

No. 871,142.

PATENTED NOV. 19, 1907.

G. S. POWER.
ADJUSTABLE SLIDEWAY.
APPLICATION FILED DEC. 13, 1906.

Fig. 1.

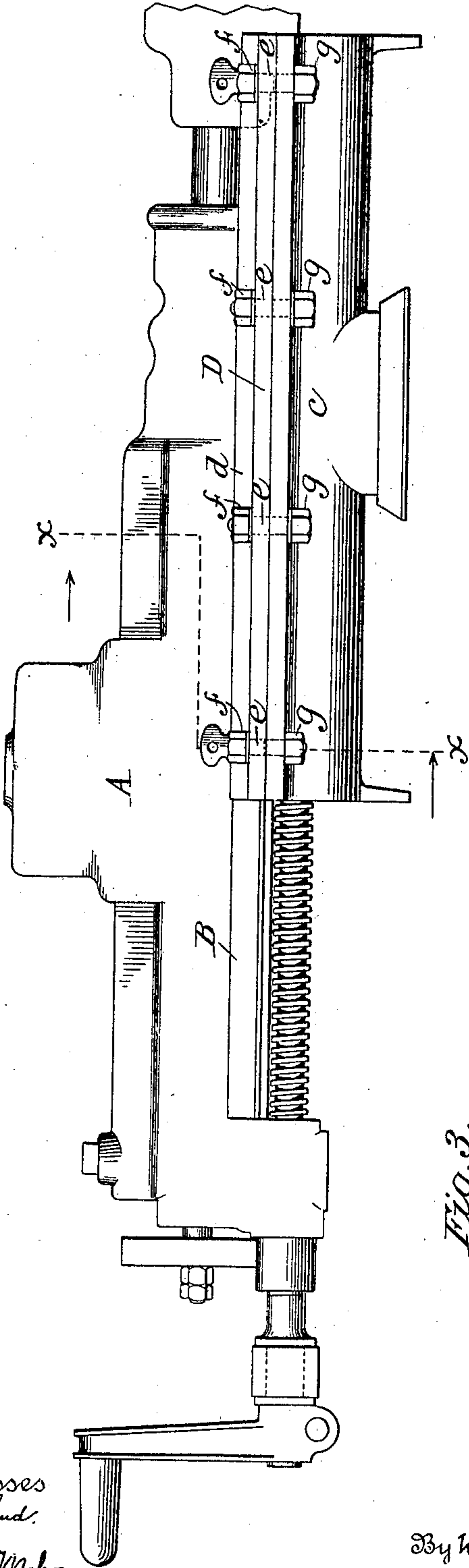


Fig. 2.

