

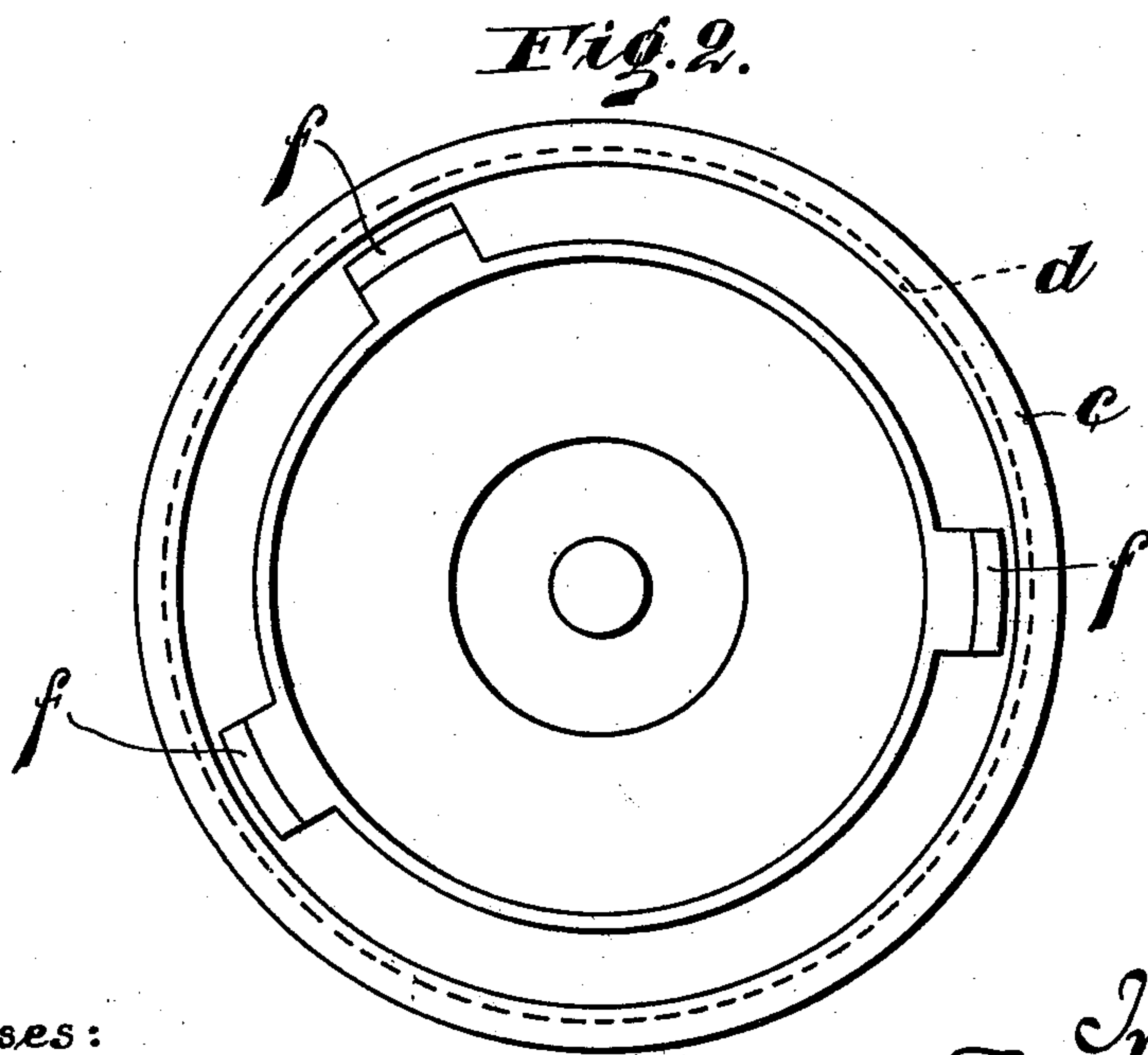
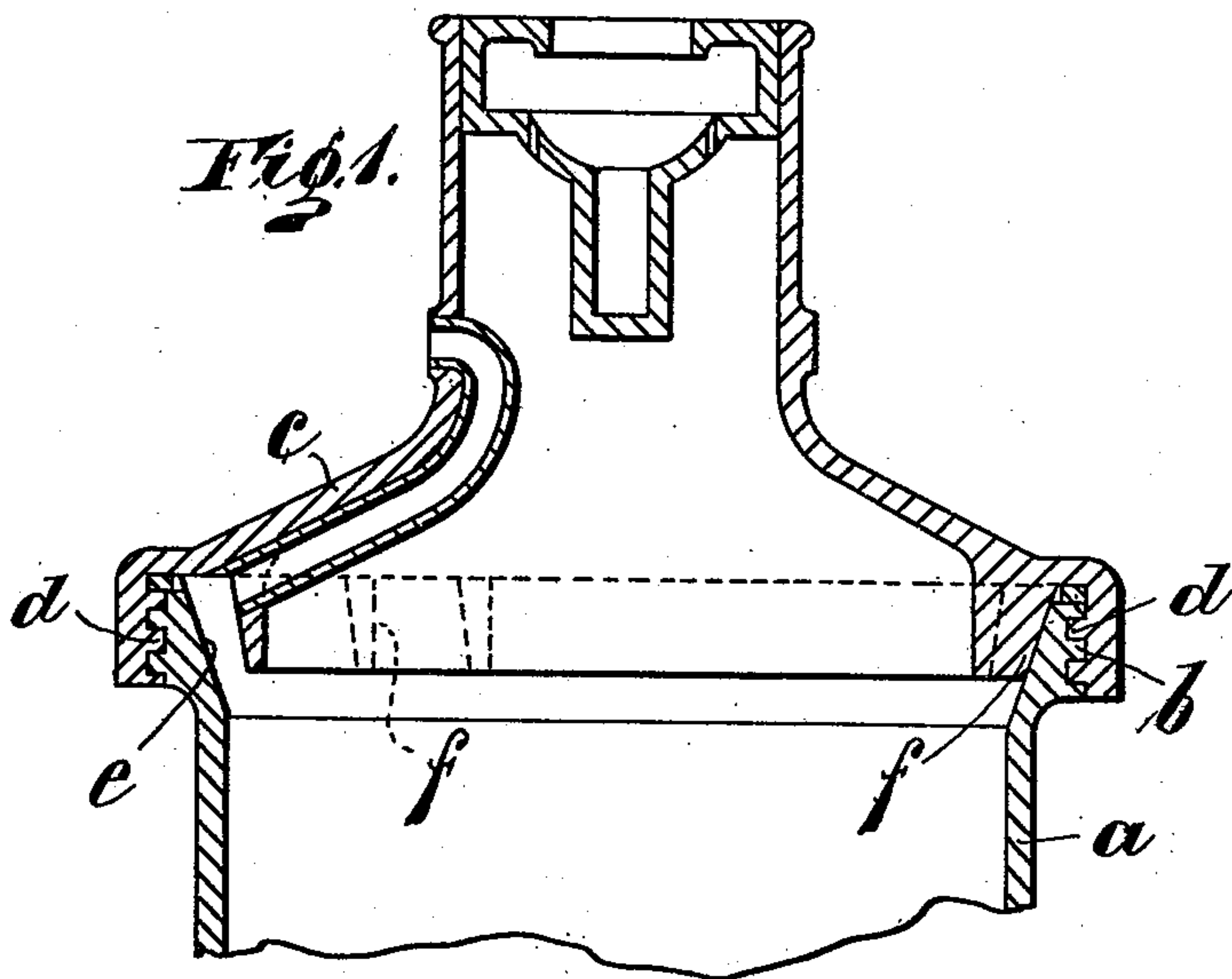
No. 689,620.

