

No. 725,901.

PATENTED APR. 21, 1903.

C. WEGENER.
FUEL FEEDING APPARATUS.

APPLICATION FILED MAY 5, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

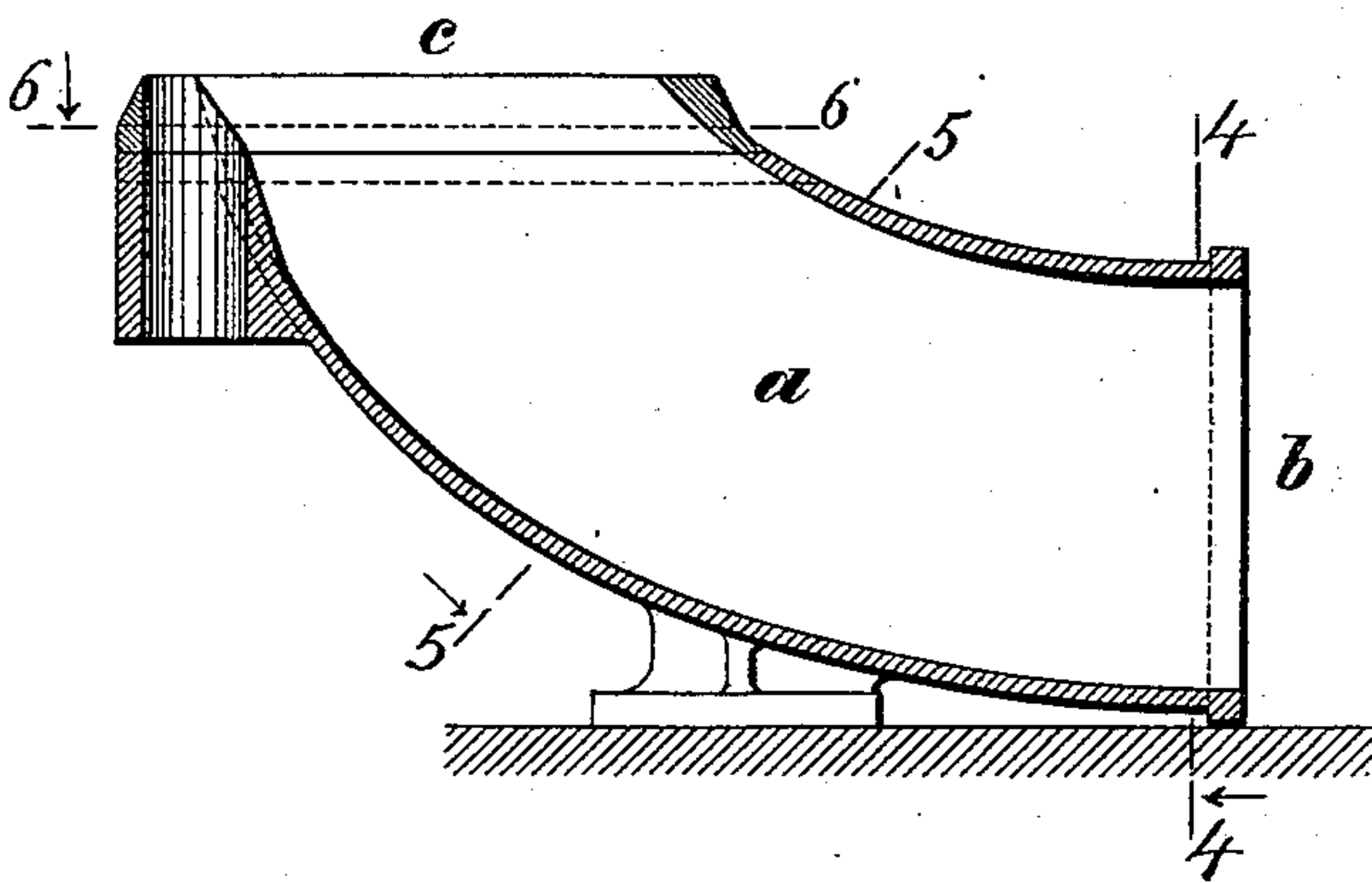


Fig. 3.

