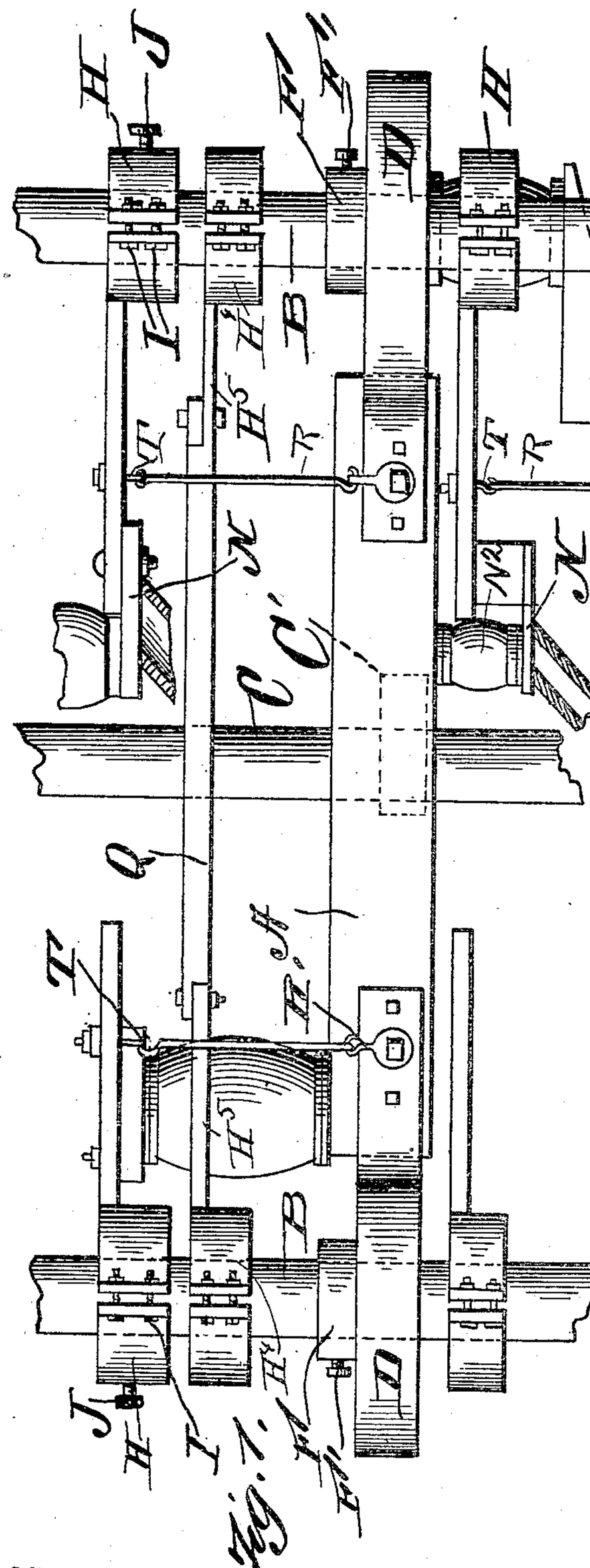
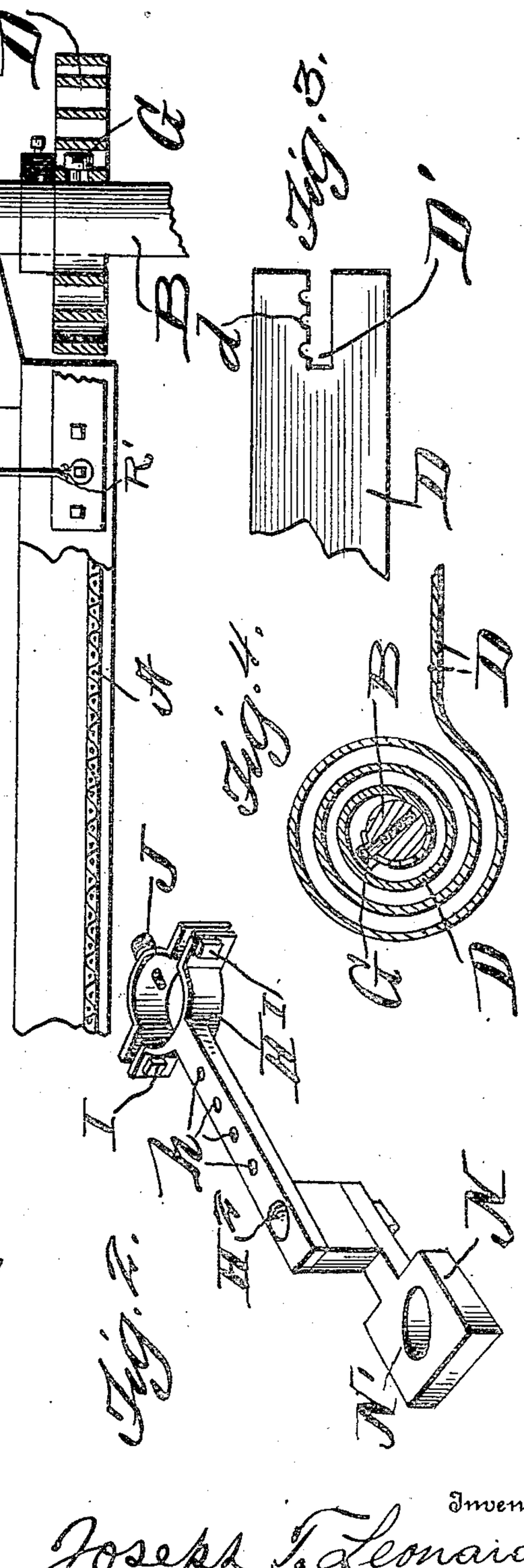
J. T. LEONARD.

