G. H. DAVIS.

PAPER CARPET.

APPLICATION FILED NOV. 15, 1911.

1,038,095. Patented Sept. 10, 1912.

Fig. 1.

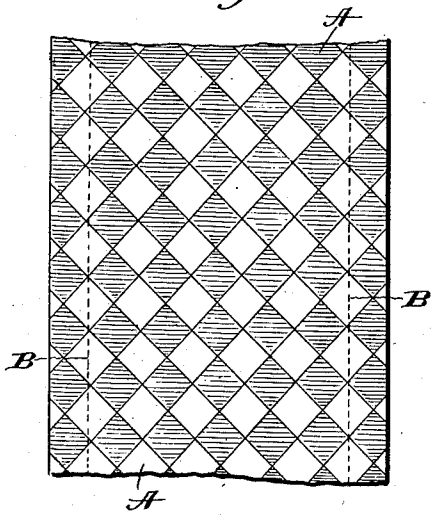


Fig. 2.

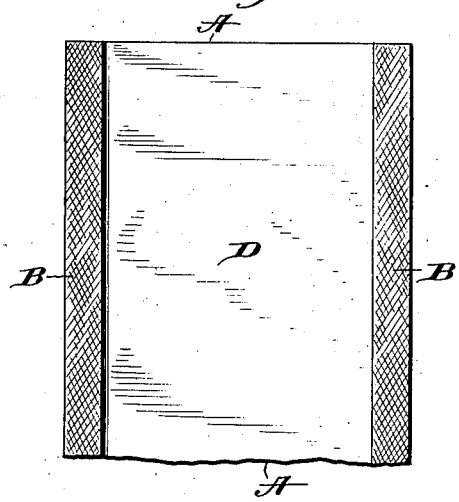


Fig. 3.

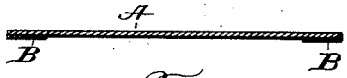


Fig. 4.

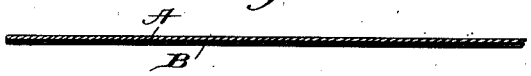
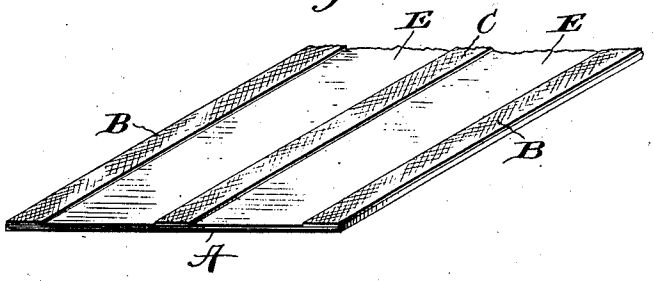


Fig. 5.



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UNITED STATES PATENT OFFICE.

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PAPER CARPET.

1,038,095. Specification of Letters Patent. Patented Sept. 10, 1912.

Continuation of application Serial No. 610,646, filed February 24, 1911. This application filed November 15, 1911. Serial No. 660,517.

To all whom it may concern:

Be it known that I, GEORGE H. DAVIS, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Paper Carpets, of which the following is a specification, reference being had therein to the accompanying drawing.

This application is in part a continuation of my application filed Feb. 24, 1911, Serial No. 610,646, covering improvements in paper carpet.

The invention relates to improvements in floor coverings, and has for its primary object the provision of what may be properly styled a practical paper carpet, which, owing to its efficiency and the cheapness with which the same may be manufactured and sold, will fill a long-felt want or enter a field of service not heretofore occupied in floor coverings. It may also, to a considerable extent, supplant ordinary linoleums, oil-cloths, straw mattings, and in fact the cheaper grades of cloth carpet.

It is universally recognized that there exist innumerable instances where it is desirable to have a neat and durable floor covering, but where the expense of the usual coverings is not justified,—for example, spare rooms or bed rooms not subjected to hard usage,—and it is equally well known that the relatively expensive character of ordinary floor coverings is, in many cases, notably among the poorer classes, prohibitive of their use.

It is with a view of meeting the conditions above outlined that the present invention has been devised.

I am aware that it has been heretofore attempted to provide a suitable floor covering by employing what is known as "rope-paper" in lieu of "burlaps" as the body for an oilcloth and to which the several coatings of paint to constitute the wear surface, and the decorative printing have been applied, but such an effort was simply directed to the overcoming of the objections,—such as roughness,—of the burlap body of the oil-cloth. It has also been suggested that a floor covering might be provided in the nature of an oilcloth the body of which was made of paper, the wearing layers of paint and ornamentation being applied to the exposed face thereof and the back covered by a thin textile fabric such as cheesecloth. Such a composite structure is quite expensive as compared to the carpet of the present invention, and possesses that disadvantage inherent in the different capabilities of paper and cloth to absorb moisture, etc., and to differently expand and contract, resulting in the wrinkling and uneven lying of the oilcloth.

As distinguished from the foregoing, the present invention embraces the provision of a carpet composed substantially of paper alone, in itself of sufficient density, thickness, hardness and stiffness,—in other words a paper board strip,—to render the same useful and practical in performing the functions usually expected of a carpet possessing the general characteristics of linoleum, oilcloth, matting, etc.

With all of the foregoing considerations in mind the present improvements are for the paramount object of rendering an all-paper strip commercially practical and useful as a substitute for the ordinary floor covering or carpet.

