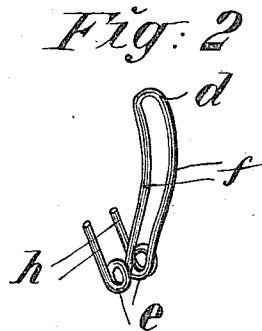
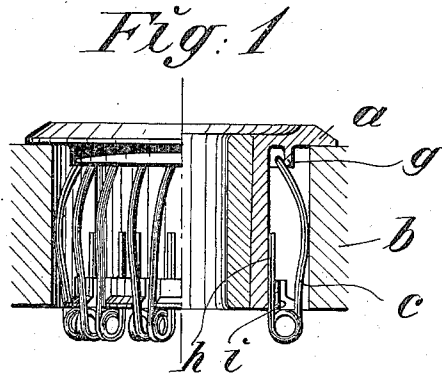
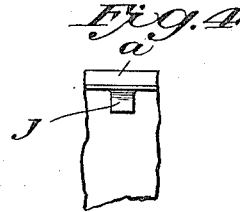
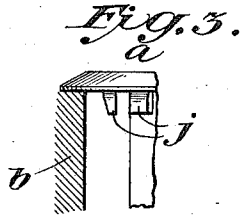


W. JÖRGENSEN.
 SPRING CUSHIONED BEARING.
 APPLICATION FILED JAN. 31, 1910.

1,060,000.

Patented Apr. 29, 1913.



Witnesses:

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UNITED STATES PATENT OFFICE.

WALTER JÖRGENSEN, OF STOCKHOLM, SWEDEN, ASSIGNOR TO AKTIEBOLAGET
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SPRING-CUSHIONED BEARING.

1,060,000.

Specification of Letters Patent.

Patented Apr. 29, 1913.

Application filed January 31, 1910. Serial No. 541,170.

To all whom it may concern:

Be it known that I, WALTER JÖRGENSEN, of Fleminggatan 8, Stockholm, Sweden, a citizen of Russia and a subject of the Emperor of Russia, have invented certain new and useful Improvements in Spring-Cushioned Bearings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The invention relates to a spring cushioned bearing, especially invented for centrifugal machines, in which a series of curved springs are inserted between the shell of the bearing and for example the frame, said curved springs being connected at their ends to the shell, whereas the curved middle portions abut against the frame or against a sleeve inserted in the frame. More specifically the individual curved springs are loosely secured to the lower part of the shell, while the opposite ends abut against the inside of an annular flange projecting from the upper part of the shell.

I will now describe my invention as embodied in the annexed drawing in which the left part of Figure 1 is an elevation of the bearing, whereas the right part is a vertical middle section of the same. Fig. 2 shows an individual spring in perspective view. Fig. 3 is a vertical section, and Fig. 4 an elevation, of a part of a modified form of shell.

—*a*— designates the shell, —*b*— the frame and —*c*— the springs inserted between the said parts. Each spring consists of a wire bent to a curved bow and having the ends recurved and raised at an angle to the bow, as clearly illustrated in Fig. 1. —*g*— designates a shoulder in the form of an annular flange projecting vertically from the upper part of the shell, and when the springs are inserted their upper ends abut against the inside of the said shoulder. The lower part of the shell is provided with a horizontally projecting flange, and this flange is provided with incisions corresponding in num-

ber and breadth to the springs, so that sector-formed shoulders projecting from the shell are formed. In each of said shoulders two holes are bored. When putting the springs in place the recurved ends —*h*— are inserted in the holes in such a way that one end is put in the right hole of one shoulder and the other end in the left hole of the next shoulder, whereby the two arms —*f*— of the bow pass through the space between the two said shoulders pressing against the walls of the same. The upper end —*d*— of the bow is then bent inward so that the same, when the spring is pushed farther up, passes inside the shoulder —*g*—, whereby the recurved portions —*e*— abut against the under side of the flange —*i*—. On account of the arms —*f*— of the bow being curved as shown their curved portions abut against the frame when the shell with its springs is put in place.

Instead of the shoulder being continuous, as shown in Fig. 1, it may be formed of separate pieces corresponding in number to the springs or bows, as shown at *j* in Figs. 3 and 4.

Having now fully described my invention, what I claim and desire to protect by Letters Patent is:

In spring cushioned bearings the combination with the shell and the frame, of a number of individual curved springs inserted between the shell and the frame, the upper ends of each pair of springs being united to form a bow, the lower end of each spring being recurved, a shoulder projecting from the lower part of the shell having holes therein in which the lower ends of the springs are inserted, and a shoulder projecting vertically from the upper part of the shell, the united ends of each pair of springs abutting against the inside of said shoulder.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

WALTER JÖRGENSEN.

Witnesses:

TH. WAWRINSKY,
HARRY ALBIN.