 6.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

Referring to the drawings in detail, A designates a portion of the support for an article of furniture, for example, the leg thereof, in which is fitted the caster hereinafter fully described.

The caster comprises a glide knob 10 formed in its tread face with a socket 11 in which is fitted a tread body 12 preferably made from leather, although the same may be made from any other flexible or resilient material or composition of materials, while rising centrally from the knob 10 is a stem or shank 13, the said knob and shank being preferably made from metal, the shank being rotatably and detachably engaged in a holder hereinafter fully described.

The holder comprises a sleeve 14 formed at one end with an external annular flange 15 forming a bearing to coöperate with an annular shoulder 16 formed concentrically about the shank or stem 13 when the latter is engaged in the sleeve 14, while the opposite end of the said sleeve is formed with an inturned circular flange 17 provided with diametrically opposed notches 18, the shank or stem 13 being of greater length than the sleeve 14 and formed at its free end with diametrically opposed nibs or lugs 19 which are of a size corresponding to the notches 18 so as to pass therethrough for detachably locking the shank or stem 13 in the sleeve 14, and in this manner the caster is fastened in the holder. Integral with the upper end of the sleeve 14 is a split resilient bonnet

20 forming a plurality of spaced downwardly divergent resilient limbs or arms 21 which support sectors 22 forming a sectional ring B concentric to the sleeve 14 and contiguous to the flange 15, the bonnet 20 being adapted for insertion in the socket C within the support A so that the arms 21 will frictionally engage the wall of the socket C for the firm fastening of the holder in the support, the ring B being designed to abut the support A to limit the insertion of the holder therein and prevent its working inwardly under the weight of the article of furniture.

In Figs. 6 to 8 of the drawings there is shown a modified form of caster which comprises a substantially semispherical shaped glide cup 23 in which is fitted a tread piece 24, the same being formed preferably from leather, yet it may be made from any other suitable flexible or resilient material or composition of materials and is held fast in the cup 23 in any suitable manner. Rising centrally from the cup is a stem or shank 25 which is detachably engaged for rotation in a holder hereinafter fully described.

The holder comprises a sleeve 26 for receiving the stem or shank 25 and is formed with an annular flange 27 at one end to engage an annular shoulder 28 formed on the stem or shank 25 concentrically about the same, the opposite end of the sleeve 26 being formed with an inturned circular flange 29 provided with diametrically opposed notches 30 through which pass diametrically opposed nibs or lugs 31 formed on the free end of the stem or shank 25 to engage the flange 29, and in this manner the stem or shank 25 is detachably fastened in the sleeve 26. Integral with or secured to the sleeve 26 at its uppermost end is a plurality of diametrically opposed resilient limbs or arms 32, the same being disposed in downwardly divergent relation to the sleeve 26 and are formed with free hook ends 33 which are adapted to be driven into the support of the article of furniture when the holder is inserted in the socket therein, and in this manner the said holder is firmly fastened in the support so as to prevent it from dropping out should the article of furniture be lifted.

In the use of the caster it will be clearly apparent that the flooring or foundation, whether it be polished or roughened, will not become scratched or marred when the article of furniture is moved from one point to another thereover. The resiliency of the arms or limbs of the holders hereinbefore described enable the proper fitting of the same within the socket in the support for the article of furniture and also frictionally hold it fast therein. When the article of furniture is moved the caster glides over the flooring or foundation as the stem or shank of the caster freely rotates within the holder when the article of furniture is being moved. It will be apparent that the stem or shank by reason of the variance of the length thereof with regard to the sleeve of the holder can automatically adjust itself longitudinally in the latter when encountering any unevenness in the floor or foundation.

From the foregoing it is thought that the construction and manner of use of the device will be clearly understood, and therefore a more extended explanation has been omitted.

What is claimed is:—

The combination with a caster shank, of a holder comprising a tubiform member for receiving the shank and having a contracted inner end to form a bearing shoulder for the shank at one point thereof, an out-turned annular flange formed at the outer end of the said member and forming a bearing for the shank at another point thereof, a resilient bonnet integral with the member and forming a plurality of spaced outwardly divergent resilient limbs for frictionally securing the holder in an article of furniture, and means at the free end of the limbs to engage with the flange on the member and also with the article of furniture for reinforcing the flange and also for limiting the inward movement of the holder in the said furniture.

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

ANDREW T. PETERSEN.

Witnesses:

THOMAS J. FAIR,

H. S. LOCKWOOD.