

Nov. 24, 1931.

L. JAENICHEN

1,833,576

SCALE PLATFORM LIFTING DEVICE

Filed July 1, 1930

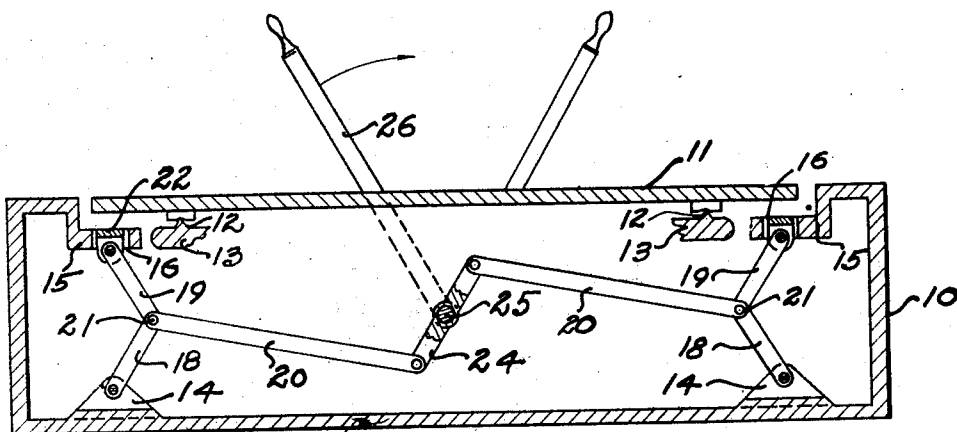


Fig. 1.

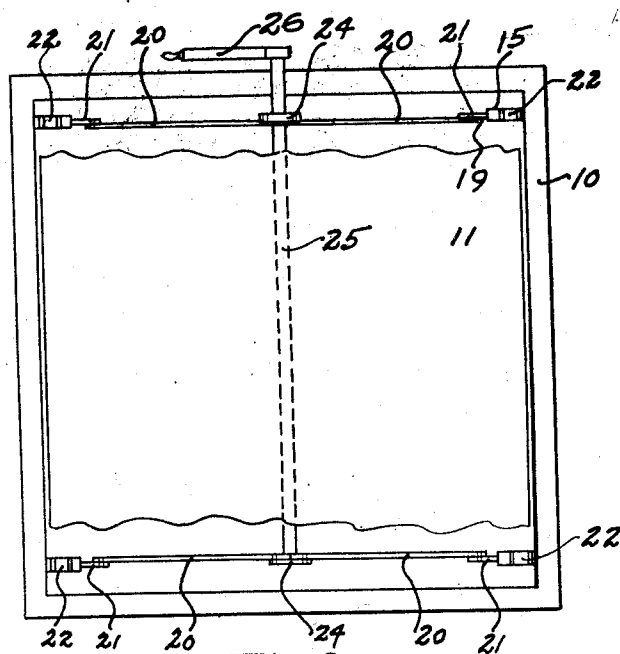


Fig. 2.

INVENTOR.

BY *Louis Jaenichen.*
Francis D. Hardesty
ATTORNEY.

UNITED STATES PATENT OFFICE

LOUIS JAENICHEN, OF SPRINGFIELD TOWNSHIP, OAKLAND COUNTY, MICHIGAN, ASSIGNOR TO THE STANDARD COMPUTING SCALE COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN

SCALE PLATFORM LIFTING DEVICE

Application filed July 1, 1930. Serial No. 465,128.

This invention relates to scales and more particularly to platform scales.

One of the most frequent sources of injury to platform scales is due to the sudden dropping of a load upon the platform while the latter was supported on its knife edges, causing injury to the knife edges. Means have been provided to lock the scale platform in position while the load is being placed thereon, but disadvantages in such means have been found due to the fact that they locked the platform in position upon the pivots or knife edges.

An object of this invention, therefore, is a means for elevating the platform off the pivots and locking the platform in its elevated position.

A still further object is a platform lifting and locking device including a toggle linkage which is operable by a handle, conveniently placed adjacent the platform.

A still further object is a scale platform elevating and locking means including toggle linkages, the scale proper having guides thereon for directing movement of parts of the linkages.

Still further objects will readily occur to those skilled in the art upon reference to the following description and the accompanying drawings in which

Fig. 1 is a sectional view of a scale platform with the device of the invention in place.

Fig. 2 is a plan view to smaller scale, parts being cut away.

As indicated in the drawings, the base 10 of the scale is provided with the usual platform 11 supported, in the usual manner, upon knife edges 12 on a weighing lever 13. The base 10 is further provided with a plurality of lugs 14 and a plurality of guides 15, the latter having guiding apertures 16 for purposes to be presently described.

Pivotally connected to the lugs 14 are links 18, which in turn are pivotally connected to the links 19, and 20, forming a toggle at the point 21. On the upper end of each link 19 is a block 22, which is slidable in an aperture 16, previously described. Connecting each pair of links 20 is a crank 24 mounted upon

and keyed to a shaft 25, upon which is disposed the handle 26.

As observed best from Fig. 2, there are provided four sets of links 18, 19 and 20, and all of the links 20 are connected to one another through the cranks 24 and the elongated shaft 25, so that all of the links work in unison when the handle 26 is moved.

The operation of the device will readily be observed. When the handle 26 is moved from left to right (Fig. 1) crank 24 rotates to a horizontal position and links 20 are thrust outwardly and horizontally until they are disposed in straight line alignment with the crank 24. Toggle forming links 18, 19 correspondingly move so that blocks 16 about the lower surface of the platform 11, elevating it off its pivots or knife edges 12.

It will be observed that when the handle 26 has been moved to its extreme right hand position (Fig. 1) the members 20, 24 and 26 will be in straight line alignment and the platform will be locked in its elevated position.

Now having described the invention and the preferred embodiment thereof, it is to be understood that the said invention is to be limited, not to the specific details herein set forth, but only by the scope of the claim which follows:

What I claim is:

In combination, a horizontal scale platform supported on knife edges, and means to lift the platform vertically, in a straight line, off said knife edges and to lock it in its elevated position, said means including toggle forming linkages connected by a handle-operated crank, the linkages having parts engaging said platform and movable vertically in straight lines, the scale being provided with stationary guides for vertically movable parts of said linkages.

LOUIS JAENICHEN.