My invention relates to improvements in under-pads for rugs, carpets and mats.
The object of my invention is to provide an improved under-pad which will protect carpets, rugs, etc., from excessive wear, provide a highly elastic support to be interposed between the carpet or rug and the floor, which will have a yielding characteristic peculiarly suited to the purpose of imparting to such fabrics a soft, yielding and noiseless characteristic, and which will eliminate noise of footfalls such as has heretofore been transmitted throughout the building.

My purpose is to provide an under-pad which will increase the durability of rugs, carpets and mats, protect the floor surface from gritty materials which find their way through rugs and carpets, protect children from injuries such as result from falling upon hard floors and add generally to the comfort of the inhabitants of dwellings.

In the drawing:

Figure 1 is an isometric view of one corner portion of my improved under-pad.

Figure 2 is a fragmentary view of a floor and a portion of my improved under-pad, with parts broken away in successive horizontal planes to disclose the structural features.

Figure 3 is a fragmentary sectional view, drawn to a vertical plane.

Like parts are identified by the same reference characters throughout the several views.

The body 10 of my improved under-pad is composed of sponge rubber, preferably having embedded therein a series of strong cords or threads 11 of fibrous material which may comprise a coarsely or openly woven fabric. These threads or cords 11 should be disposed near the bottom of the body 10. Another more closely woven fabric 12 is embedded substantially in the top surface of the body 10 and covered by a layer or sheet 13 of ordinary solid vulcanized rubber upon which the rug or carpet 14 will be laid.

Sponge rubber is highly elastic, its multi-tudinous air pockets forming pneumatic cushions, and the air compressed therein by the weight of persons walking over such a pad tends to react in direct proportion to the reduction in weight as the foot pressure is relieved, thereby giving to any rug or carpet a luxuriant characteristic, making it a pleasure to walk thereover.

The sponge rubber referred to herein is the ordinary inexpensive commercial sponge rubber. I am aware of the fact that the term sponge rubber may be generically employed to include various grades of porous or cellular rubber having air or gas containing cells which for some purposes may be extremely minute whereby pads may be produced which are highly resilient although only slightly compressible and which are therefore adapted for use as pads for printing press rolls or platens. But it is essential for the purposes of my invention that the under-pad may be inexpensive and capable of yielding under pressure sufficiently to give the impression to a person walking over a rug having such an underlay, an impression that the rug itself is exceedingly thick and of the yielding characteristic inherent with the more expensive woolen rugs. It is also of great importance to the success of my invention that the threads 11 in the base of the pad and also the fabric 12 and upper layer 13 be of such character as to allow the sponge rubber to yield freely in a vertical direction, the fibrous material merely distributing the load and extending the area over which the load is applied.

The reinforced threads, cords or equivalent material 11 in the base of the pad, tend to hold it against lateral expansion. The fabric 12 also resists lateral expansion and distributes the pressure over a considerable area around the place where the pressure is directly applied, thereby preventing the under-pad from yielding too readily or completely. The upper layer 13 protects the sponge rubber from destructive abrasion and also provides a comparatively smooth surface which can be easily cleaned and which affords no pockets for the reception of dust and grit.

In applying my improved under-pad to a floor, the margins thereof may be secured to the floor by adhesive material as best indicated at 15 in Figure 2. This adhesive mate-
rual co-operates with the fibrous material 11 in preventing lateral spreading of the body 10, and it also prevents shifting or creeping movements of the body upon the floor. The necessity of employing this adhesive will be determined largely by the size of the rug and the character of the floor, there being little tendency for a large under-pad to shift. In the case of carpeting covering the entire floor of a room, there will ordinarily be no necessity for employing adhesive unless the under-pad is made thin and has a tendency to lift or curl along the margins or at the corners, and to displace carpeting that is not tacked to the floor.

I claim:

An under-pad for floor covering composed of sponge rubber, spaced coarse fibers embedded in the lower portion of the sponge rubber to prevent lateral expansion thereof, woven fabric embedded in the upper surface portion of the sponge rubber and acting to distribute the pressure over a considerable area around the place where the pressure is applied, and an exposed layer of smooth vulcanized rubber for receiving the floor covering.

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