Our invention relates to a safety stand or rack for linoleum rolls which at the same time may serve as display rack for such rolls in retail stores.

Rolls of inlaid linoleum for which the present invention is particularly designed have a weight of about 200 to 600 pounds, a height of about 6 feet and a diameter of 12-16 inches. They are usually stored in an upright position partly for technical reasons, as they are too heavy to be easily lifted or placed on shelves or racks, and partly in order to save space. This last consideration is of particular importance in the display of inlaid linoleum in stores which handle not only the many different designs and qualities of a single manufacturer but those of several manufacturers. As long as only a few patterns are displayed in a store, it is possible to line up the rolls against a wall of the store and even to keep them securely in place. However, such wall space is limited and in modern stores is frequently occupied by other merchandise such as rugs, carpet material, etc. It has accordingly become customary in linoleum and rug stores to arrange several rolls of linoleum together at some convenient place inside the store, sometimes in rows of two with alleys between such rows to allow customers to inspect the various patterns and select the wanted merchandise.

This practice of putting up the linoleum rolls throughout the store space has been a constant and considerable hazard, as the accidental falling of a single roll may cause adjacent rolls to fall down, thereby endangering the safety of the buying public and at the same time damaging the merchandise. Especially in larger stores where customers and their children may pass through the alleys without being accompanied by a sales clerk, serious injury and damage may result from the tilting of a single linoleum roll.

Accordingly, it is a purpose of the present invention to provide a new stand for such linoleum rolls which will increase the safety of the buying public in stores handling linoleum rolls.

It is a further object of this invention to decrease the likelihood of damage to the linoleum rolls which might result from tilting over of the upright linoleum rolls. Another object of the invention is to hold upright linoleum rolls securely in place and to prevent the collapse of rows of linoleum.

It is a further object of the invention to accomplish the foregoing objects with a rack or guard structure which does not need to be permanently fixed to the floor of the store, which may be set up readily at any desired location to allow the alleys between rows to be arranged as narrow or as wide as is necessary depending on display needs, customer traffic etc.

Still another object of the invention is a safety stand or rack of simple, light and inexpensive construction in which we make use of the weight of a few of the linoleum rolls for increasing the stability of the stand and for countering tilting forces exerted on said stand.

A further object of the invention is to obtain the foregoing and other advantages by a portable structure which can be set up by one person and which allows the removal or rearrangement of the heavy linoleum rolls likewise by a single person.

These and other objects, features and advantages are obtained according to our invention by a stand comprising an elongated frame structure including a pair of side members, each of which is mounted on an enlarged base plate which forms a platform of such size as to accommodate two linoleum rolls in upright position, one on each side of a beam that interconnects the upper end portions of the side members, while additional upright linoleum rolls may be placed between such platforms along said beam. The weight of the rolls placed on said platform-like base plates will serve to increase the stability of the stand and to counteract tilting forces exerted by linoleum rolls falling or learing against said beam.

For a clearer and more detailed description of our invention, reference should now be had to the accompanying drawing in which Fig. 1 shows a perspective view of a preferred embodiment of the invention and Fig. 2 shows a perspective view of another embodiment, disclosing modifications of various details of the arrangement of Fig. 1.

The safety stand shown in Fig. 1 comprises an open elongated frame 1 including two vertical side or end members 2, and a horizontal cross member or beam 3 extending lengthwise of the stand and interconnecting the side members 2 so as to hold them in predetermined spaced relationship. Linoleum rolls 4 and 5 are intended to be placed along each side of the cross bar 3, the height of which is approximately 2/3 of that of the upright rolls. The two side members 2 are each provided with an enlarged base plate forming a thin platform 6. The platforms are preferably of sheet metal of about ⅛ thickness rigidly united with the associated side piece 2, for instance, by welding. Each platform is of such width and extends lengthwise of the rack a distance sufficient to accommodate two linoleum
rolls, such as the end rolls 4', 5' side by side in upright position, one on each side of the cross member or bar 3.

The height of the platform should be as low as possible and preferably not exceed about ½ inch and its edge should be smoothed off to allow the placing of linoleum rolls on the platform by a rotary movement or the like without requiring lifting the rolls from the store floor.

The side members 5 are preferably composed of a pair of upright channel iron 7 disposed with the channels in confronting relation and arranged to form a side piece of inverted V-shape.

In order to increase the rigidity of the side pieces, a cross piece 6 may be provided which will result in a generally A-shape of the side pieces 2.

