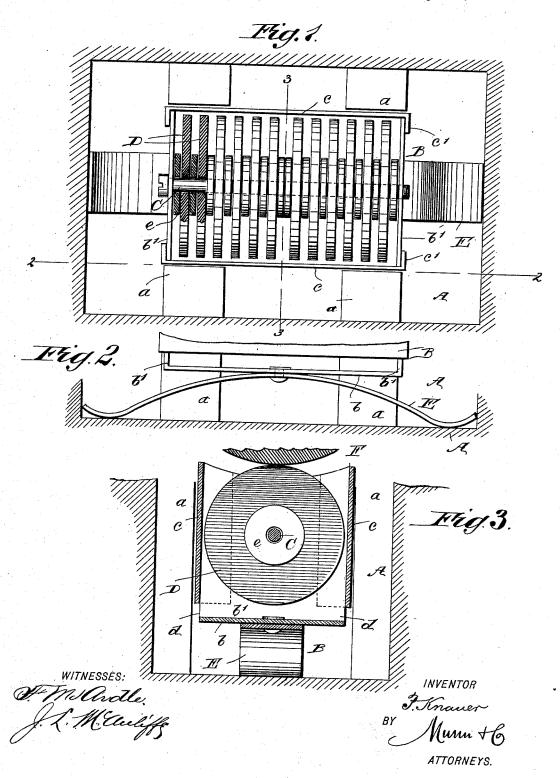
## P. KNAUER. LUBRICATOR FOR JOURNALS.

No. 522,838.

Patented July 10, 1894.



## UNITED STATES PATENT OFFICE.

PANKRATZ KNAUER, OF ELIZABETH, NEW JERSEY.

## LUBRICATOR FOR JOURNALS.

SPECIFICATION forming part of Letters Patent No. 522,838, dated July 10, 1894.

Application filed April 28, 1894. Serial No. 509, 372. (No model.)

To all whom it may concern:

Be it known that I, PANKRATZ KNAUER, of Elizabeth, in the county of Union and State of New Jersey, have invented a new and Im-5 proved Lubricator for Journals, of which the following is a full, clear, and exact descrip-

The invention relates to that class of lubricators in which lubricating devices are main-10 tained in yielding contact with the journal by spring pressure, and adapted to apply the lubricant to the revolving journal, shaft or the like, and the object of the invention is to provide a novel arrangement of spring-supported 15 rotary disks, whereby a single series of disks will be disposed directly beneath the journal. and have a sufficient frictional contact therewith and sufficient surface, to effect an efficient lubrication of the journal with a mini-20 mum of friction.

The invention consists in the novel details hereinafter particularly described and defined in the claims.

Reference is to be had to the accompanying 25 drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a broken plan view, with parts broken out and in section. Fig. 2 is a broken 30 longitudinal sectional elevation on line 2-2 of Fig. 1; and Fig. 3 is a broken transverse section on the line 3-3 of Fig. 1.

A, represents any approved journal box, which preferably has suitable guides a, be-35 tween which is received my improved lubricating device B. It will be understood that the journal box forms no part of the present invention, which resides solely in the lubricating device B.

In constructing the lubricating device, a box-like structure or casing is provided in which the bottom b and the ends b' are formed integrally, and the sides c have their ends c'bent at right angles to overlap the ends b'. 45 and are suitably secured thereto. The sides c do not extend to the bottom, but terminate above the same, thereby providing openings d for the inlet of oil. In the ends b' there is suitably mounted a rod or shaft C, which 50 ranges longitudinally and centrally, and on l

said rod there is mounted to rotate, a longitudinal series of lubricating disks D, between which disks spacing washers e are fitted, the disks and also, preferably, the washers, being free to rotate. To the bottom b of the casing 55 or structure in which the disks are mounted, there is secured the bowed spring E, the ends of which usually are curved slightly upward. This spring is of a length to contact with the ends of the box in which it is secured, and of 60 a strength to maintain the lubricating disks in contact with the journal, as F.

In practice, the journal box is given a sufficient supply of oil, and the oil will surround the lower ends of the disks at all times, and 65 by the rotation of the disks will be delivered constantly to the journal, and with very little friction.

It will be observed that the disks are provided in sufficient numbers to lubricate sub- 70 stantially the whole length of the journal, and bear on the journal directly in line with the pressure of the spring, and the box-like structure maintains the device in proper position at all times.

Having thus described my invention, I claim as new and desire to secure by Letters Patent-

1. The combination in a lubricating device, of a series of disks mounted upon a shaft, 80 each of said disks being free to rotate, a boxlike casing in which said shaft is supported, and a spring arranged on the bottom of such structure and normally tending to press the casing and the disks upward, substantially as 85 described.

2. The combination, with the box-like casing adapted to be removably held in a journal box, the side of the casing having openings at the bottom for the admission of oil, of 90 a rod extending longitudinally of the casing, a series of alternate disks and washers each arranged to rotate freely on said rod, and a bowed spring secured to the bottom of the casing and serving as a yielding support there- 95 for, substantially as described.

PANKRATZ KNAUER.

Witnesses:

S. FISHER, CH. F. MOELLER.