

No. 782,253.

PATENTED FEB. 14, 1905.

L. S. LACHMAN.
PULLEY OR WHEEL.
APPLICATION FILED JAN. 26, 1904.

Fig. 1.

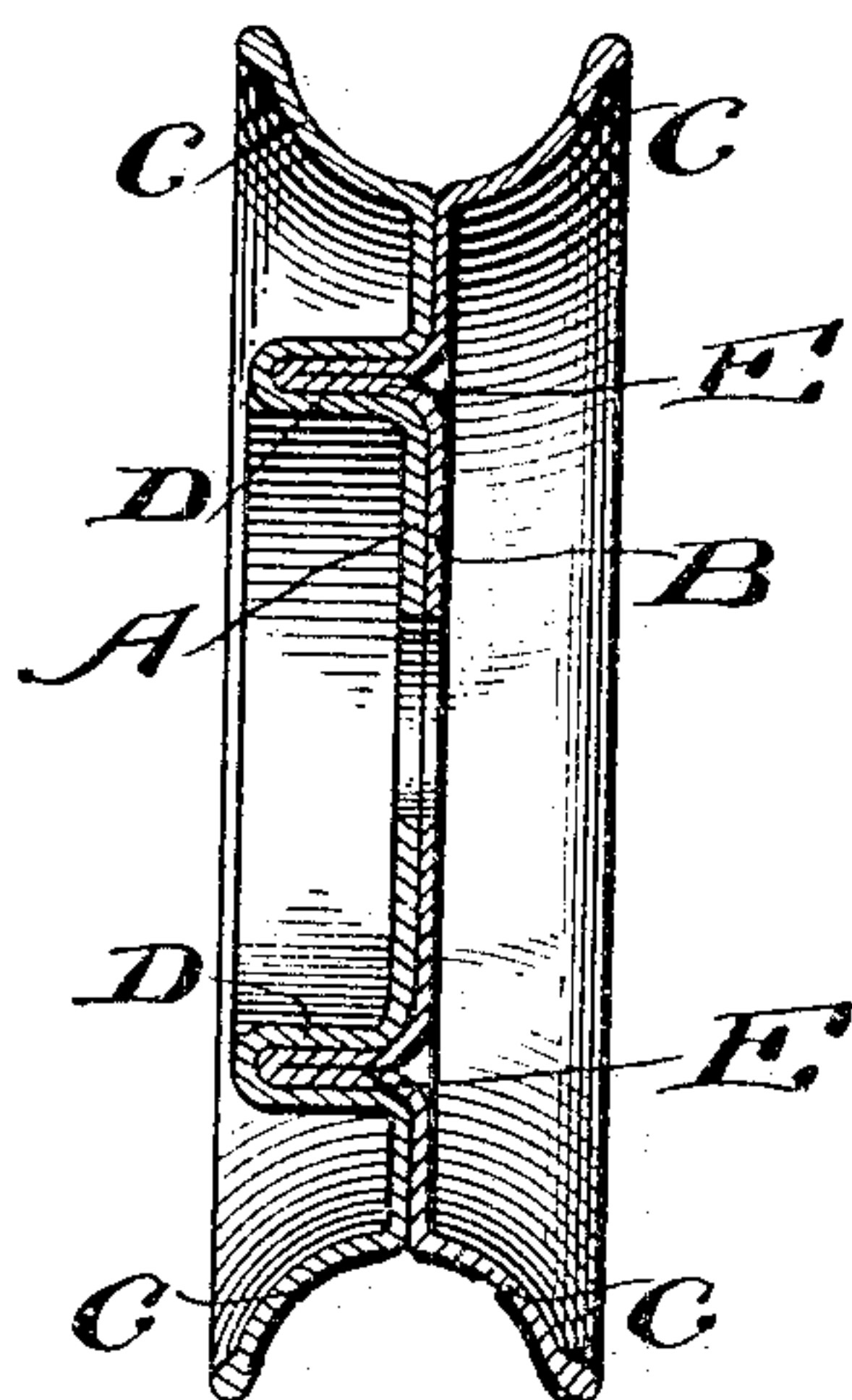


Fig. 2.

