Dec. 3, 1968 J. M. KRANTZ 3,413,678

CARPET SEAM SECURING DEVICE

Filed Sept. 28, 1966 2 Sheets-Sheet 1

FIG. 1

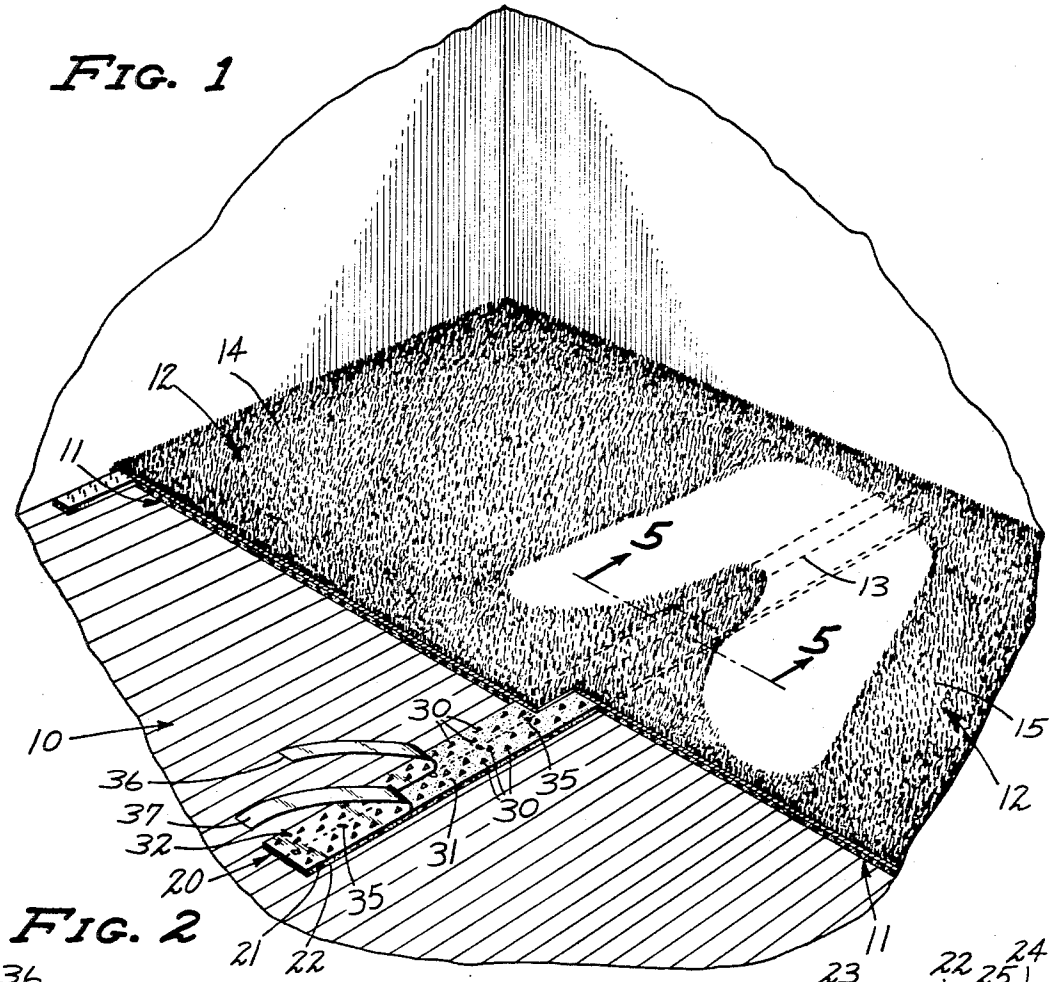
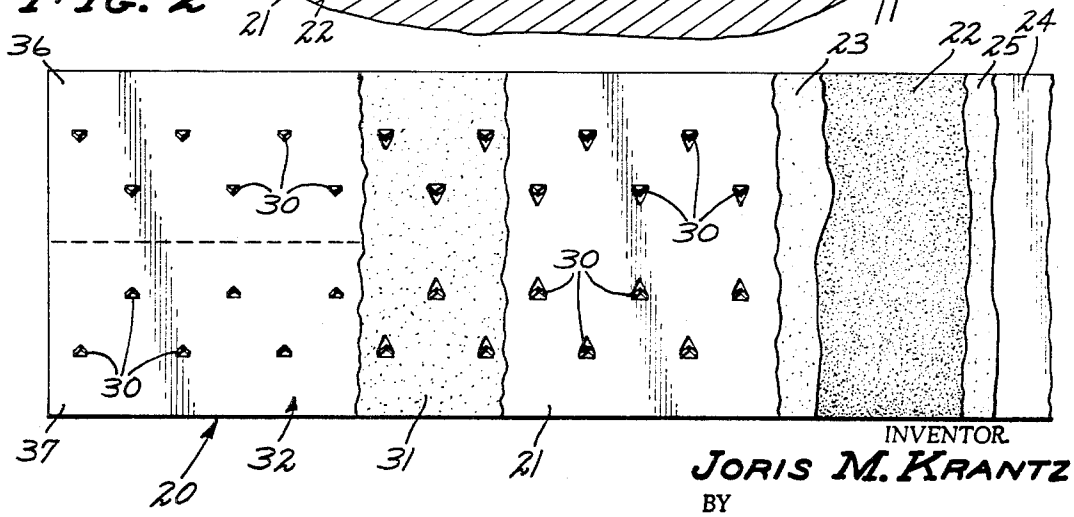