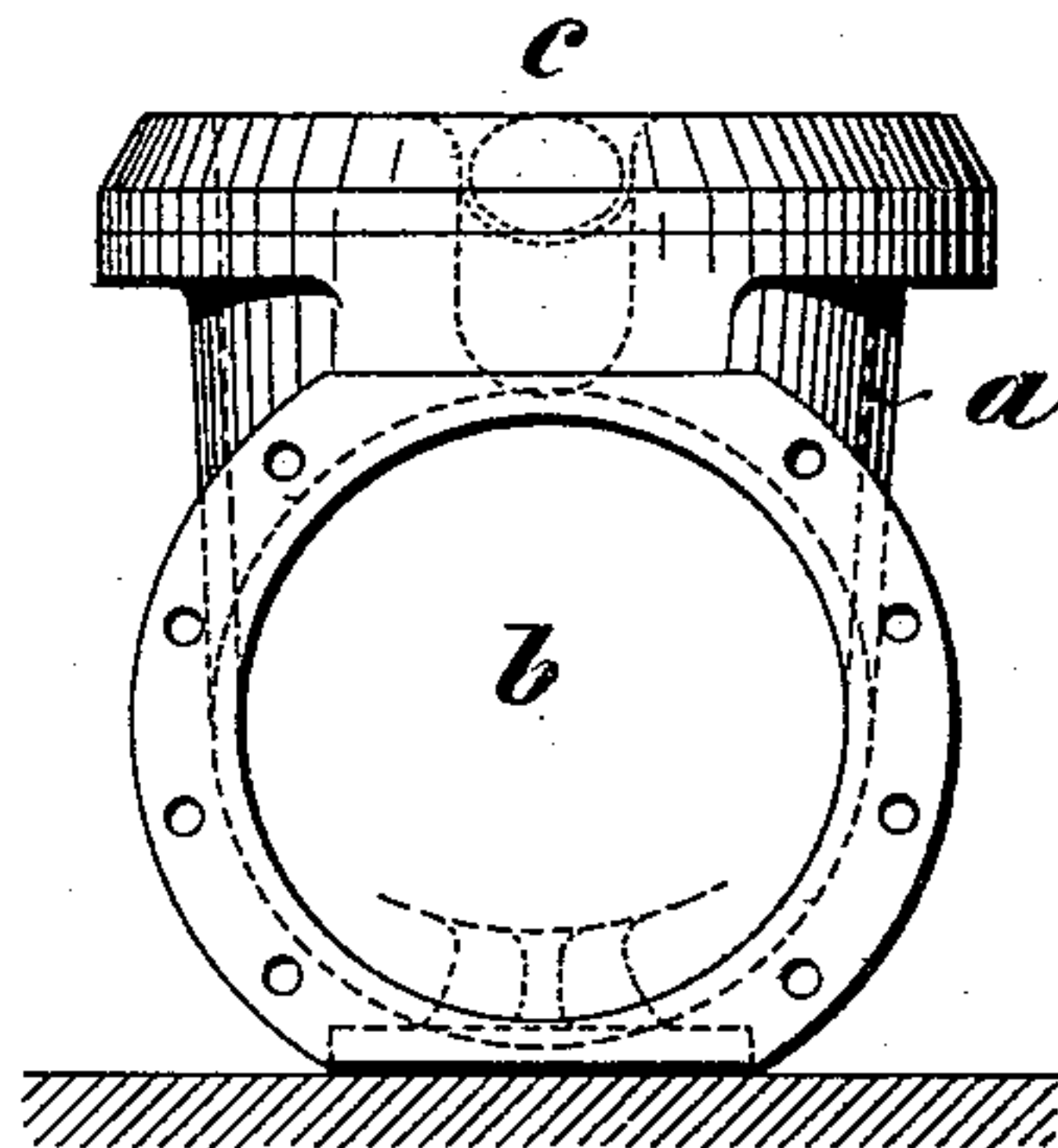
