Dec. 2, 1930. R. J. BURKE 1,783,826

RACK ROD ASSEMBLY FOR SCALES

Filed Jan. 7, 1929

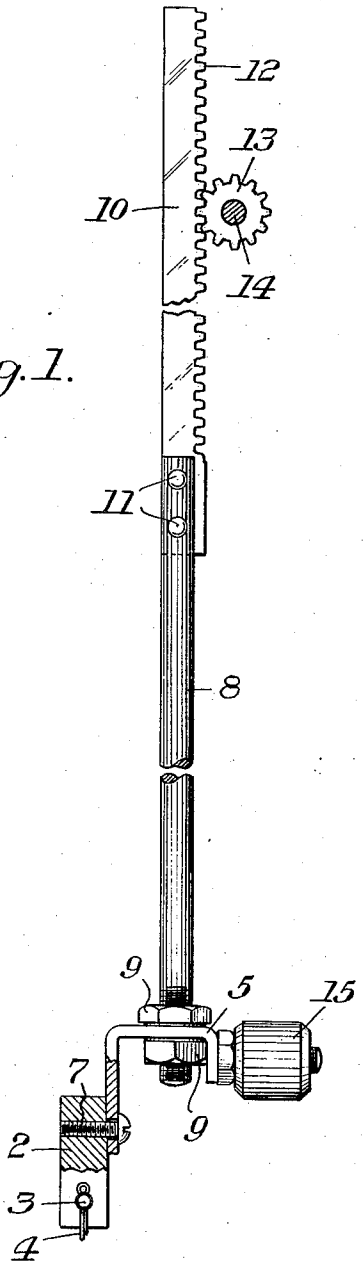


Fig. 1.

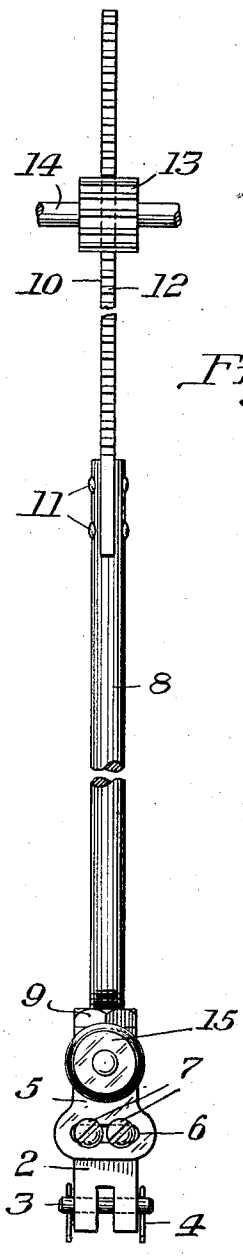


Fig. 2.

INVENTOR

Robert J. Burke

by Byrnes, Stebbins & Parmelee

his Attys.

Patented Dec. 2, 1930 1,783,826

UNITED STATES PATENT OFFICE

ROBERT J. BURKE, OF LATROBE, PENNSYLVANIA, ASSIGNOR TO LINCOLN SCALE CORPORATION, OF LATROBE, PENNSYLVANIA, A CORPORATION OF DELAWARE

RACK-ROD ASSEMBLY FOR SCALES

Application filed January 7, 1929. Serial No. 330,779.

This invention relates generally to scales, and more particularly to a rack rod assembly used in connection with drum scales.

In drum scales a drum is provided which has divisions indicating the different weights marked thereon. The drum is supported by a shaft, and to this shaft there is connected a drum pinion. The drum pinion is actuated by a rack rod connected at one end to the main scale lever.

The teeth on the pinion and rack are designed substantially without back lash. In order to prevent binding, it is necessary that the axes of the drum pinion and rack rod be truly perpendicular. Occasionally in assembling the scale, or while in transit or use, this perpendicular relation is not maintained, which causes the parts to bind.

My invention provides means for adjusting the parts in a simple manner so that they will run freely. This is accomplished by providing for lateral adjustment of the rack rod on its support.

In the accompanying drawing which illustrates the present preferred embodiment of my invention,

Figure 1 is a side elevation, parts being shown in section, and

Figure 2 is a front elevation.

Referring to the drawing, a bearing block 2 is pivotally mounted on the main scale lever (not shown) by means of a pin 3 and cotter pins 4. A bracket 5 is adjustably supported on the bearing block. As shown, the bracket 5 is provided with an elongated slot 6 which receives screws 7 secured to the bearing block. A rack rod 8 is secured to the bracket by nuts 9, and at its upper end it carries a rack 10 which is fastened to the rack rod by rivets 11. The teeth 12 of the rack mesh with a drum pinion 13 secured to a drum shaft 14.

The bracket 5 is provided with the usual weight 15. If the rack and pinion show any tendency to bind, the screws 7 are loosened, the bracket 5 is moved laterally of the bearing block 2, and the screws are again tightened. Usually it is only necessary to depress the scale platform a few times, thus moving the rod up and down, in order to position the rack rod in a free-running position.

I have illustrated and described the present preferred embodiment of my invention. It is to be understood, however, that the invention may be otherwise embodied without departing from the spirit of the invention or the scope of the following claims.

I claim:—

1. A rack rod assembly comprising a bearing block, a bracket supported by said block, a rack rod carried by said bracket, and means for adjusting said bracket laterally of said bearing block.

2. A rack rod assembly comprising a bearing block, a bracket supported by said block, a rack rod carried by said bracket, said bracket and block being provided with a cooperating slot and fastening means for lateral adjustment of said bracket and block.

3. A rack rod assembly comprising a bearing block, a bracket supported thereby, and a rack rod carried by said bracket, said bracket having an elongated slot which receives a fastening means secured to said bearing block for lateral adjustment of said bracket and block.

4. In a drum scale, a drum pinion, a rack adapted to actuate the pinion, a support for the rack adjacent the end thereof opposite the pinion, and means for adjusting the rack laterally of the support.

5. In a drum scale, a drum pinion, a rack adapted to actuate the pinion, a support for the rack adjacent the end thereof opposite the pinion, and means for adjusting said opposite end of the rack laterally of the support and longitudinally of the drum pinion axis, and substantially parallel to said axis.

6. In a drum scale, a bearing block, a bracket supported by said block, a drum pinion, a rack carried by said bracket and adapted to actuate said pinion, and means for adjusting said bracket laterally of said bearing block and longitudinally of the drum pinion axis.

In testimony whereof I have hereunto set my hand.

ROBERT J. BURKE.