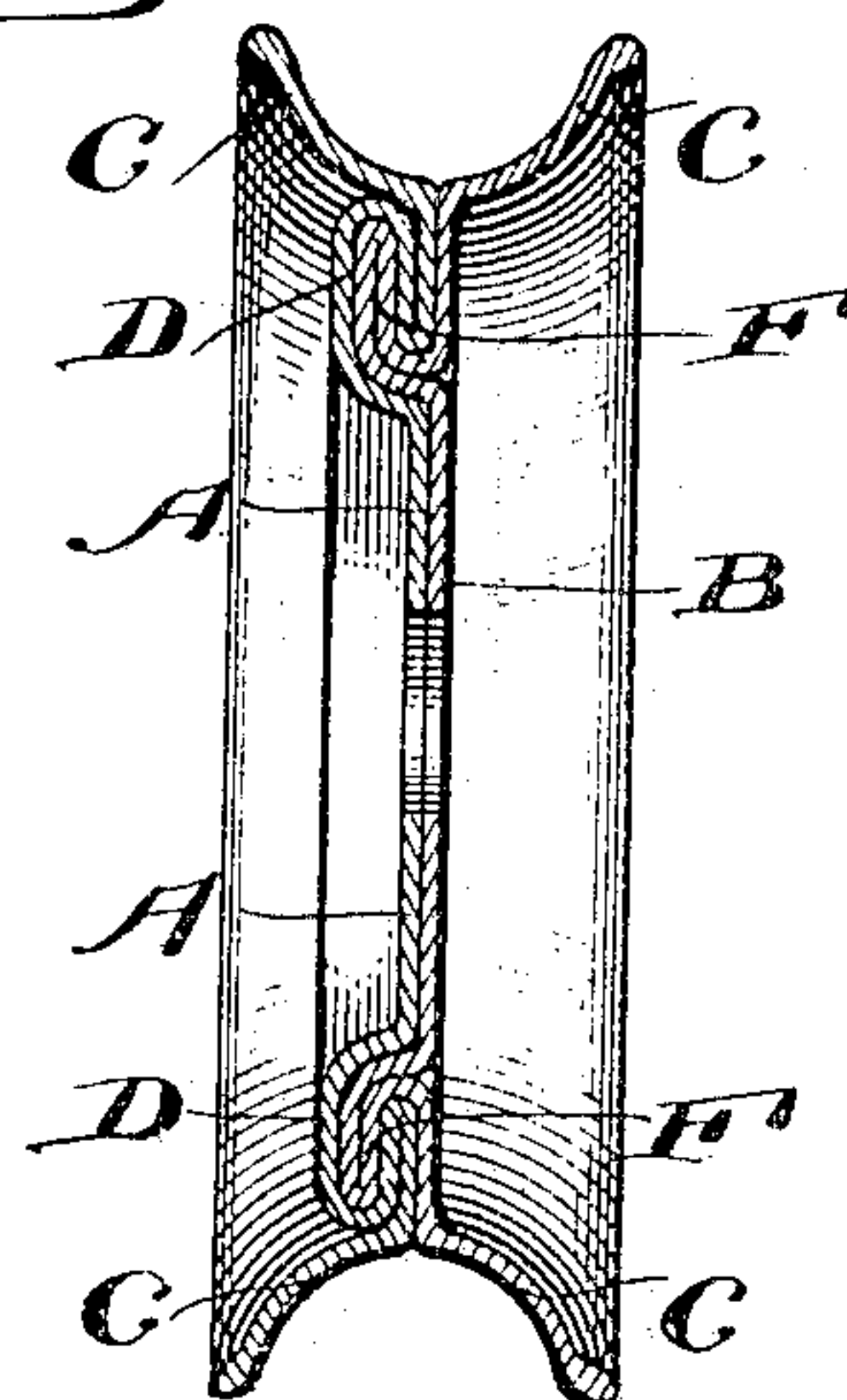


Fig. 3.

