

A. J. THORNLEY.

VAULTING BAR.

APPLICATION FILED APR. 17, 1911.

1,013,829.

Patented Jan. 2, 1912.

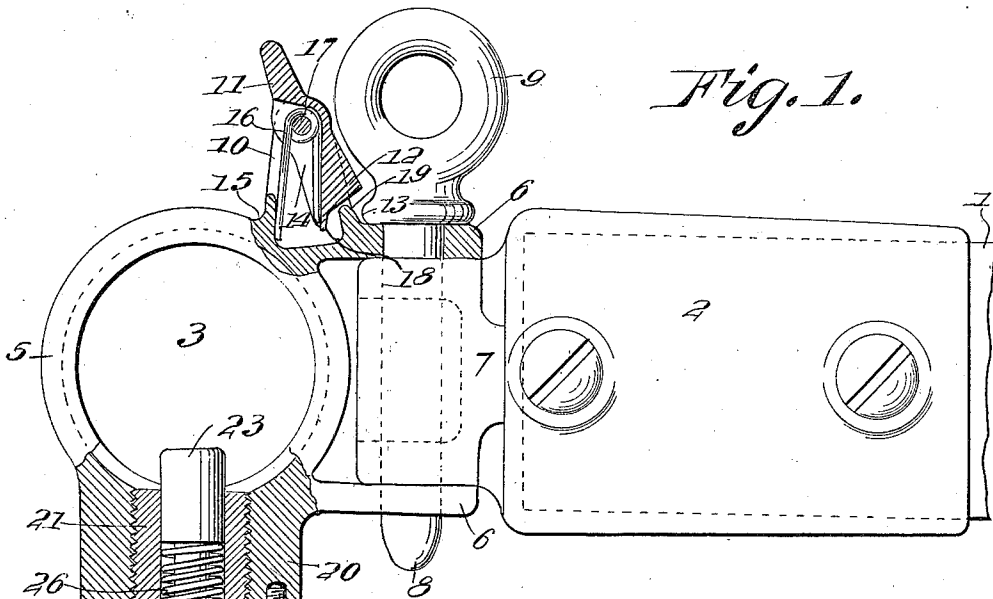


Fig. 1.

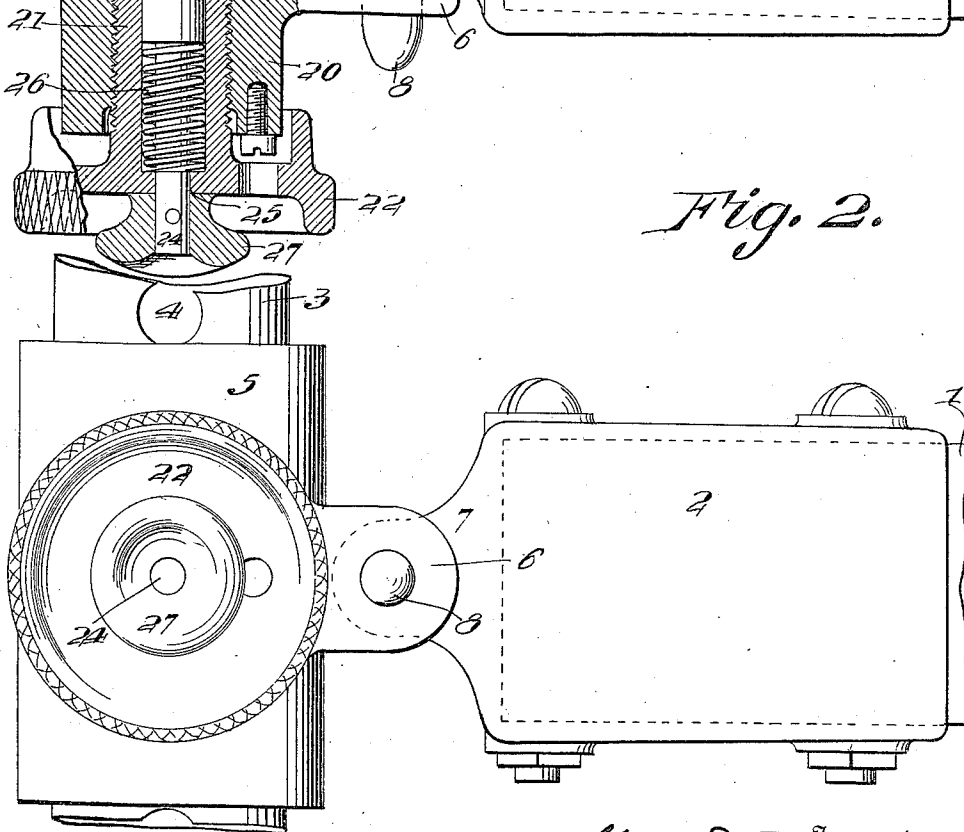


Fig. 2.

Witnesses
Ada E. Hagerty
Emmet B. Smith

Inventor
Albert J. Thornley
by Joseph A. Miller
Attorney

UNITED STATES PATENT OFFICE.

ALBERT J. THORNLEY, OF PAWTUCKET, RHODE ISLAND, ASSIGNOR TO NARRAGANSETT MACHINE COMPANY, OF PAWTUCKET, RHODE ISLAND, A CORPORATION OF RHODE ISLAND.

VAULTING-BAR.

1,013,829.

Specification of Letters Patent.