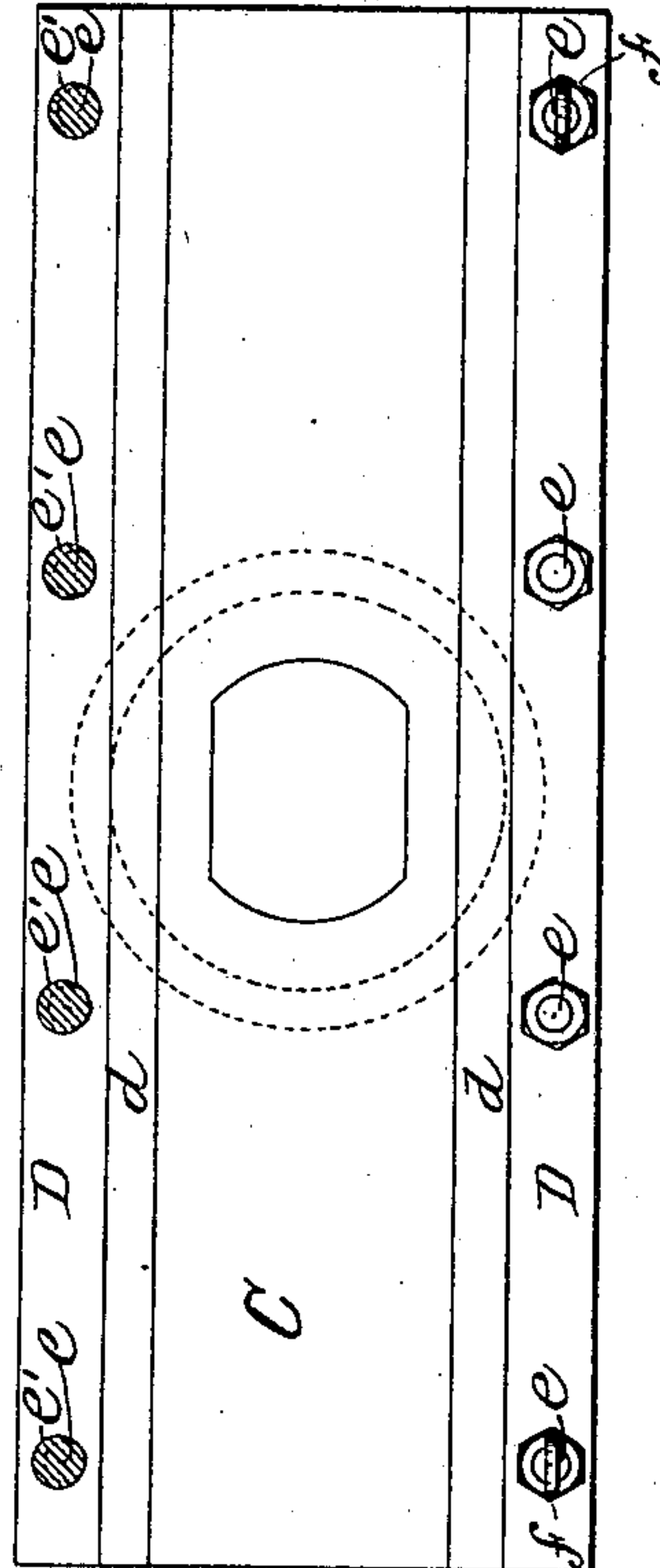
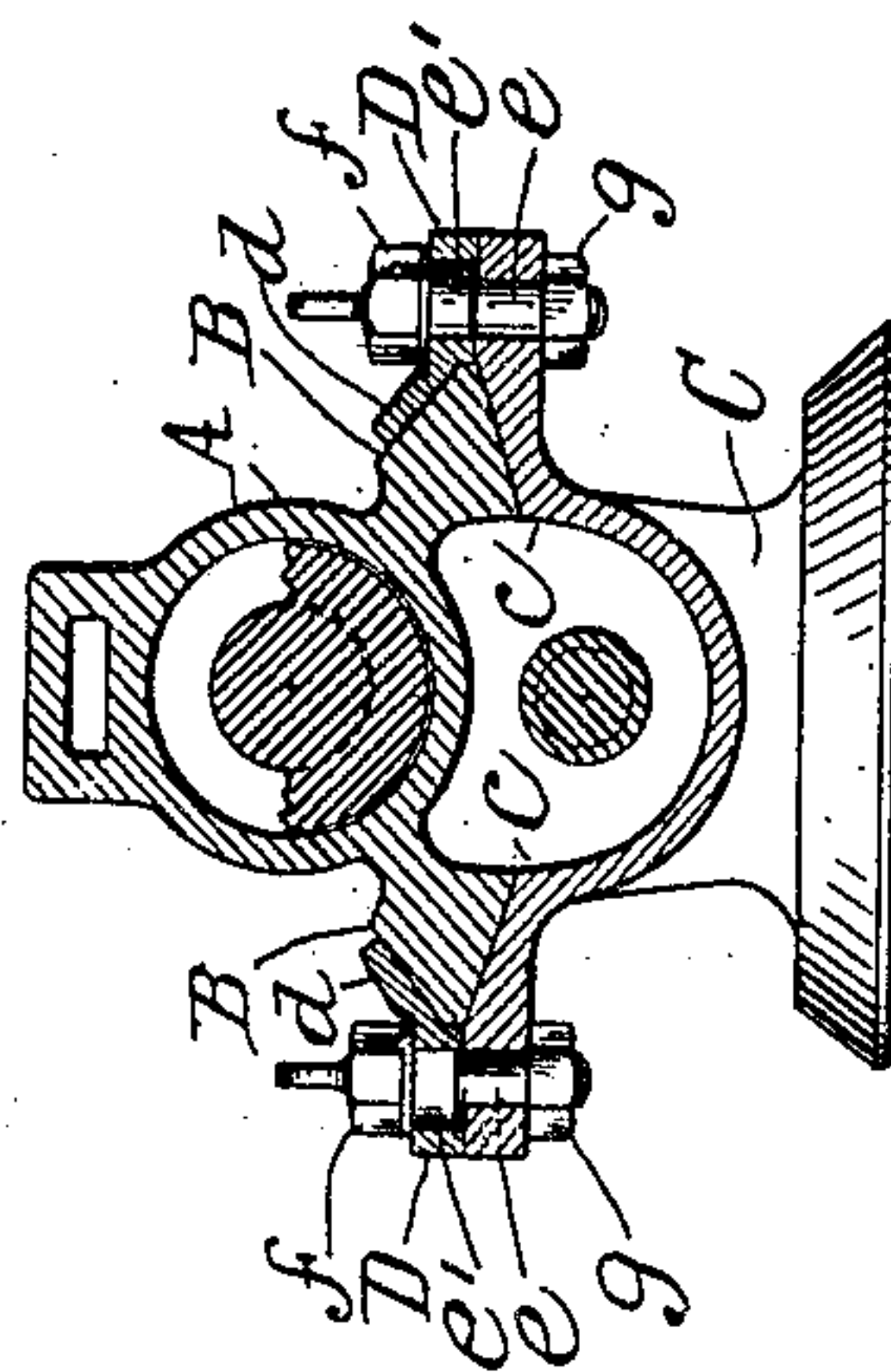