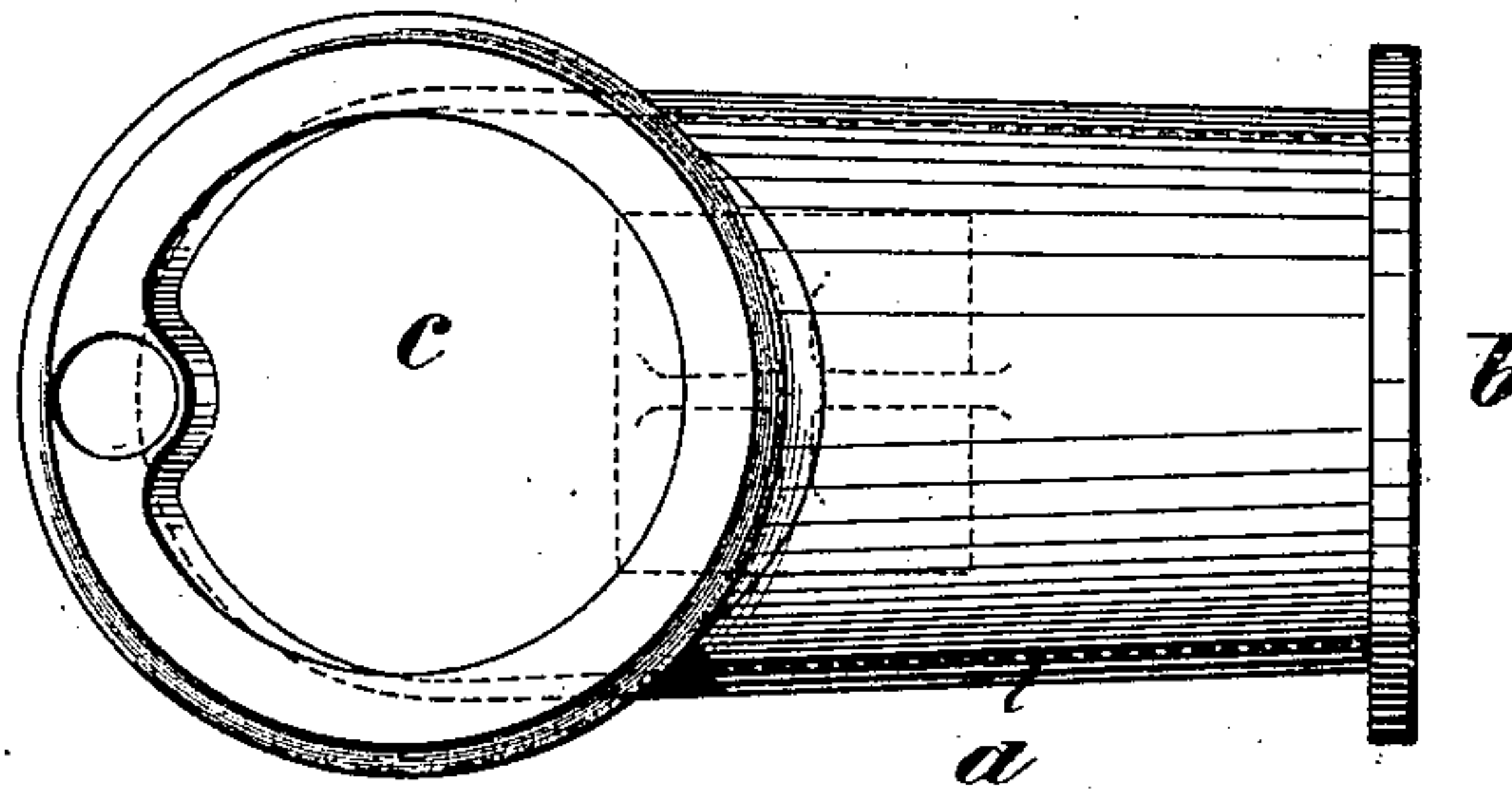