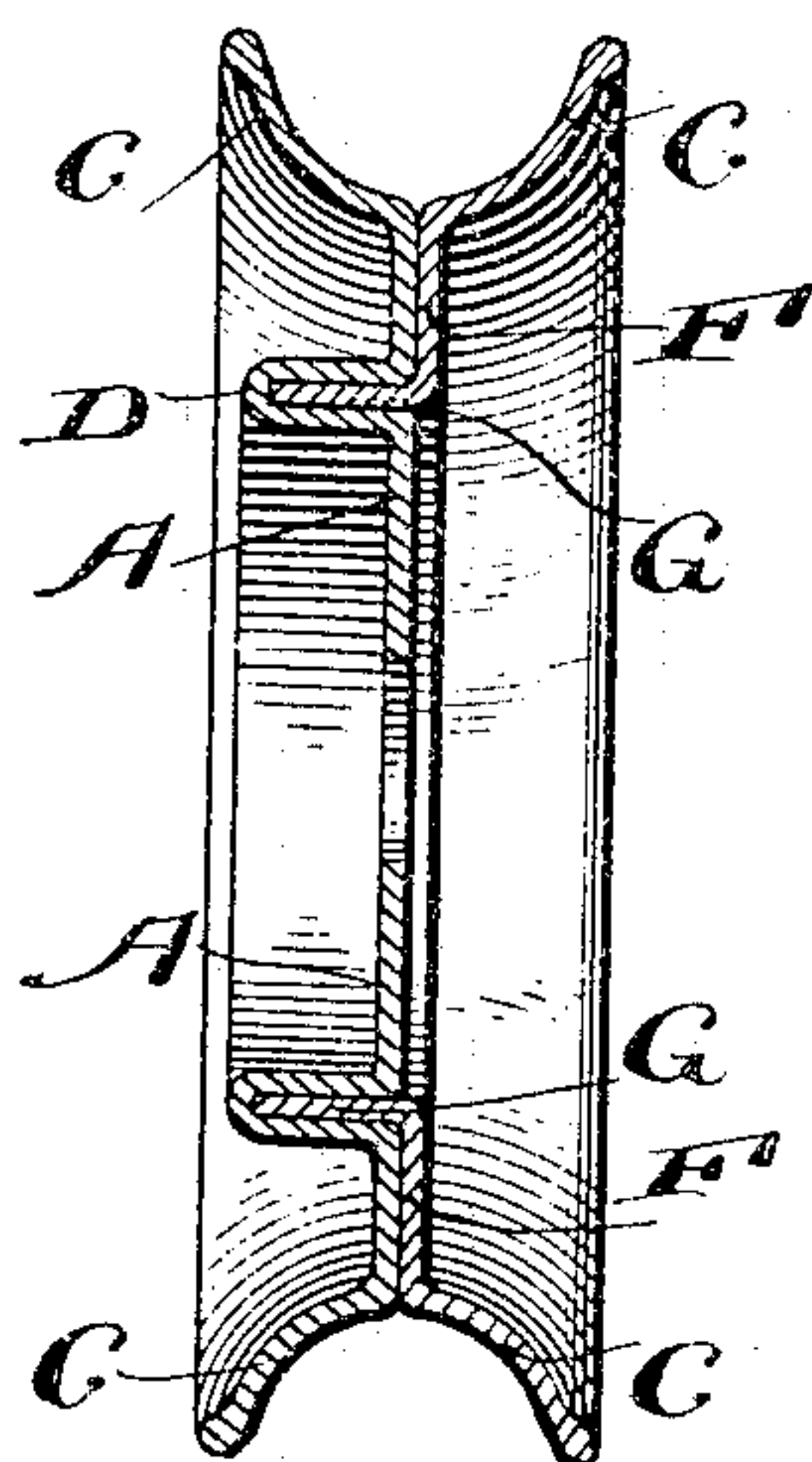


Fig. 4.

