

No. 723,883.

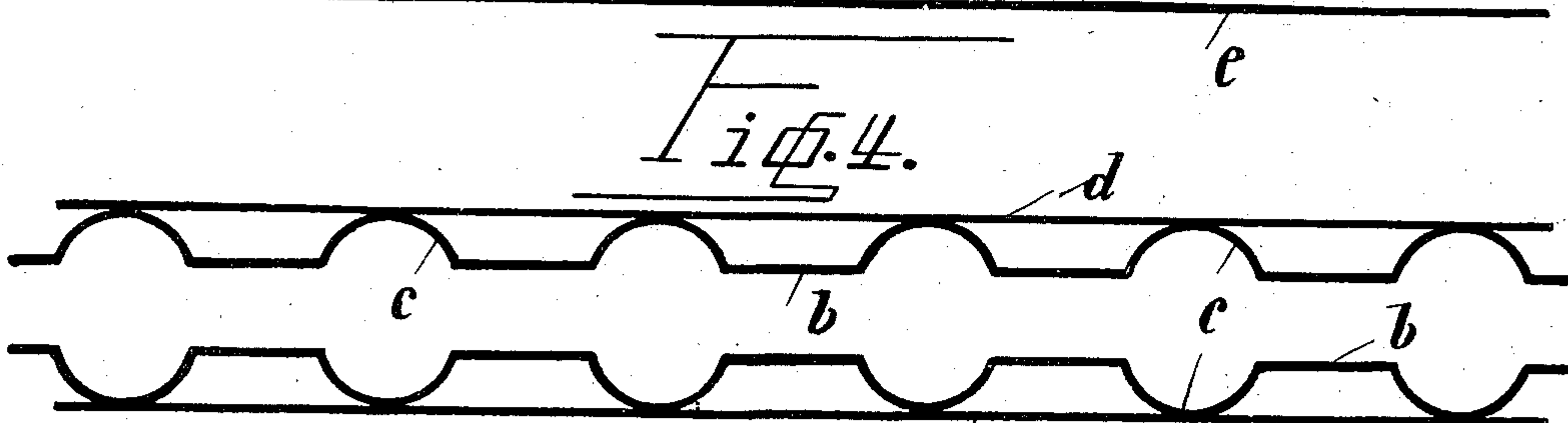