Patented Dec. 24. 1901.

F. O. NILSSON.
CENTRIFUGAL SEPARATOR DRUM.

(Application filed Feb. 7, 1900.)

(No Model.)



Witnesses:
Lustaf Tspatt.
Lustaf Tspatt.

Inventor:
F. O. Nilsson
by Olof Dahl
his att'y

UNITED STATES PATENT OFFICE.

FRANS OSCAR NILSSON, OF WAXHOLM, SWEDEN, ASSIGNOR TO AKTIEBOLAGET SVEASEPARATORN, OF STOCKHOLM, SWEDEN.

CENTRIFUGAL SEPARATOR-DRUM.

SPECIFICATION forming part of Letters Patent No. 689,620, dated December 24, 1901.

Application filed February 7, 1900. Serial No. 4,338. (No model.)

To all whom it may concern:

Be it known that I, FRANS OSCAR NILSSON, a subject of the King of Sweden and Norway, and a resident of Brännudden, Waxholm, Sweden, have invented a new and useful Improvement in Centrifugal Separator-Drums; of which the following is a specification, reference being had to the drawings accompanying and forming a part hereof.

10 The present invention relates to improvements in covers for such centrifugal separator-drums as are journaled both above and below the drum.

In separator-drums of the aforesaid kind it has been usual to attach the cover to the drum by means of screw-threads provided on the inside of the cover and engaging with corresponding screw-threads on the outside of the drum proper. Said method of attaching the cover to the drum has been found to have the disadvantage that the screw-threads on account of the great strain they are subjected to will soon wear enough to make the joint between the cover and the drum loose. In order to make the joint stiff again, it has been found necessary to force out the edges of the drum proper by some suitable mechanical contrivance.

30 The object of the present invention is to provide such improvements in the joints that the same will be so strong as to lessen the wear of the screw-threads; but when worn out the edges of the drum may be pressed out without the use of special contrivances.

35 The invention consists in making the upper part of the inside of the drum slightly conical and in providing lugs on the inside of the cover adapted to bear against said conicity of the drum and of such strength that when the screw-threads become worn in screwing the cover to the lugs will force out the edge of the cover enough to make the joint stiff again.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 shows a vertical section of the upper part of the drum and the cover, and Fig. 2 shows a plan view of the cover seen from the bottom.

Referring to the drawings, *a* designates the separator-drum, the upper edge of which on the outside is provided with screw-threads *b* and on the inside made slightly conical, as shown at *e*, Fig. 1. The cover *c* of the drum is on the inside provided with screw-threads *d*, adapted to engage with the said screw-threads *b*, and with lugs *f*, which are conical, so as to fit against the said conicity *e* of the drum. When the cover is screwed onto the drum, the said lugs bear tightly against the said conicity of the drum, making the joint between the cover and drum much stronger than would be the case without said lugs, thus lessening the wear of the screw-threads. When the screw-threads are worn enough to make the joint unsteady, it is only necessary to screw the joint tighter to the drum, when the lugs will force the edge of the drum against the edge of the cover, making the joint stiff again.

Having now described my invention, I claim—

In a centrifugal separator-drum the combination of, a drum proper having a vertical screw-threaded wall and a beveled interior wall, a cover threaded to fit the said screw, and conical interior lugs on the said cover adapted to engage the beveled portion of the said drum, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANS OSCAR NILSSON.

Witnesses:

GERDA PINDKVIST,
GUSTAF ISPALT.