

No. 667,291.

Patented Feb. 5, 1901.

A. E. BRION.
SHEET STEEL SPLIT PULLEY.

(Application filed Feb. 16, 1899.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

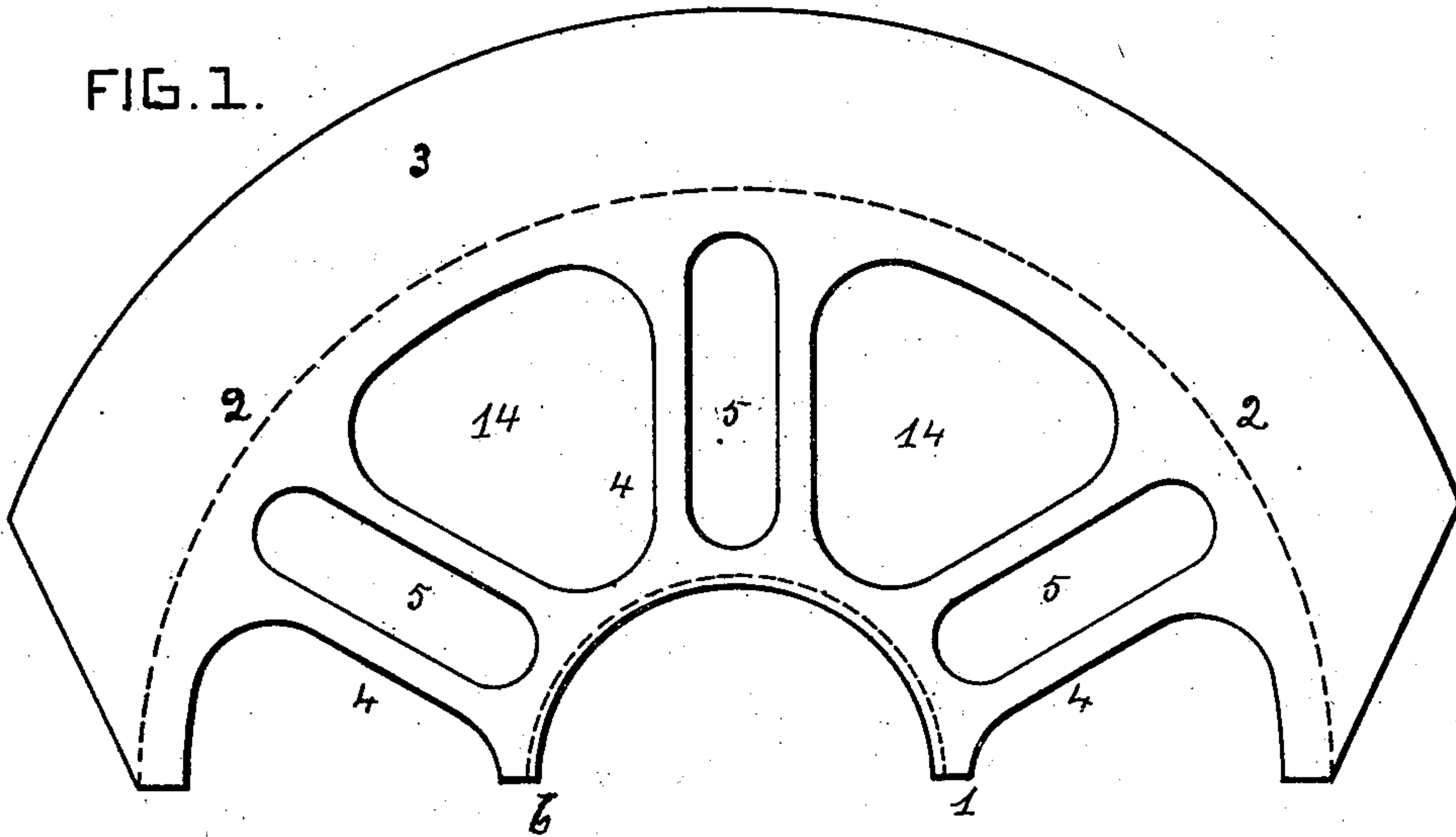


FIG. 2.

