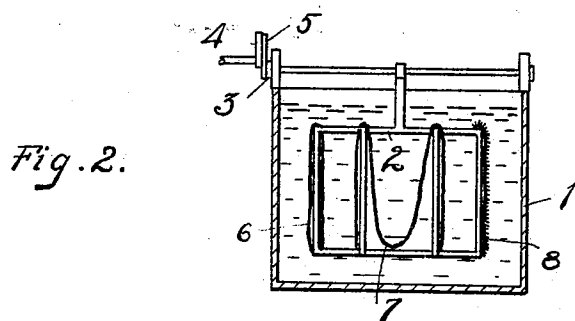
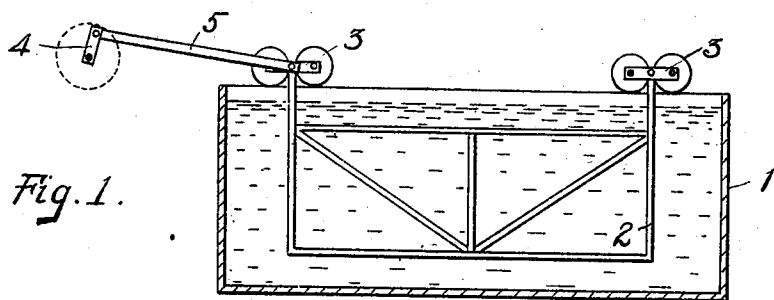


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TREATMENT OF RUGS, PILE FABRICS, ORIENTAL CARPETS, AND SIMILAR TEXTILES.
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980,752.

Patented Jan. 3, 1911.



Witnesses

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TREATMENT OF RUGS, PILE FABRICS, ORIENTAL CARPETS, AND SIMILAR TEXTILES.

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Specification of Letters Patent.

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Application filed December 14, 1906. Serial No. 347,743.

To all whom it may concern:

Be it known that I, JOHN A. BOYAJEAN, a citizen of the United States, residing at New York, county of New York, State of New York, have invented certain new and useful Improvements in the Treatment of Rugs, Pile Fabrics, Oriental Carpets, and Similar Textiles, of which the following is a full, clear, and exact description.

My invention relates to the treatment of pile fabrics, mats, rugs, carpets, tapestries and similar textile fabrics. Such fabrics are made in many different sizes and are known under many different names depending largely upon their size, shape and use. The term "rug" will be used generically hereinafter as referring to the entire class of heavy textile fabrics. These fabrics, especially the more expensive and oriental products, are very heavy and sometimes have a pile which is quite long and thick.

Great difficulty has been experienced in chemically treating rugs owing to their great weight and bulk and the tendency of the colors to run. Further difficulty is occasioned, from a commercial standpoint, by the irregularity in size which has prevented uniform treatment per unit of area of the large and small rugs. It has been customary in the past to fold up the rugs and place them in the tanks for stripping the colors, but this results often in matting down the pile and local settling of the colors or running so that additional treatment is required to correct the faults.

It is the object of my invention to avoid such difficulties and faults in treatment so that the rugs may be handled expeditiously and the color stripping be effected more quickly and satisfactorily.

Figure 1 is a longitudinal section of a tank showing a side view of a frame for supporting one or more rugs during treatment according to my invention. Fig. 2 is a transverse section of the tank showing an end view of the rug supporting frame with rugs thereon.

The tank 1, is of any suitable construction for containing the desired stripping liquid. In the tank is a frame, preferably composed of a number of vertical racks such as 2, 2 suspended from trucks 3, 3. These trucks run on suitable ways, for instance, on the

top of the tank. The frame is slowly reciprocated by suitable means, for instance, a crank 4, and connecting rod 5, at the rate of, say, 20 strokes per minute.

The rug or rugs to be treated are secured to the racks 2, 2 face side out, that is, with the backs against the racks, before the racks are submerged in the tank. Different lengths of rugs may be accommodated in this way, for instance, rug 6, extends around one rack only, rug 7, requires two racks, while rug 8, covers only one side of a rack. Any width may be accommodated up to the full length of the rack. In this way both sides of each rug are subjected to the chemical action without contact with any other portion of the rug. This is of particular advantage in treating pile fabrics. In such cases the pile stands out substantially at right angles to the body of the fabric and the circulation of liquid is increased by the waving movement of the individual pile threads as the direction of movement of the rug changes at each end of each stroke of the frame. This agitation prevents the colors from settling and permits complete stripping to take place under the most favorable circumstances. The invention thus will be seen to contemplate a relative movement of the fabric and the submerging liquid in a direction such that the liquid passes longitudinally of the body of the fabric, first in one direction and then in the other. This insures uniform action on all portions of the fabric no matter how irregular the surface. The vertical arrangement of the fabric permits vertical circulation of the liquid so that the portions having different specific gravities are better intermingled and local settling is prevented.

While the preferred type of mechanism is herein illustrated, I wish it understood that the invention of this application in its broad scope is not limited to any particular form of mechanism.

The liquid might be caused to circulate past the rugs by means of a pump or pumps or other means, but care should be taken to prevent the formation of eddies and consequent local stagnation. By moving the rugs as described these difficulties are obviated. The rugs might also be mounted horizontally in the tank but this places limitations

on the size of rugs to be treated and affords extensive areas for collecting sediment which the vertical arrangement avoids.

What I claim is:

5 1. The improvement in the art of renovating heavy pile fabric rugs which comprises submerging a plurality of rugs in a liquid adapted to remove unstable colors, each rug being spread out separately so as to expose
10 the pile threads at the surfaces and leaving the pile threads free to move and creating a relative movement between the liquid and the rugs and thereby gradually stripping the unstable colors from the rugs.

15 2. The improvement in the art of renovating heavy pile fabric rugs which consists in submerging a rug in a liquid adapted to remove unstable colors, relatively moving the

rug in a direction parallel to its surface back and forth in the liquid so that the pile 20 threads sway from side to side and the liquid acts on the fabric at the roots of the pile threads and removes the unstable colors gradually.

3. The improvement in the art of treating 25 heavy pile fabric rugs which comprises submerging the rugs in a treating liquid and slowly reciprocating the rugs whereby there is relative movement of the liquid over the surfaces of the rugs and movement of the 30 pile threads relative to the bodies of the rugs.

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Witnesses:

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