The cross member 3 may consist of metal pipe and be screwed or welded or otherwise fastened to the side members 2. Additional inclined braces extending generally lengthwise of the rack, such as the braces 8, may be provided for increasing the rigidity of the frame structure. In the arrangement of Fig. 1, the length of the cross bar 3 is illustrated as being approximately 6 times the diameter of a full linoleum roll to accommodate 6 full rolls on either side of the cross bar 3, some of the rolls 5 being indicated only by broken lines for sake of clarity of the drawing. The cross bar 3 may be of any desired other length and is preferably of sufficient length to accommodate between 10 and 15 full rolls on each side or a corresponding larger number of broken rolls. The generally U-shaped brackets 10 and 11 are pivotally attached to the side pieces 2 by means of pin members 12 and may be swung upwardly as indicated in dash-dotted lines for the right end of bracket 10. When thus raised, the brackets will not interfere with the insertion or removal of the linoleum rolls. Stop members (not shown) may be provided to fix the end positions of the brackets.

In the preferred construction, the various parts of the frame and the platforms are welded together, but other suitably fastening means may be provided especially between the side pieces and the cross bar to allow easy shipment and assembling. As appears from the drawing, the stand comprises only 3 different main pieces: two side members 2 with their attached platforms 6, one cross bar 3 and two identical brackets 10 and 11.

After the stand has been placed at the desired and convenient location in the store and the brackets lifted to their upper position, two rolls are placed upon each platform 6 to weight the stand or rack to the store floor. As the platforms are almost flush with the store floor, this can be done by one person by simply sliding the heavy rolls onto the platforms, preferably with a rotary motion. Convenielly rolls of a pattern that do not "move" as fast as other designs are used as the end rolls (4', 5'; 4'', 5'') on the platform. Additional rolls 4 and 5 may then be placed between the end rolls along the cross bar 3 without requiring lifting these additional rolls off the floor. The brackets are then lowered to the position shown in heavy lines in the drawing. As will now clearly appear from the above, all the rolls and rows are securely held in place. If a roll should be pushed or fall against the cross piece 3, the latter will hold such roll from falling down, while tilting outwardly is prevented by the brackets 10 and 11, the rolls on the platforms acting as counterweight and increase the stability of the stand. For additional protection against falling and particularly in order to prevent tilting of rolls lengthwise of the stand, in case that the stand is not filled, the rolls are additionally secured to the cross piece 3 or the side members by twine or leather strips. When it is desired to remove or replace one or more of the linoleum rolls, the retaining brackets 10 and 11 may be swung upwardly and after removal or replacement of the roll, the roll or rolls are swung back into the illustrated position shown in full lines.

The linoleum stand or rack illustrated in Fig. 2, comprises a pair of vertical side members 23, a cross beam 21 and the sheet metal platform 22 corresponding respectively to parts 2, 3 and 6 of Fig. 1. The side members are each composed of channel iron 23 and a cross arm 24 provided with notches 25 adapted to receive retaining rods 26, 27. The outwardly extending portions of the cross arms 24, together with the retaining rods 26, 27 form retaining brackets for linoleum rolls placed alongside the horizontal beam 21. The latter is welded or otherwise fastened to the side members 20 and additional braces 25 corresponding to the braces 9 of Fig. 1 may be provided for increasing the rigidity of the stand.

As shown in bar 22, some of the platforms are extended to both sides of the associated side members 22 and are of such length and width as to provide room for 4 rolls on each platform, i.e., two on each side of the associated side member 20. Thus, the weight by which the stand is held against the store floor is increased and the counterweight effect doubled which acts through the cross member and retaining means on rolls accidentally pushed or leaning against them. This larger platform is of particular importance when the stand is designed for accommodating a larger number of rolls than illustrated in Fig. 1. The rolls to be placed on the outwardly extending portion of the platforms 22 may be held in place by twine or suitable extensions (not shown) of the retaining brackets.

As schematically indicated in the arrangement of Fig. 2, the cross beam 21 may comprise telescoping members 21', 21'' so as to allow adjustment of the distance between the side members 20. The bracket or retaining rods 26, 27 illustrated in Fig. 2 are likewise telescoping and as shown, comprise the telescoping rods 26', 26'' and 27', 27''. These bracket rods may be readily removed when need arises for removing or replacing any of the linoleum rolls. The operation, use and function of the stand of Fig. 2 are substantially similar to those already mentioned in connection with the stand of Fig. 1.

As appears from the foregoing description of two embodiments of our invention, it is now possible to hold upright heavy rolls of inlaid linoleum securely in place by means of an extremely simple stand, in which the weight of a few rolls is employed to fix the stand securely to the store floor and to counteract any tilting forces acting upon the cross bar and retaining means, such as the brackets carried by the stand whereby its stability is greatly improved. Thus positive protection against falling of the linoleum rolls or rows of rolls is obtained resulting in increased protection of the customers against injury and in preventing damage to the linoleum rolls.