FIG. 2



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Filed Sept. 28, 1966 2 Sheets-Sheet 2

FIG. 3

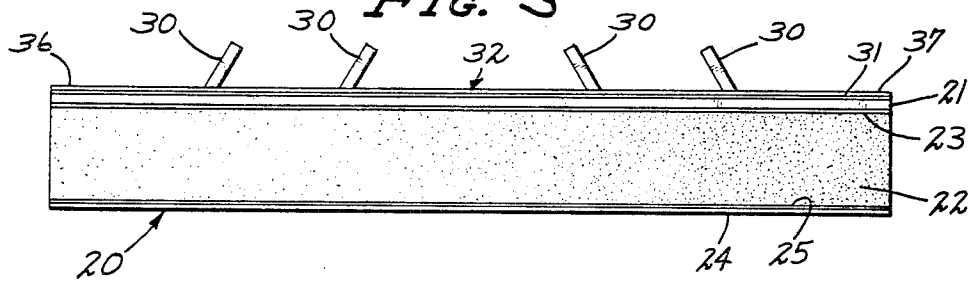


FIG. 4

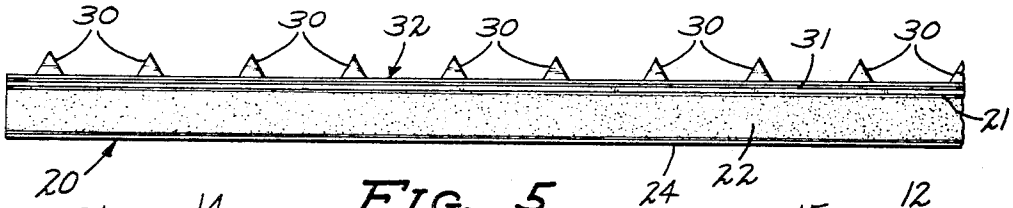
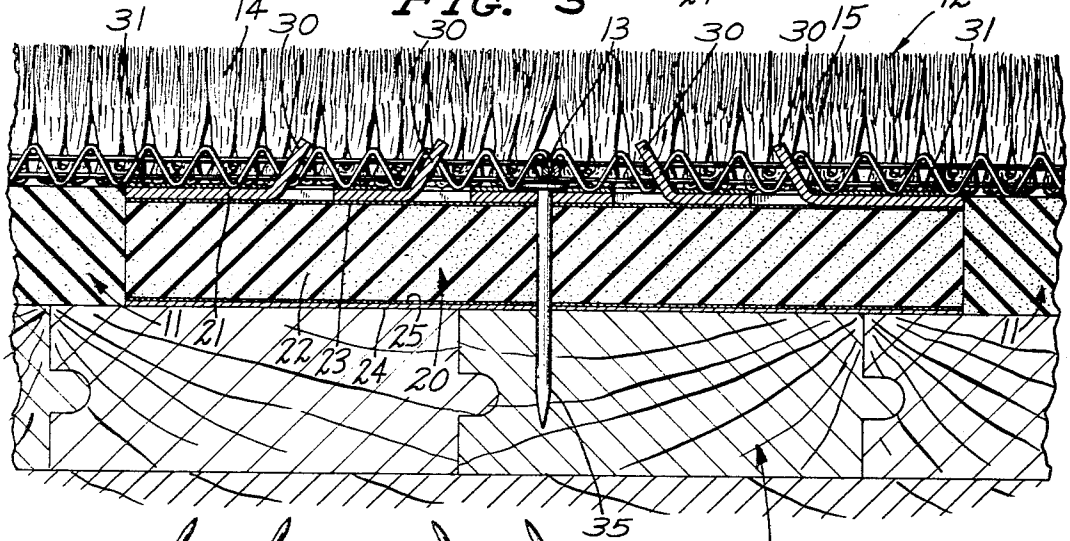