Patented Jan. 2, 1912.

Application filed April 17, 1911. Serial No. 621,662.

To all whom it may concern:

Be it known that I, ALBERT J. THORNLEY, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Vaulting-Bars, of which the following is a specification.

This invention relates to certain new and useful improvements in vaulting bars or Swedish bars, and the object of the invention is to provide simple, and efficient means for holding the boom or bar against accidental movement.

Further and other objects will later appear and of themselves be manifested.

In the drawings: Figure 1 is a top plan view partly in section showing the present invention as in use, and Fig. 2 is a side elevation thereof.

1 designates the boom or bar and 2 the cap or connection to which the bar is secured.

3 designates the upright bar which is formed throughout its height with a series of spaced openings 4, and which is preferably hollow.

5 designates a coupling which is slidable along the length of the upright bar 3 and receives the latter. The coupling 5 is provided at one side with a pair of spaced ears 6 between which is received the forked extension 7 of the cap or connection 2, a pin 8 being passed through registering openings provided therefor in the ears 6 and in the fork of extension 7, the pin 8 having a head 9 to allow of easy manipulation thereof. One side of the coupling 5 is formed with an integral extension 10 to which is pivoted a latch 11 the inner end of which has a locking nose 12 which projects into the path of movement of the neck portion 13 of the head 9 of pin 8. The latch has a cut out portion 14 and the coupling 5 is formed with a projection 15, a U-shape spring 16 being coiled about the pivotal pin 17 of the latch and having its ends engaged in cut out portions 14 of the latch and abutting the projection 15 of the coupling 5 in order to at all times exert an outward pressure on the latch forcing the locking nose 12 thereof outwardly into engagement with the latch 9 of the pin 8, and since the locking nose 12 extends in the path of movement of the neck 13 of pin 8 it will be seen that accidental movement of the pin will be prevented, and that in order

to remove the pin, the latch 11 must be moved so that its locking nose 12 is out of the path of movement of the neck 13. The latch 11 is further provided with an extension 18 which is adapted for engagement with a nose or projection 19 formed on the coupling 5, whereby the outward movement of the nose 12 will be restricted in an obvious manner. Coupling 5 is further formed with an interiorly threaded and outwardly extending socket portion 20 in which latter is threaded the hollow stem 21 of the locking screw, said screw being composed of the stem 21 and the knurled head 22. A pin 23 of a size to slidably enter the openings 4 of the upright bar 3 is secured on the hollow interior of the stem 21 and has its stem 24 extending through an opening 25 formed in the knurled head 22. A coiled spring 26 surrounds the stem 24 of the pin 23. A head 27 is secured to the stem 24 of the pin 23 and is adapted for manual manipulation, whereby the pin 23 may be withdrawn from one of the apertures 4 in an obvious manner to permit coupling 5 to be adjusted to various heights along the upright bar 3. Obviously, the pin 23 by virtue of the action of spring 26 will snap into one of the holes 4 in the upright bar to hold the boom in position, whereupon the knurled head 22 is screwed inwardly to cause the inner end of the stem 21 thereof to frictionally bind against the upright bar 3, thereby preventing any movement or rattling of the parts with respect to the bar 3. It will thus be seen that accidental movement of the pin 8 is prevented, due to the presence of the locking latch 11 and the similarly accidental movement of the pin 23 is prevented due to the presence of the spring 26, and the fact that the knurled head 22, partially surrounds the head or knob 27 of pin 23 affords protection to the latter, the knurled head 22 being formed hollow on its outer end for the purpose described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. In a device of the type set forth, in combination with an upright bar having a coupling slidable thereon, a horizontal bar, a connection carried by the horizontal bar and secured to the coupling, a pin for securing said connection to the coupling, and

a spring pressed latch normally engaging said pin to prevent accidental movement thereof.

2. In a device of the type set forth, in
5 combination with an upright bar having a coupling slidable thereon, a horizontal bar, a connection carried by the horizontal bar and secured to the coupling, a pin for
10 securing said connection to the coupling, said pin having a projection, and a spring pressed locking element having a nose normally extending across the path of movement of the projection, said element being
15 movable to a position to permit said projection to pass the same.

3. In a device of the type set forth, in combination with an upright having a coupling thereon, and a boom connected to the coupling, a spring pressed pin carried by
20 the coupling for engagement with openings provided therefor in the upright, and a screw member carried by the coupling to bind against the upright to prevent rattling of the coupling with respect to the upright.

25 4. In a device of the type set forth in combination with an upright having a coupling thereon, and a boom connected to the coupling, a hollow screw threaded member

carried by the coupling, and having a head to operate same to cause the screw to bind
30 against the upright, and a spring pressed pin arranged on the interior of said screw for entry into one of a plurality of openings provided therefor in the upright.

5. In a device of the type set forth in
35 combination with an upright having a coupling thereon, and a member carried by the coupling, and having a head to operate same to cause the screw to bind against the upright, and a spring pressed pin arranged
40 on the interior of said screw for entry into one of a plurality of openings provided therefor in the upright, said pin having a head thereon, and said head of the screw threaded member being formed hollow to
45 receive said head of the pin, so that said head of the screw threaded member surrounds the head of the pin to protect the latter.

In testimony whereof I have signed my
50 name to this specification in the presence of two subscribing witnesses.

ALBERT J. THORNLEY.

Witnesses:

ADA E. HAGERTY,

J. A. MILLER.