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 4.

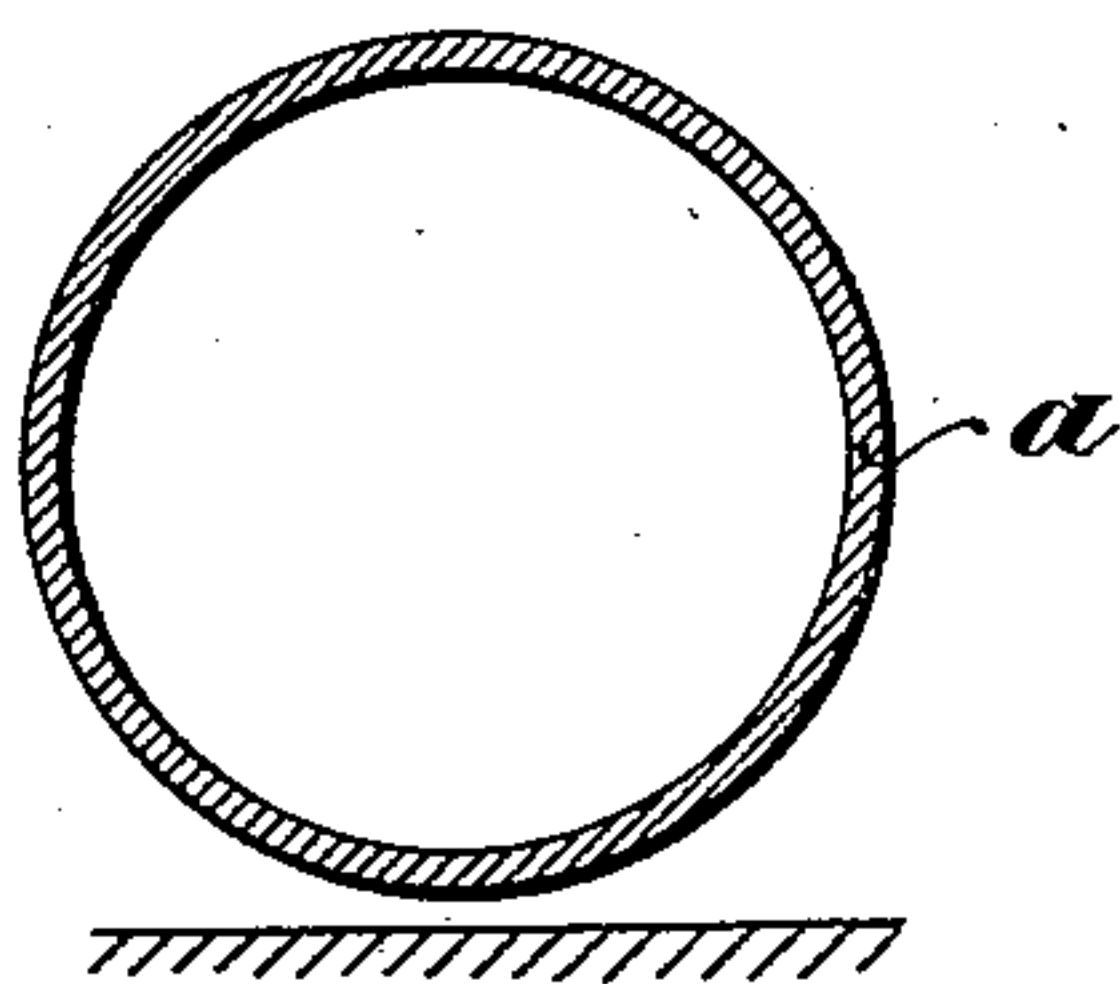


Fig. 5.

