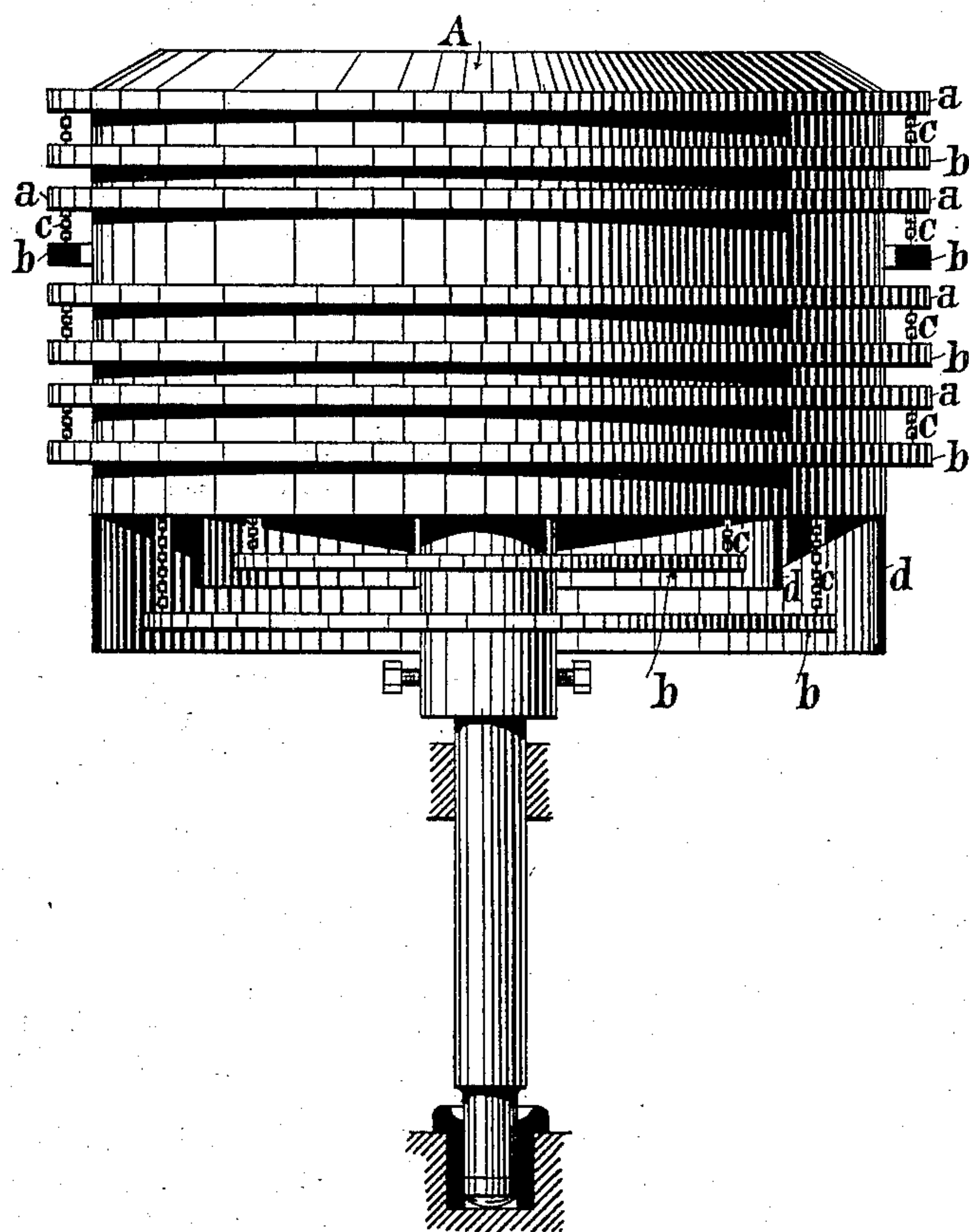


(No Model.)

E. ROTHE.  
CENTRIFUGAL MACHINE.

No. 322,069.

Patented July 14, 1885.



*Witnesses.*  
*Robert Roy*  
*Wm. E. McHugh*

*Inventor.*  
*Emile Rothe*  
*per Roeder & Priesner*  
*Atty.*

# UNITED STATES PATENT OFFICE.

EMIL ROTHE, OF BREITENAU, NEAR OEDERAN, GERMANY.

## CENTRIFUGAL MACHINE.

SPECIFICATION forming part of Letters Patent No. 322,069, dated July 14, 1885.

Application filed April 22, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, EMIL ROTHE, a subject of the Emperor of Germany, residing in Breitenau, near Oederan, Empire of Germany, have invented certain new and useful Improvements in Centrifugal Machines, of which the following is a specification.

The object of my invention is a device for regulating the rotation of centrifugal machines; and the sole figure of the here-annexed drawing is an illustration of my invention, showing the same in connection with that part of a centrifugal machine which comes in the present case in consideration. This figure is a side view of the respective parts of the centrifugal machine.

Round the rotary drum or vessel A of the centrifugal machine are secured the strong iron hoops *a*, which protect the vessel A from exploding, and serve at the same time for holding in place the regulating-rings *b*. These rings *b* are, with their interior circumference, somewhat distant from the outside of the vessel A, and may be either freely carried by the hoops *a* or suspended to the latter by means of the small chains *c*.

If the objects which are to be subjected to the action of the centrifugal machine are unequally distributed in the vessel A, which is practically unavoidable, and the latter therefore makes irregular revolutions, the rings *b* will

occupy, according to the well-known law of mechanics, such position that they re-establish the equilibrium of the rotating parts. Occupying this position, the rings *b* will lean against the overcharged side of the vessel A and by so doing increase the security from explosions. Also, to the bottom of the rotary vessel A may be suspended regulating-rings *b*, as shown in the drawing, by means of the chains *c*, and prevented from excessive dislocation by means of the rings *d*, attached to the bottom of the vessel A.

My regulating device is superior to all other devices constructed for the same purpose, because it does not occupy any room in the vessel itself, and besides this, secures the vessel against explosions.

I claim as my invention—

A regulating device for centrifugal machines, consisting of the rings *b*, surrounding at some distance the vessel A, and suspended either from or laid upon the hoops *a*, as described, and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

EMIL ROTHE.

Witnesses:

C. C. MASON,  
JNO. L. PARISH.