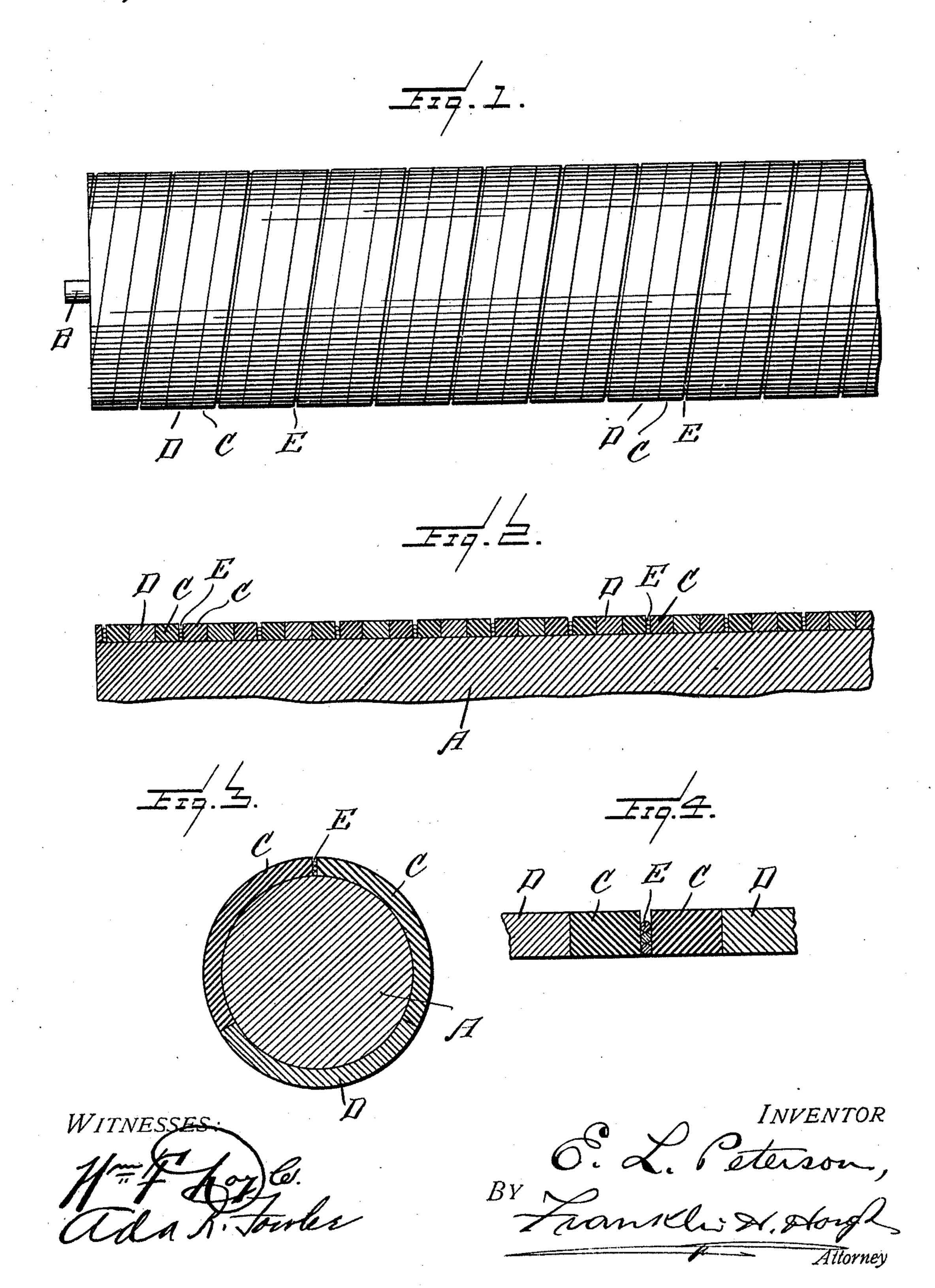
## E. L. PETERSON. GIN ROLLER. APPLICATION FILED MAR. 25, 1809.

945,411.

Patented Jan. 4, 1910.



## UNITED STATES PATENT OFFICE

EMMETT LEE PETERSON, OF WILLACOOCHEE, GEORGIA.

GIN-ROLLER.

945,411.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed March 25, 1909. Serial No. 485,714.

To all whom it may concern:

Be it known that I, EMMETT L. PETERSON, a citizen of the United States, residing at Willacoochee, in the county of Coffee and 5 State of Georgia, have invented certain new and useful Improvements in Gin-Rollers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled 10 in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in cotton gin rollers and the object in view is to produce a simple and efficient device of this nature so arranged that the grooves intermediate the strips about the 20 circumference of the roller may be formed by the releasing of a cord which is wound intermediate the series of strips at the time the covering for the roller is applied thereto.

The invention comprises various details of 25 construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accom-

30 panying drawings, in which:—

Figure 1 is a side elevation of a roller made in accordance with my invention. Fig. 2 is a longitudinal sectional view through a portion of the roller. Fig. 3 is a cross sec-35 tional view, and Fig. 4 is an enlarged detail section showing the manner of applying the cord intermediate the series of strips forming the covering to the roller.

Reference now being had to the details of 40 the drawings by letter, A designates a cylindrical roller having spindle ends, one of which is shown in Fig. 1 of the drawings and designated by letter B. The circumference of the roller is made up of series of strips, 45 designated by letters C and D, the former of which are preferably of rubber and the latter of leather or other fiber. As shown in the drawings, the strips are wound diagonally about the roller and intermediate the 50 adjacent rubber strips, shown clearly in Figs. 2 and 4 of the drawings, a cord E is wound, said cord also being spirally wound

about the cylinder.

When the covering is made up in the manner shown, between each three strips will be 55 positioned strands of the cord one upon another, filling the space intermediate the adjacent rubber strips upon the surface of the cylinder to the outer faces of the strips. When it is desired to form grooves in the 60 circumference of the gin roller, one layer of the cord is unwound from the cylinder leaving the grooves as shown clearly in the drawings. This groove, which has been formed heretofore upon the circumferences of the 65 rollers in order to accomplish proper results, heretofore has been made by grooving one of the strips but, by the provision of the construction shown in my invention, this groove is formed by merely unwinding a portion of 70 the cord. When the coverings become worn down to the bottom of the groove thus formed, an additional layer of the cord may be removed and so on until the entire surface of the gin roller has been worn away by 75 friction.

What I claim to be new is:—

1. A gin roller having a covering made up of a series of strips wound thereabout with a cord wound about the cylinder intermedi- 80 ate certain of the strips thereon, said cord forming a plurality of layers, one above another and adapted to be unwound to form grooves intermediate the strips, as set forth.

2. A gin roller having a covering made up 85 of a series of rubber and leather strips wound spirally about the roller, a cord wound spirally about the cylinder intermediate the adjacent rubber strips, said cord forming a series of layers superimposed one upon an- 90 other, portions of which are adapted to be removed to form grooves in the covering, as set forth.

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

## EMMETT LEE PETERSON.

Witnesses:

EDWD. GRAY, J. F. SHEARER.