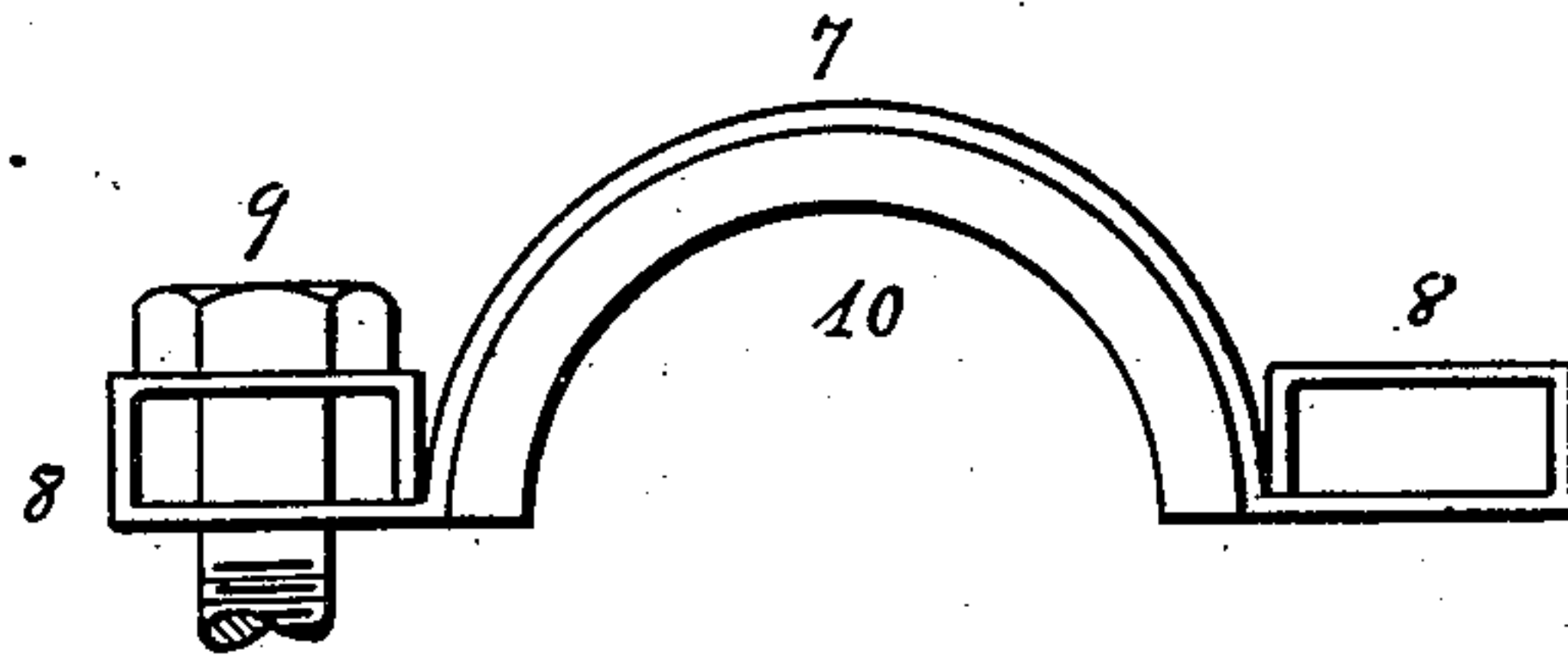