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE S. POWER, OF PASSAIC, NEW JERSEY, ASSIGNOR TO WICKES BROTHERS, OF SAGINAW, MICHIGAN, A CORPORATION OF MICHIGAN.

ADJUSTABLE SLIDEWAY.

No. 871,142.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed December 13, 1906. Serial No. 347,588.

To all whom it may concern:

Be it known that I, GEORGE S. POWER, a citizen of the United States, residing at Passaic, New Jersey, have invented certain new and useful Improvements in Adjustable Slideways, of which the following is a specification.

My invention relates to ways for sliding pieces of machinery such as rock-drill cylinders, lathe-beds and the like, and consists in certain novel means for adjusting the side guides of such ways so as to take up the wear of the parts in use.

In the drawings Figure 1 is a side view of a rock-drill provided with my improved adjustable guides; Fig. 2 is a top view of the bed and guides, the heads of the upper row of adjusting bolts being removed and the bolts being shown in section; and Fig. 3 is a cross-sectional view, looking in the direction of the arrows and taken on the line X X of Fig. 1, the adjusting bolts being shown in full. In all the figures corresponding parts are designated by the same letters.

A is the cylinder of a rock-drill which is provided with the guide wings B B.

C is the frame or bed which is provided with tracks *c c*, on its upper surfaces.

D D are guides with upwardly inclined flanges *d d*, and which are pierced to receive the adjusting bolts *e e*. These bolts are provided with eccentrically set shoulders *e' e'* which fit in the holes in the adjustable guides, the lower end of the bolt passing through the side of the base or bed. These bolts are provided with suitable heads *f f*, which may be plain, as shown on the intermediate bolts, or may be thumb caps as shown on the end bolts. And the bolts are secured at their lower ends by suitable nuts *g g*.

The sliding of the traveling part of the machine, in the case illustrated the drill cylinder, tends to wear away the track and the wings traveling within it, and thus to make the operation of the machine loose and uncertain. The inclining of the ways and flanges downward and inward, as shown, assists in centering the cylinder as its wings wear down, and prevents its sliding to one side or to the other as it would do if the tracks *c c* were level. The wearing down of the opposing surfaces will make the cylin-

der wings B B drop away from the flanges *d d*. In that case each flange D may be tightened up to its complementary wing B by loosening the nuts *g g* and then turning the bolts *e e* simultaneously and in the same direction, the eccentric shoulders *e' e'* on the bolts swinging the flange D to the required position, where it can be again locked by tightening up the nuts *g g*. It will be observed that it is necessary to turn all the eccentric bolts in the flange simultaneously and in the same direction; for any number less than all cannot be turned without the eccentrics at once wedging and stopping further rotation. This prevents the unequal adjusting of the side flange D by setting one end in further than the other and insures the true adjustment of the flanges whenever they are altered.

If desired the eccentrics may be left off of the intermediate bolts and those bolts simply used to secure the flange when adjusted, the adjustment, in that case, being made by the eccentric bolts at the ends.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States is:—

1. The combination, with the bed of a slideway provided with inwardly beveled tracks, of a marginal guide extending over each of said tracks, a plurality of rotatable adjusting members consisting of bolts passing through each of said guides each bolt having relatively eccentric portions one of which passes through and is journaled at a fixed point in said guide and the other of which is journaled at a fixed point in said slideway, and a carriage sliding between said tracks and guides.

2. The combination, with the bed of a slideway provided with tracks, of a marginal guide for each of said tracks, and a plurality of adjusting bolts each provided with an eccentric shoulder engaging with said guide and with a trued shank engaging with the bed of the slideway, means for turning said bolts, and means for holding them in position.

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Witnesses:

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