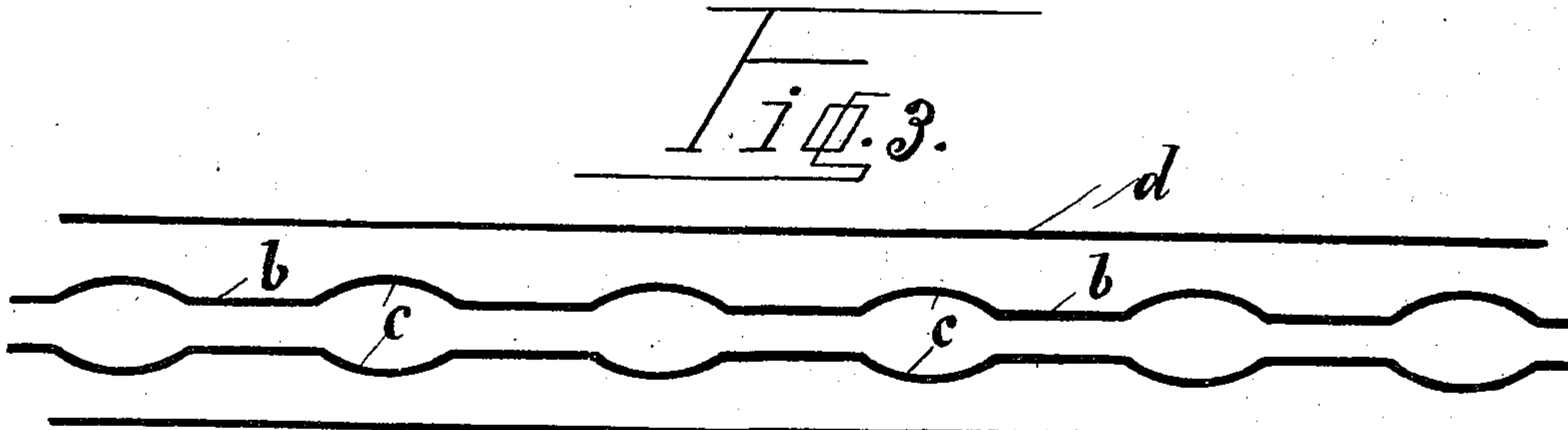
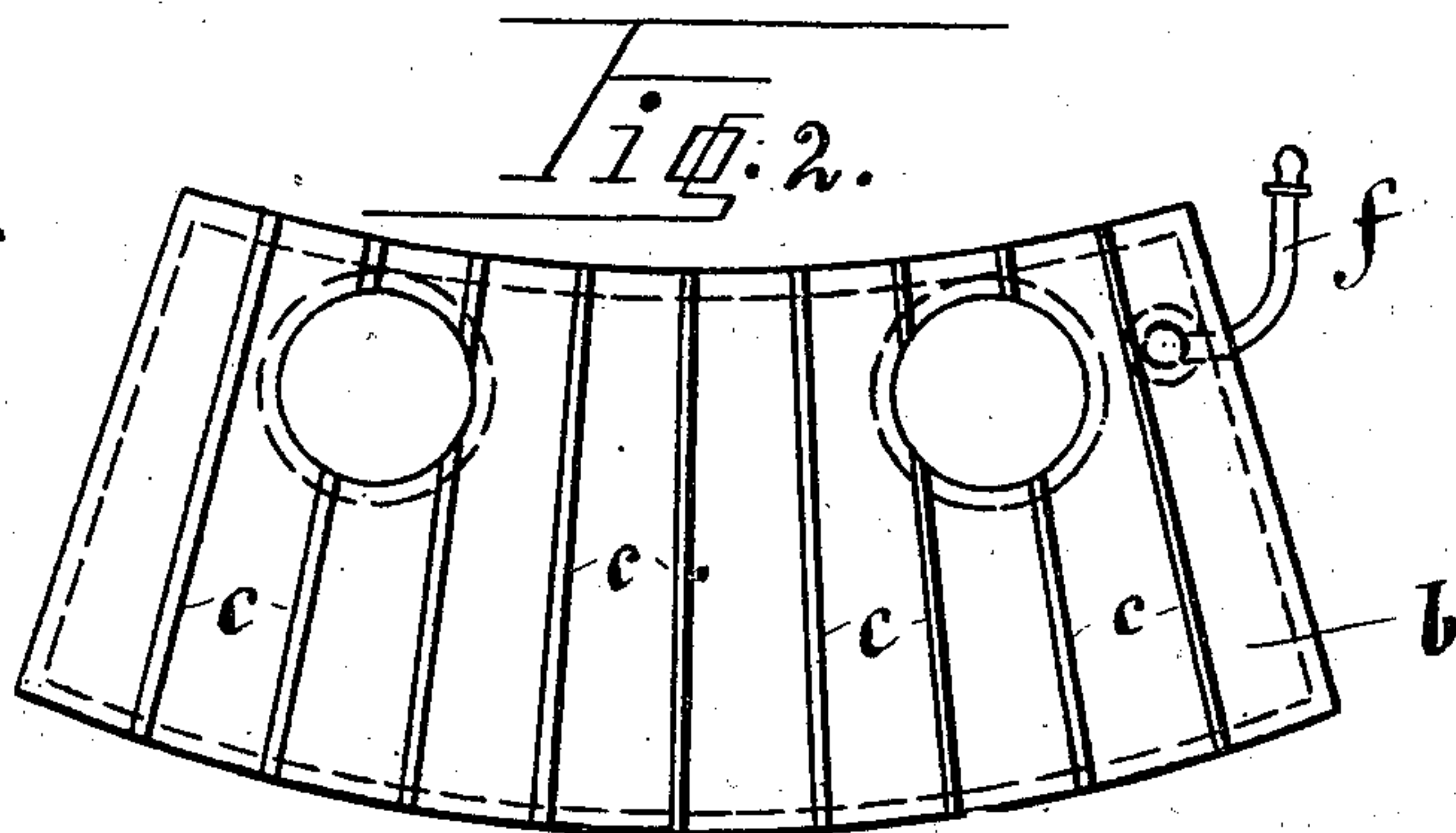