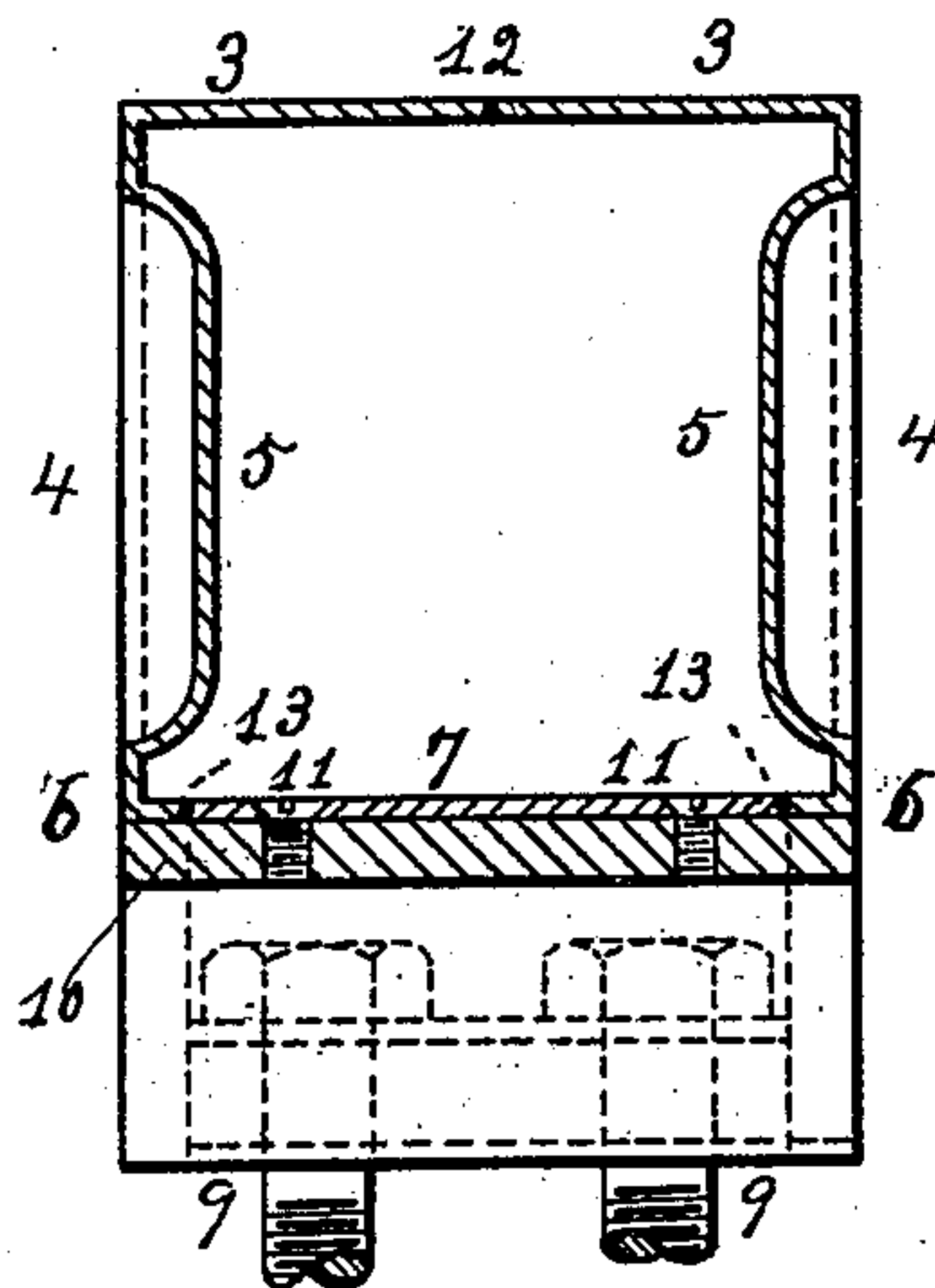


