

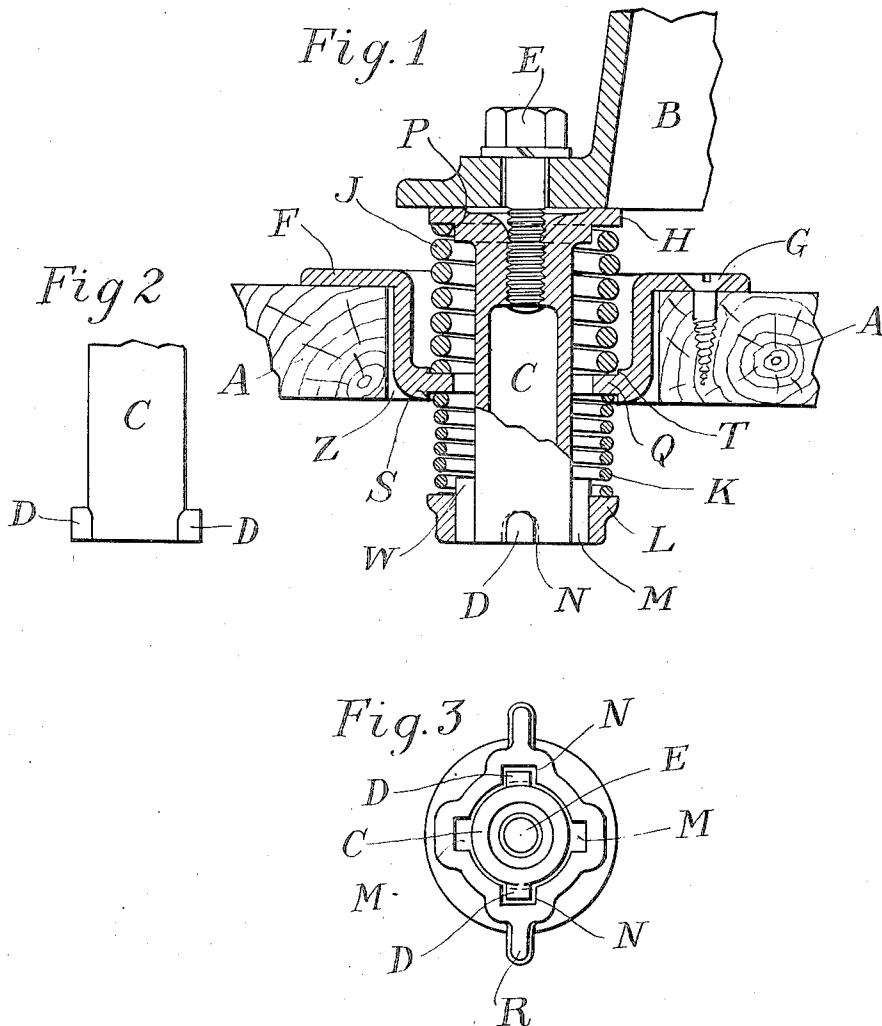
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M. S. GROH

MACHINE SPRING SUPPORT

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WITNESSES

Edwin P. Walsen
Herbert Jahstich

Melvin Solomon GROH INVENTOR
BY Cipriano Andradé ATTORNEY

UNITED STATES PATENT OFFICE.

MELVIN SOLOMON GROH, OF TORONTO, ONTARIO, CANADA, ASSIGNOR TO JOSEPH MERCADANTE, OF NEW YORK, N. Y.

MACHINE SPRING SUPPORT.

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To all whom it may concern:

Be it known that I, MELVIN SOLOMON GROH, a citizen of Canada, residing at Toronto, in the county of York, in the Province of Ontario, Canada, have invented a new and useful Improvement in Machine Spring Supports, of which the following is a specification.

My invention relates to a machine spring support to absorb the vibration both vertical and horizontal generated by any mechanical machine or device.

I attain this object by the mechanism illustrated in the accompanying drawings, in which:

Fig. 1 is a side view of my device with a portion thereof in vertical section; Fig. 2 is a side view of the lower portion of the plug C, and Fig. 3 is a bottom view of a portion of my device.

Similar letters refer to similar parts throughout the several views.

A is a base, which as shown is of wood, but which may be of metal, stone or any other supporting medium. Z is a circular vertical hole in base A, but said hole may be of any other form without departing from the essential features of my device. B is one end of the support housing shown partly in section and partly in solid form, said support housing being adapted to sustain a pump, an electric motor or any other mechanical device the function of which creates vibration. C is a plug preferably hollow, attached to support housing B by screw bolt E. F is a support fastened to base A by screws G or other appropriate means. H is a flange, on the upper end of plug C, adapted to hold the upper end of spring J, and P is a projection on the lower inner face of flange H. Q is a flange integral with support F and having projection T at its upper surface, and projection S at its lower surface, and adapted to hold the lower end of spring J. L is a removable locking member with a circumferential upper projection W and with full length vertical grooves M adapted to permit locking member L to be moved past lugs D onto the periphery of plug C, and when this is done, locking member L can be turned circumferentially by hand lugs R to a distance of 90 degrees, whereupon the recesses N, open at the bottom but closed at the top of locking member L, will

engage lugs D, thus holding locking member L in place, and confining spring K to operative pressure between the lower face of flange Q and the upper face of locking member L.

The operation of my device is as follows: Any vertical downward vibration is absorbed and checked by spring J. Any vertical upward vibration is absorbed and checked by spring K. Any transverse vibration is absorbed and checked by spring J the inner face of which bears against projection P and the outer face of which bears against projection T. The transverse vibration is also absorbed and checked by spring K the inner face of which bears against projection W and the outer face of which bears against projection S. The installation or removal of my device is made very simple by means of the hand removable locking member L with full length grooves M and closed grooves N as above described.

I claim:

In a machine spring support, a cylindrical plug adapted to be fastened to the machine housing, a flange on the upper end of said plug and a projection immediately below the lower face of said flange, a spring spirally located outside of said cylindrical plug, the upper end of said spring bearing against the lower face of said flange, and the inner face of the upper end of said spring bearing against the outer periphery of said projection, a support encircling said cylindrical plug, said support having a flange, with projections at the upper and lower surfaces of the outer periphery of said flange, the lower end of said spring bearing against the upper face of said flange, and the outer face of the lower end of said spring bearing against the inner periphery of the projection at the upper surface of the outer periphery of said flange, radially extending lugs at the lower end of said cylindrical plug, a locking member with full length vertical grooves adapted to permit said locking member to clear said lugs, a second set of grooves in said locking member, each of said second grooves being closed at the upper end thereof and adapted to hold said locking member in fixed relation to said cylindrical plug, a projection at the upper and inner surface of said locking member, and a second spring spirally located outside of said cylindrical

plug, the upper end of said second spring bearing against the lower face of the flange on said support, and the outer face of the upper end of said second spring bearing
5 against the inner periphery of the projection on the lower surface of said flange on said support, the lower end of said second spring bearing against the upper face of said locking member, and the inner face of the lower end of said second spring bearing against
10 the outer periphery of the projection at the upper and inner surface of said locking member.

MELVIN SOLOMON GROH.