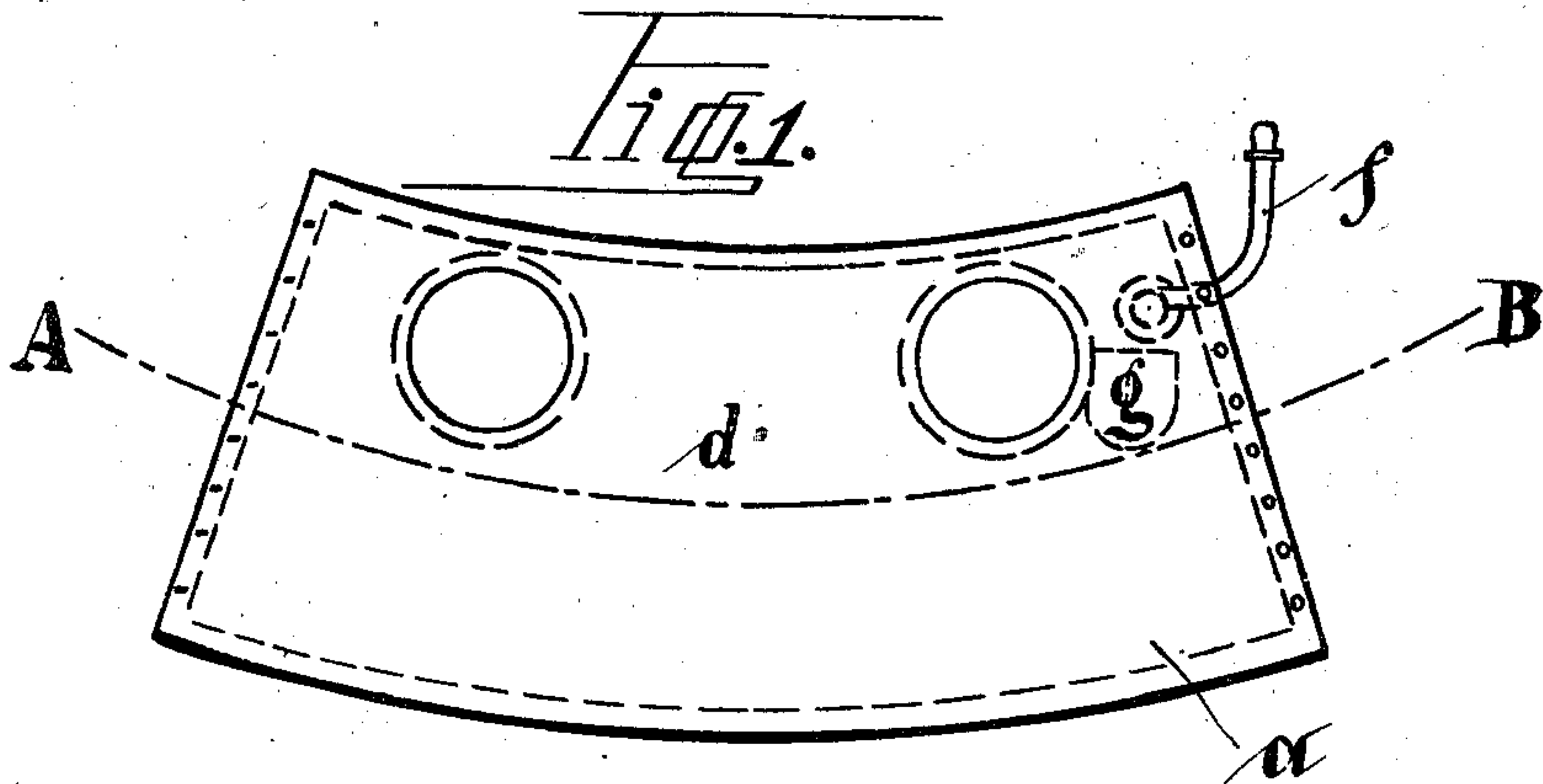
PATENTED MAR. 31, 1903.