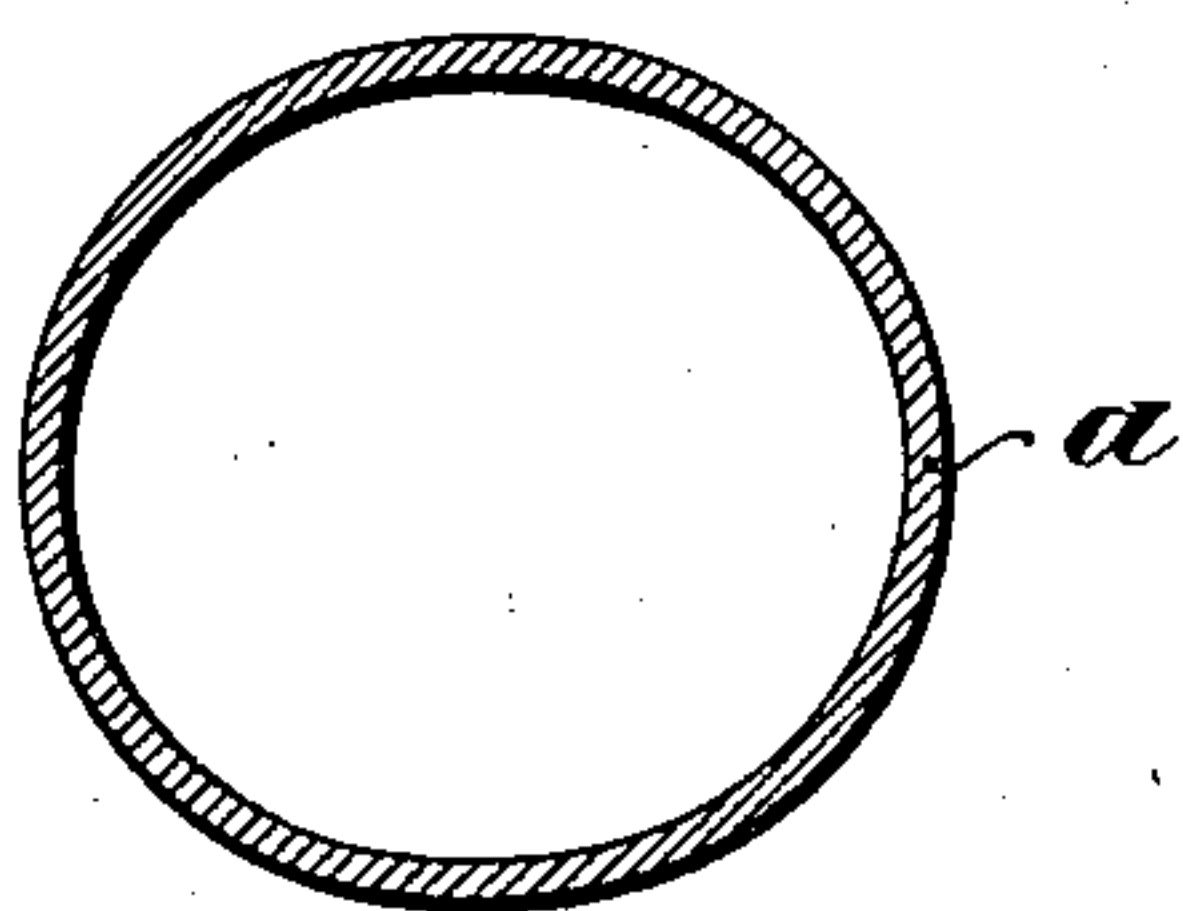
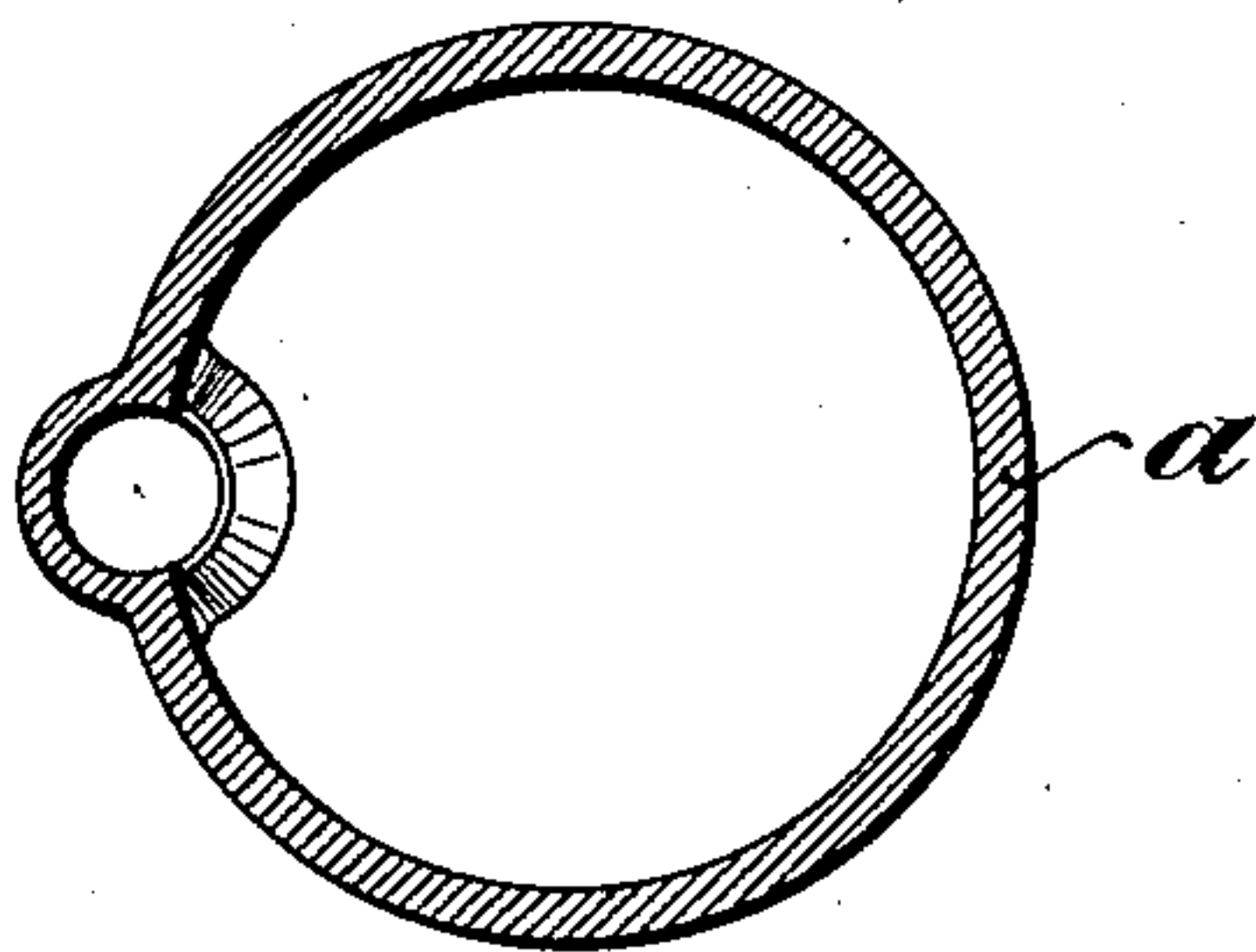