While we have shown a number of embodiments of our invention by way of illustration, many modifications will occur to those skilled in the art and we therefore wish to have it understood that the appended claims are intended to cover all such
modifications as fall within the true spirit and scope of our invention.

What we claim as new and desire to secure by Letters Patent of the United States is:

1. A safety and display stand for upright linoleum rolls supported on a storage floor in two parallel rows comprising an elongated open frame-like structure including a pair of side members interconnected at their upper end portions by a beam extending lengthwise of the stand and adapted to have a plurality of said linoleum rolls placed on each side alongside of it, said side members having their planes extending crosswise of said stand, each of said side members being mounted on a horizontal base plate extending both lengthwise and crosswise of said stand and of a size sufficient to receive a pair of rolls of linoleum in upright position, one roll on each side of said beam, whereby the weight of the rolls placed on said base plates will counteract tilting forces exerted by linoleum rolls falling or leaning from either side against said beam, or leaning against said side members, said stand being adapted to receive additional retaining means to prevent tilting of the linoleum rolls in a direction away from said beam, and said base plates being substantially flush with said store floor so as to allow said pairs of rolls to be placed on said base plates by a sliding motion.

2. A safety and display stand for upright linoleum rolls supported on a storage floor in two parallel rows comprising an elongated open frame-like structure including a pair of vertical side members and a cross-member extending lengthwise of the stand between said side members and fastened to an upper portion of each of said vertical side members to hold the latter in predetermined spaced relationship and adapted to have a plurality of said linoleum rolls in upright position placed on each side alongside of it, each of said side members having attached to its free lower end one of a pair of low platform-like base plates extending lengthwise and crosswise of the stand and adapted to accommodate at least two standard size linoleum rolls in upright position side by side, one on each side of said cross member, said base plates being substantially flush with said floor so as to allow said last mentioned rolls to be placed on said base plates by a sliding motion, and retaining means on said stand adapted to limit tilting of linoleum rolls placed along said cross member.

3. A safety and display stand for upright linoleum rolls supported on a storage floor in two parallel rows comprising an elongated open frame-like structure including a pair of vertical substantially A-shaped side members having their planes crosswise of said stand and a horizontal bar extending lengthwise of said stand between said side members and fastened to an upper part of each of said A-shaped side members, each of said side members being mounted on one of a pair of platform-like substantially rectangular base plates of a length and width to allow placing thereon at least two standard size linoleum rolls side by side in upright position, one on each side of said horizontal bar, and of a thickness sufficiently small to allow said last mentioned rolls to be placed thereon by a sliding motion, and a pair of retaining brackets attached to said side members and extending generally lengthwise of said horizontal bar with one bracket of said pair at each side of said horizontal bar.

4. The safety and display stand as claimed in claim 3 in which each retaining bracket comprises an open frame-like structure of substantially U shape pivotally mounted on the side members.

5. The safety and display stand as claimed in claim 3 in which each retaining bracket is formed of notched arms of the side members and a retaining rod removably held in said notched arms.

6. A safety and display stand for upright linoleum rolls supported on a storage floor in two parallel rows comprising an elongated open frame-like metal structure including a pair of vertical members having their planes crosswise of said stand, and a horizontal beam extending lengthwise of the stand between said side members and securely fastened to an upper end portion of each of said side members, the foot end of each of said side members being of such size as to provide for no two standard size rolls in upright position side by side, one on each side of said horizontal beam and being of a thickness sufficiently small to allow said last mentioned rolls to be placed thereon by a sliding motion, and retaining means attached to said stand and adapted to limit tilting of linoleum rolls placed along said horizontal beam.

MAXWELL W. HUTTEN. FRANK S. MONE.

References Cited in the file of this patent

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,646,174</td>
<td>Bernstein</td>
<td>Feb. 6, 1877</td>
</tr>
<tr>
<td>580,655</td>
<td>Thew</td>
<td>Apr. 13, 1897</td>
</tr>
<tr>
<td>3,055,152</td>
<td>Montgomery</td>
<td>July 18, 1955</td>
</tr>
<tr>
<td>925,086</td>
<td>Lewis</td>
<td>June 22, 1900</td>
</tr>
<tr>
<td>1,315,658</td>
<td>Burgener</td>
<td>Sept. 9, 1919</td>
</tr>
<tr>
<td>1,716,862</td>
<td>McEntire</td>
<td>June 11, 1929</td>
</tr>
<tr>
<td>2,251,271</td>
<td>Del Campo, Jr.</td>
<td>Aug. 5, 1941</td>
</tr>
<tr>
<td>2,276,789</td>
<td>Foster</td>
<td>Mar. 17, 1942</td>
</tr>
</tbody>
</table>