H. KUHLMANN.

INFLATABLE AIR BAG FOR LIFE PRESERVING GARMENTS.

APPLICATION FILED JULY 3, 1901.

NO MODEL.



Attest:
Edw. L. Reed

Inventor:
Hans Kuhlmann,
by *Richards & Co.*
Attys.

UNITED STATES PATENT OFFICE.

HANS KUHLMANN, OF GROSS-SALZL, GERMANY.

INFLATABLE AIR-BAG FOR LIFE-PRESERVING GARMENTS.

SPECIFICATION forming part of Letters Patent No. 723,883, dated March 31, 1903.

Application filed July 3, 1901. Serial No. 67,037. (No model.)

To all whom it may concern:

Be it known that I, HANS KUHLMANN, a subject of the King of Prussia, Emperor of Germany, and a resident of Gross-Salzl, near
5 Schönebeck-on-the-Elbe, in the Kingdom of Prussia, Germany, have invented an Improvement in Inflatable Air-Bags for Life-Preserving Garments, of which the following is a specification.

10 My invention relates to an inflatable air-bag for life-preserving garments by which the garment is not substantially altered in cut, &c. In former life-preserving apparatus the principal drawback was that they were
15 not worn constantly or could not be, partly on account of being too heavy and partly because their inflated form disfigured the body.

By means of the present invention a life-preserving apparatus is now provided which
20 can be applied to any garment or portion of a garment without altering the external form thereof and without being in any way burdensome, so that every one may always have his preserver at hand, so as to be able to fear-
25 lessly trust himself to the waves.

In the accompanying drawings, Figure 1 shows a life-preserving waistcoat. Fig. 2 illustrates an inflatable air-bag from the front. Fig. 3 is a section on the line A B of Fig. 1.
30 Fig. 4 is the same as Fig. 3 when the inner reservoir has been filled.

The waistcoat, which is illustrated by way of example in the drawings, shows one of the simplest forms of such a garment, though
35 the waistcoat can be adapted to any fashion without affecting the principle of the invention. Between the material *d* and the lining *e* of the waistcoat *a* there is a bag *b*, of rubber sheeting, made perfectly air and water

tight. This bag consists of two opposing 40 walls, which are provided with vertical corrugations *c*, which stiffen the bag, forming what might be called "stays." The inflation of the bag can be effected by the wearer of the waistcoat by means of a tube *f*, which 45 when not in use can be pushed into the pocket *g*. The inflation can be effected in about thirty seconds. Should the wearer of the waistcoat after the inflation forget to close the air-valve, he would still be supported for 50 about half an hour if lying face downward, as the tube is closed by the water.

As the bag is inside the quilted waistcoat, it cannot be damaged easily by wear, so that its duration is comparatively long. 55

The bag *b* can be adapted to the shape of any garment without being inconvenient, which also enables it to be worn at night. In this manner much may be done to reassure passengers and many accidents prevented 60 without any special trouble on the part of the passenger.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is— 65

An inflatable air-bag for safety-garments comprising a hollow body provided with reinforcing longitudinal grooves *c*, which stiffen the sides of the bag so that it is inflated in a uniform manner and that the garment sur- 70 rounding the bag is in no place deformed, substantially as described.

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

HANS KUHLMANN.

Witnesses:

L. PALMER,
MAX GÖRNEMANN.