HANGER FOR SCREENS.

APPLICATION FILED MAY 28, 1909.

935,267. Patented Sept. 28, 1909.





Witnesses

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UNITED STATES PATENT OFFICE.

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HANGER FOR SCREENS.

935,267. Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed May 28, 1909. Serial No. 499,051.

To all whom it may concern:

Be it known that I, JOSEPH THOMPSON LEONARD, a citizen of the United States, residing at Malvern, in the county of Carroll and State of Ohio, have invented certain new and useful Improvements in Hangers for Screens; 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in sifters and screening apparatus for milling purposes and comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of a portion of my improved apparatus. Fig. 2 is a detail view of one of the clamping members. Fig. 3 is a detail view showing means for adjusting a coiled spring which is fastened to the sifter or screen box, and Fig. 4 is a detail sectional view.

Reference now being had to the details of the drawings by letter, A designates a sieve box which forms one of a series superimposed one above another, only portions of two, however, being illustrated in the drawings.

B, B designate vertically mounted shafts and intermediate the various sieves is mounted a vertical shaft C having a cam C′ thereon which is adapted to contact with the adjacent sides of the sieves or screen boxes for the purpose of giving the same a lateral vibratory movement. Fixed to the opposite sides of each sieve are the springs D, ends of which are bent to form coils, and each spring is slotted as at D′, shown in Fig. 3, the upper marginal edges of the springs being provided with notches *d*. Each end of the spring which is coiled is adapted to pass about a shaft B, and F, F designate collars each held upon the latter by means of set screws F′. Projecting from the shaft at points diametrically opposite is a bolt G adapted to engage one or another of the notches *d* to hold the spring in an adjusted position and, when thus adjusted, a collar F is designed to bear against the upper edge of the spring and hold the spring in such adjustment.

H and H′ designate clamping members having bolts I passing through the registering apertures therein and one of said members carries a set screw J. Said clamping members are adapted to embrace the shaft B and be held in adjusted positions thereon by drawing the bolts so that the clamping members will frictionally engage said shaft. Each of said clamping plates H has a laterally projecting arm H^2 provided with perforations *h* and N, N designate plates which are adjustably held to said projecting arm H^2 and each provided with a central opening N′ communicating with a bag N^2 forming means whereby the material being screened may pass from one sieve to another. A bar Q is connected at its ends to the arm H^5 upon the clamping plate H^4. Fastened to the opposite sides of each sieve are the rods R, the lower ends of which are fastened to hooks R′, while their upper ends are fastened to hooks T passing through one or another of the apertures *h* in the arm H^2, said rods being provided for supporting means to the sieves and contents thereof, thus relieving the springs of extra strain.

From the foregoing, it will be noted that, by the provision of the apparatus shown and described, secure supporting means is afforded for holding the sieve boxes and thus relieving the springs of any supporting office and allowing the same to be utilized for imparting the required vibratory movement to the sieves and absorbing vibrations. By the provision of the adjusting feature to hold the springs, a quick springy motion may be imparted to the apparatus.

What I claim to be new is:—

1. In combination with vertical shafts, sieve boxes, springs fastened to the latter boxes and having their ends coiled, the coiled end of each spring having a slot with notches in the edge thereof, bolts passing through said shafts and adapted to engage said slots and notches, collars mounted upon the shafts and adapted to hold said bolts in engagement with the notches of the spring, clamping means secured to said shaft and from which the sieve boxes are suspended.

2. In combination with vertical shafts, sieve boxes, springs fastened to the latter boxes and having their ends coiled and slot-

ted with notches in the edge thereof, bolts passing through said shafts and adapted to engage said slots and notches, collars mounted upon the shafts and adapted to hold said bolts in engagement with the notches of the spring, clamping members, means for holding the same in engagement with said shafts, a projection upon one of said members, and a rod connecting said projection with the sieve box.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JOSEPH THOMPSON LEONARD.

Witnesses:

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