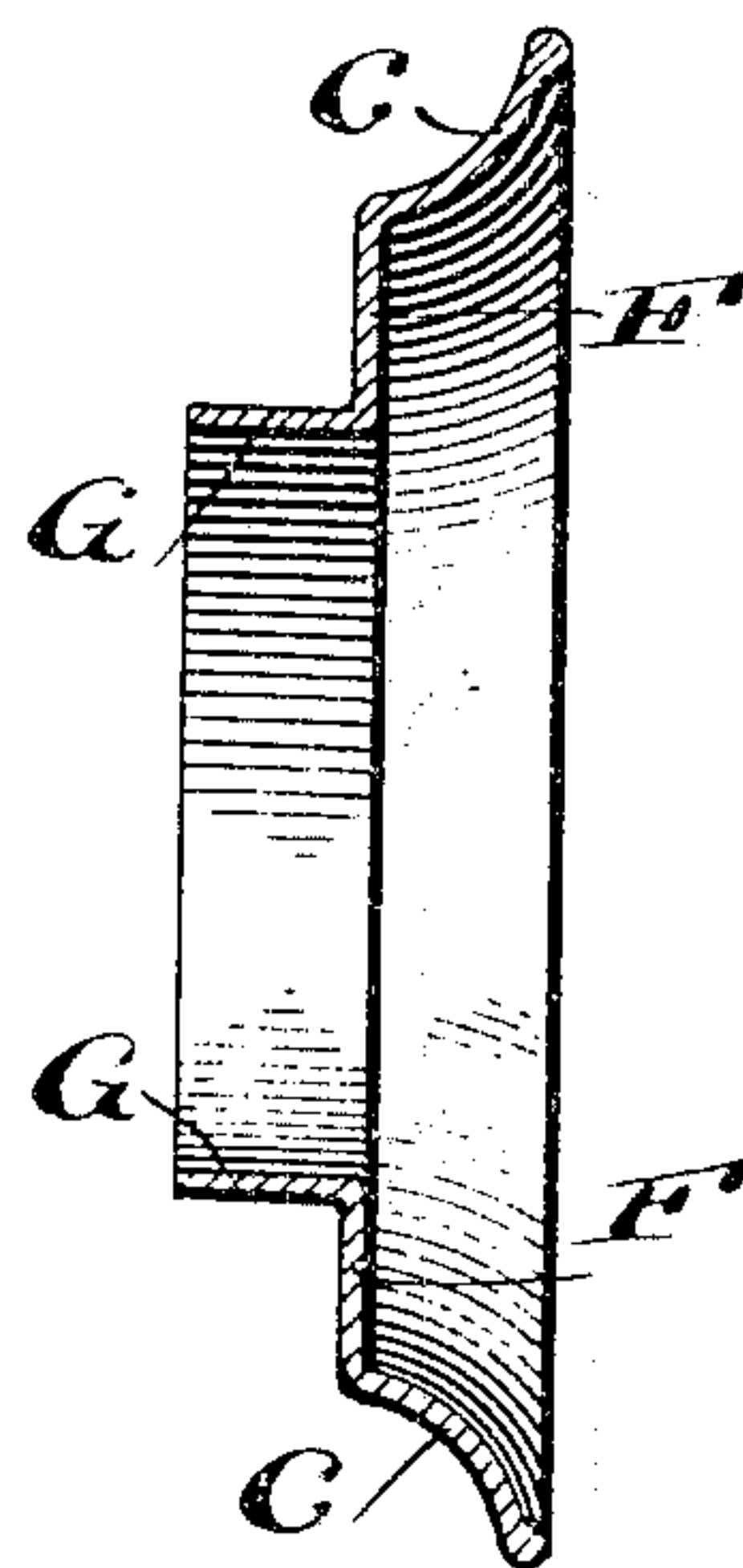
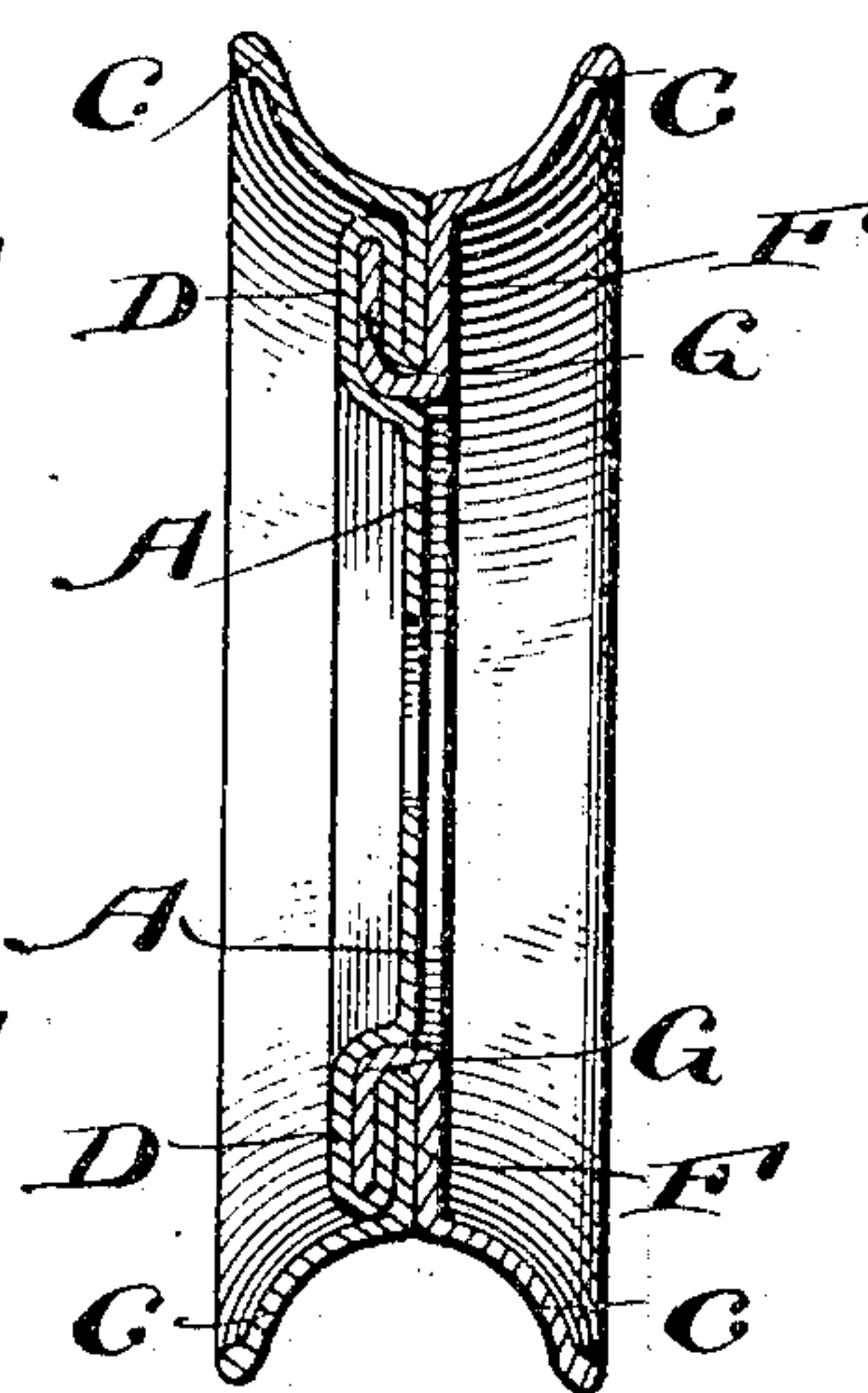