Fig. 6.



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UNITED STATES PATENT OFFICE.

CARL WEGENER, OF BERLIN, GERMANY.

FUEL-FEEDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 725,901, dated April 21, 1903.

Application filed May 5, 1902. Serial No. 106,034. (No model.)

To all whom it may concern:

Be it known that I, CARL WEGENER, a subject of the King of Prussia, Emperor of Germany, (whose post-office address is No. 14 Gitschinerstrasse, Berlin, Prussia, German Empire,) have invented certain new and useful Improvements in Fuel-Feeding Apparatus, of which the following is a specification.

In the hitherto-known curved feed-pipes of round section for the introduction of fuel to a firing plant in which the fresh fuel is fed from underneath into the combustion-chamber by a feed device the drawback has become apparent that the coal when being forced forward within the feeding-pipe jams or sticks fast to such a degree that a forward movement of the same within the tube is impossible.

The present invention has for its object to remove this drawback by imparting to the curved feed-pipe at its outer end a round section which gradually passes over into an oval and subsequently toward the inner end again into a circular section.

In the accompanying drawings the invention is represented in one form of construction, of which—

Figure 1 is a vertical section, Fig. 2 a plan, and Fig. 3 an end view. Figs. 4, 5, and 6 are sections taken, respectively, on lines 4, 5, and 6 of Fig. 1.

As will be seen from the drawings, the curved feed-pipe *a* has at its outer end *b* a round section, (see Figs. 1, 3, and 4,) which at the point where the tube bends gradually becomes oval, (see Figs. 1 and 5,) the major axis of this oval section being always in the horizontal plane. This oval section of the pipe becomes circular again toward the end *c*, opening into the combustion-chamber, and the section of this end is a little larger than that of the outer end *b*. (See Figs. 1, 2, and 6.)

Owing to this especial formation of the feed-pipe the lumps of coal in the pipe where the curve of the latter begins can move laterally and toward the place in the pipe where the length of the course to be traversed by the coal and consequently the speed corresponding thereto of the lumps of coal to be moved forward amount to about the mean of the course to be traversed by the coal in the upper and under parts of the pipe, so as to prevent the lumps of coal becoming jammed or stuck fast and to enable them to be delivered properly into the combustion-chamber.

It will be clear that a feed-pipe constructed according to the present invention may be employed for other purposes than the introduction of fuel into the combustion-chamber of fire plants.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In a coal-furnace in which the fuel is fed from below into the combustion-chamber, a curved feed-pipe of circular section at its outer ends and oval section in the curved portion, the major axis of the oval section being in the horizontal plane, essentially as and for the purpose described.

2. In a coal-furnace in which the fuel is fed from below into the combustion-chamber, a curved feed-pipe of circular section at its outer ends and oval section in the curved portion, the section of the end opening into the combustion-chamber being wider than that of the other end, essentially as and for the purpose described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CARL WEGENER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.