FIG. 3.



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SHEET-STEEL SPLIT PULLEY.

SPECIFICATION forming part of Letters Patent No. 667,291, dated February 5, 1901.

Application filed February 16, 1899. Serial No. 705,834. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH E. BRION, a citizen of the United States, residing in New York, (Brooklyn,) Kings county, State of New York, have invented a new and useful Improvement in Sheet-Steel Split Pulleys, of which the following is a specification.

My invention relates especially to the manufacture of split band-pulleys employed in driving machinery, and has for its object the provision of a simple, cheap, light, and strong electrically-welded sheet-steel split pulley.

To attain the desired end, my invention consists, essentially, in a sheet-steel split pulley having side arms or box-shaped, the parts being electrically welded and secured together without the use of rivets, all of which will be hereinafter first fully described and then pointed out in the claims.

In the accompanying drawings, forming a part hereof, Figure 1 is a plan view of one of the blanks from which my improved sheet-steel pulley is formed after the blank is punched out of the material and before the rim portion is formed up or turned. Fig. 2 is a side elevation of one-half of the hub and bushing of the pulley. Fig. 3 is a transverse axial sectional view of one-half of the completed pulley. Fig. 4 is a side elevation of a complete split pulley constructed in accordance with my invention. Fig. 5 is a cross-sectional view at line *a a* of Fig. 4.

Similar numerals of reference wherever they occur indicate corresponding parts in all the figures.

1 is a sheet-steel blank cut and stamped, pressed, or spun to the proper shape, the dotted line 2 indicating where the blank is to be bent inward to form part of the rim of a completed pulley, said rim being designated as 3.

4 represents the spokes, preferably having depressions 5 formed therein to increase the rigidity of the pulley and add to its strength. The space 14 between the spokes may be cut away. At 6 the edge of the metal is bent inward at right angles to the spokes.

7 is a curved strip of sheet-steel which forms the hub of the pulley, the ends of said strip terminating in pieces 8, which are per-

forated for the passage of securing-bolts 9 for uniting and securing the two parts of the pulley around the shaft when in use.

10 is a bushing welded to the hub 7 or held thereto by screws 11. At 12 the abutting edges of the two parts of the rim of the pulley are electrically welded together, and a like welding is accomplished at 13 13 to the hub 7.

In order to provide means for securing the parts of the pulley together at the rim, the metal of the blank 1 is cut, as indicated by the dotted lines to the left in Fig. 4, forming pieces 15, terminating in rivets 16, which when the pieces 15 are bent, as particularly shown in Fig. 5, enter perforations in the rim and are secured by riveting upon the exterior or by welding. These pieces 15 form eyes for the reception of securing-bolts 17.

I do not confine myself to the exact construction shown, the essential features being the making of a sheet-steel split pulley having the material supporting each edge of the rim, obviating any possibility of breaking down, the electrical welding of the abutting edges of the sheet-steel sections of the pulley, and the provision of a sheet-steel pulley devoid of any rivets. In making the pulleys the parts may be punched or pressed in quarter-sections, or, in large sizes, in eighth sections. This may be done by hydraulic pressure, or the parts may be spun and the sections sawed apart. The bushing may be made in any approved manner.

Having now fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. A sheet-steel, split pulley, having the rim divided and connected to a hub at each edge, the inturned edges of the rim portion and the hub being in alinement and abutting, substantially as shown and described.

2. A sheet-steel split pulley, having the rim divided and connected to a hub at each edge, the inturned edges of the rim portion and the hub being in alinement and abutting, and the abutting edges united together, substantially as shown and described.

3. A sheet-steel split pulley, having its rim-sections each formed in two parts, the abut-

ting edges at the periphery being united as
set forth; spokes formed integral with the
rim-sections and extending inward to a hub
at each edge thereof; a hub, united as set forth
5 to the spokes; a bushing, and means for con-
necting the two portions of the pulley to-
gether, substantially as shown and described.

Signed by me at New York, N. Y., this 14th
day of February, 1899.

ADOLPH E. BRION.

Witnesses:

A. M. PIERCE,
C. A. PIERCE.