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

LAURENCE S. LACHMAN, OF NEW YORK, N. Y., ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO PRESSED METAL MANUFACTURING COMPANY, A CORPORATION OF NEW JERSEY.

PULLEY OR WHEEL.

SPECIFICATION forming part of Letters Patent No. 782,253, dated February 14, 1905.

Application filed January 26, 1904. Serial No. 190,734.

To all whom it may concern:

Be it known that I, LAURENCE S. LACHMAN, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Pulleys or Wheels, of which the following is a specification accompanied by drawings.

This invention relates to pulleys or wheels of sheet metal; and the objects of the invention are to enable such pulleys or wheels to be made in a simple and economical manner, to improve upon their construction and efficiency, and increase their strength with simplicity of parts.

Further objects of the invention will hereinafter appear; and to these ends the invention consists of a pulley or wheel as a new article of manufacture for carrying out the above objects embodying the features of construction, combinations of elements, and arrangement of parts, substantially as hereinafter fully described and claimed in this specification, and shown in the accompanying drawings, in which—

Figure 1 is a vertical sectional view through the wheel, showing the two cooperating members before the interlocking portions are bent. Fig. 2 is a vertical sectional view taken through the wheel when completed. Fig. 3 is a vertical sectional view taken through another form of the wheel before the locking portions are bent. Fig. 4 shows in detail the cooperating member for one side of the wheel in accordance with Fig. 3. Fig. 5 is a vertical sectional view of the completed wheel when made in accordance with the modification of Fig. 3.

The parts of the wheel or pulley may be stamped cold out of sheet metal, and they are then locked together, so that no rivets are necessary.