Carrying this object into effect, the invention consists of a paper carpet wherein the body part as a whole is of paper or paper stock provided along its edges, and if desirable also intermediate of the edges, with strips of fabric or other strengthening material. These strips are spaced apart and are intended to serve the purposes of preventing the edges of the carpet from buckling or crimping when laid; of constituting with the edges of the paper body a strong abutting margin for an adjoining strip; and of serving as a suitable edging through which tacks may be forced for retaining the carpet in place. By having the main portions of the paper body,—those portions intermediate of the marginal reinforcing strips or intermediate of said strips and any intermediate strip or strips devoid of supplemental reinforcing fabric, the body is given substantially full freedom for natural expansion and contraction according to moisture, temperature changes, etc., and this expansion and contraction is rendered uni-

form throughout, as distinguished from a fabric coated with paper wherein there is an unequal expansion or contraction between the two materials.

The nature of the present invention being thus apparent, the preferred embodiment of the invention in practical form may now be considered, it being understood that the invention is capable of embodiment in other forms than that specifically disclosed herein, as will appeal to those skilled in the art.

That embodiment of the invention to which I have made reference is illustrated in the accompanying drawings forming part hereof and wherein—

Figure 1 is a face view of a section of the carpet strip, Fig. 2 is a bottom view of the same, Fig. 3 is a cross sectional view, Fig. 4 is a longitudinal sectional view, and, Fig. 5 is a bottom perspective view showing the use of one intermediate reinforcing strip.

Referring more specifically to the drawings wherein like reference characters designate corresponding features in the several views A represents the strip of carpet, the same being formed of paper of suitable width and length and of that character hereinbefore set forth as to density, thickness, etc., rendering the same capable in itself of withstanding the wear to which the same is subjected. The under side of the strip may be left plain or printed if desired to represent cloth or burlap, while the upper or exposed surface thereof is decorated in keeping with the particular use or surroundings in connection with which the carpet is designed, and both surfaces where found expedient may be treated to render them impervious to moisture.

One or both margins of the strip A and the ends of the same, where found desirable, are provided with an underlying reinforcing narrow strip of fabric such as muslin, conveniently in the nature of selvage-edged tape B, secured in any desired manner to the under surface of the paper, as by pasting. These narrow woven fabric reinforcing strips, when properly applied at the edges of the paper body strip assist materially in preserving the paper strip in proper condition for service, and in service prevent undue warping or curling of the edges thereof, present strong tough edges against which an adjoining strip may be alined and abutted, prevent kicking-up and tearing of the edges of the paper under the action of the foot, and also act as tacking strips through which the tacks may be driven and prevented thereby from pulling through the paper and freeing the frail unprotected raw edge of the paper as would inevitably follow were the tacks passed through the paper alone. By utilizing the selvage edge, I obtain the additional advantage that ravelings incidental to the use of raw-edged fabric cannot escape upwardly through the space between adjoining strips and render the carpet as a whole unsightly in that particular.

As illustrated in Fig. 5 of the drawings, wherever found desirable, intermediate reinforcing and tacking strips C may be secured to the under surface of the paper body in such number and arrangement found practical and useful, dependent upon the width and the strip, etc. If desired, several thicknesses of the reinforcing strips may be employed, thus further to prevent stretching of the paper and maintaining the shape of the carpet, also enabling the carpet to withstand unusual or abnormal pulling action on the securing tacks, while throughout the entire marginal edges of the carpet such edges will be preserved against any fracture or breakage which might be incident to a tripping or severe kicking action of the toe of the foot. The narrow raised strips will also serve to hold the decorated surfaces of the carpet out of contact to a considerable extent when the paper strip is rolled for compactness in shipping or storage.

By reason of the fact that the intermediate portions of the paper body strip, represented at D in Fig. 2 and E in Fig. 5, are devoid of the supplemental reinforcing and stiffening material, said paper body strip is substantially free and therefore capable of independent and consequently uniform expansion and contraction under changing conditions of moisture and temperature.

I claim:—

1. A carpet consisting of a dense body strip formed wholly of paper of substantial thickness to render the same durable, the obverse surface of said strip being decorated, and a narrow reinforcing stiffening strip of woven fabric at each edge of the body constituting with said edge an abutting margin of substantial thickness and strength, intermediate portions of the body being devoid of the supplemental stiffening material to permit relatively free and uniform expansion and contraction thereof.

2. A carpet consisting of a dense body strip formed wholly of paper of substantial thickness to render the same durable, the obverse surface of said strip being decorated, and edge and intermediate narrow reinforcing stiffening strips of woven fabric, the edge reinforcing strip constituting with an edge of the paper body strip an abutting margin of substantial thickness and strength, the portions of the paper body strip intermediate of the reinforcing strips and beyond the intermediate strip being devoid of the supplemental stiffening material to permit relatively free and uniform expansion and contraction thereof.

3. A carpet consisting of a dense body strip formed wholly of paper of substantial

thickness to render the same durable, and a narrow reinforcing stiffening strip of suitable fabric at the edge of the body constituting with said edge an abutting margin of substantial thickness and strength, the major portion of the paper body strip throughout the extent thereof being devoid of supplemental stiffening material to permit relatively free and uniform expansion and contraction thereof.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE H. DAVIS.

Witnesses:

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S. A. KINSLEY.