Referring to the drawings, more especially to Figs. 1 and 2, A and B represent the two parts or members of a wheel or pulley, which cooperate one with the other to form the complete structure. The members A and B are provided with cooperating flaring flanges C, which in the drawings are shown cooperating

to form a grooved pulley or wheel, although they may take other forms when a wheel with a flat rim is desired. The body portions of the members A and B are provided with cooperating portions adapted to be bent to lock the parts of the wheel together. These cooperating portions may take the form of a groove on one member and a projection on the other. The member A, as shown, is provided with the groove D, while the member B has the projection E thereon, adapted to enter the groove D on the member A, as shown in Fig. 1. The parts D and E are then bent in any suitable manner into the form shown in Fig. 2 to lock the parts of the wheel together. Preferably the locking portions are so arranged and proportioned that when the bending operation has been completed the groove D will bear upon the base of one of the flanges C, as shown in Fig. 2, and lie flat against the side of the wheel. In this way the wheel is braced and strengthened. The wheel members A and B may be formed in any suitable manner by suitable tools and dies, and the bending operation for locking the parts together may be effected in any suitable manner by suitable tools.

In Figs. 3, 4, and 5 the member F is adapted to cooperate with the member A to form the complete wheel. The member F is provided with the flange C, as shown, and also with a tongue portion G, adapted to enter the groove D to afford means for locking the member F to the member A. After the portion G has been inserted in the groove D, the said portion and the groove are bent, as shown in Fig. 5, to lock the parts together.

Obviously some features of this invention may be used without others, and the invention may be embodied in widely-varying forms.

Therefore, without limiting the invention to the constructions shown and described nor enumerating equivalents, I claim, and desire to secure by Letters Patent, the following:

1. As a new article of manufacture, a wheel formed of two members having outwardly-flaring flanges forming the rim of the same, and cooperating portions for said members

both bent to lock the parts together, whereby they are prevented from being separated in the general direction of the axis of the wheel.

2. As a new article of manufacture, a wheel
5 formed of two members having outwardly-flaring flanges forming the rim of the same, one of said members having a groove formed therein, and the other having a portion co-
operating with the groove, said grooved mem-
10 ber and coöperating portion being bent to lock the parts together, whereby they are prevented from being separated in the general direction of the axis of the wheel, for substantially the purposes set forth.

15 3. As a new article of manufacture, a wheel formed of two members having outwardly-flaring flanges forming the rim of the same, one of said members having a groove formed therein, and the other having a coöperating
20 projection adapted to enter the groove, said grooved member and coöperating projection both being bent around and against the body portion of the wheel to lock the parts together, for substantially the purposes set forth.

25 4. As a new article of manufacture, a wheel formed of two members having outwardly-flaring flanges forming the rim of the same, said members having interlocking connections formed therein, and situated between the cen-
30 ter of the wheel and the rim thereof, the connections on both portions of the wheel being bent around and against the body portion of the wheel to lock the parts together, for substantially the purposes set forth.

35 5. As a new article of manufacture, a wheel formed of two members having outwardly-flaring flanges forming the rim of the same, one of said members having a groove formed concentric with the axis of the wheel, and the
40 other having a coöperating projection enter-

ing said groove, the grooved member and projection being bent to lock the parts together, for substantially the purposes set forth.

6. A sheet-metal sheave or pulley, consisting of two members secured together by inter-
locking annular ribs and grooves formed on
45 the two members, the said ribs being curved radially over upon themselves.

7. A sheet-metal sheave or pulley, consisting of two disk-shaped members having
50 flanges at their peripheries, and their adjacent faces secured together by interlocking annular ribs projecting from opposite faces of each member and curved radially upon themselves.

8. A sheet-metal pulley or sheave, consisting of the combination of two members secured together by laterally-extending inter-
locked annular ribs and grooves and in which
60 the said ribs are curved from their roots outwardly whereby they have a different diameter at their peripheries to that at their roots.

9. A sheet-metal sheave or pulley, consisting of the combination of two halves arranged
65 face to face and formed with their peripheries flanged with a quarter-curve so as to constitute a groove, and in which the parts are secured together by interlocked ribs and grooves concentrically arranged, the rib of one part
70 fitted to the groove on the other part, and the said ribs and grooves having radial curvature whereby they are distorted and the two parts are permanently locked together.

In testimony whereof I have signed this specification in the presence of two subscrib-
75 ing witnesses.

LAURENCE S. LACHMAN.

Witnesses:

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H. G. OGDEN, Jr.