FIG. 5



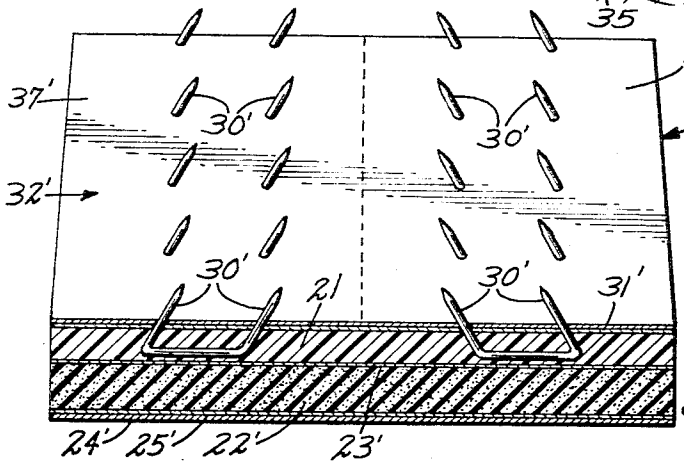


FIG. 6

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CARPET SEAM SECURING DEVICE

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4 Claims. (Cl. 16—16)

ABSTRACT OF THE DISCLOSURE

A substantially flat elongated strip of material having upwardly projecting barbs adapted to receive thereon along an imaginary seam line extending parallel with the longitudinal axis of said strip both edges of the carpet making up a seam in overlying relationship to said strip, adhesive on the upper surface of said strip to prevent vertical movement of the carpet relative to the strip, padding material affixed to the under surface of the strip so that the strip and the padding material have a thickness approximately equal to standard carpet padding, and means for affixing the strip to a floor along the desired seam line.

This invention pertains to a device for securing the edges of a carpet in a smooth seam and more particularly to a one step securing device which embodies all of the materials necessary for the use thereof.

In the prior art edges of carpets are connected in a variety of ways to form seams, some of which include sewing, taping, etc. In all of these methods of forming a seam a special person utilizing special tools and skills is required to perform the work. In one prior art method of joining the edges of a carpet to form a seam, a special tape having what is commonly referred to as built-in grippers is first glued to the floor by a special adhesive after which the same adhesive is applied to the upper surface and the carpet is laid in place. The built-in grippers hold the two edges of the carpet together until the adhesive sets. This method has many disadvantages since the entire tape must be correctly positioned and glued in place on the floor first. Then the entire upper surface is covered with the adhesive and both edges of the rug are laid in place simultaneously. During the time that the carpet is actually being engaged over the tape, the adhesive is open to receive lint, dust, and other foreign objects therein, which greatly reduce the adhesive quality of the material. Also, in applying the adhesive to the floor and to the upper surface of the tape, if too much adhesive is utilized it will penetrate the backing material of the carpet and may ruin the nap. If too little adhesive is utilized, the carpet may quickly come loose, thereby, ruining the entire carpeting operation. In addition to these problems, the individual performing the operation must perform the disagreeable and often messy task of applying the adhesive. This task is also time consuming since the adhesive below the tape must be allowed to dry before the adhesive can be applied to the upper surface thereof.

In the present invention a strip of rigid material is constructed with carpet engaging means, such as a plurality of barbs, nails, etc., extending upwardly therefrom. In addition, the barbs are angled slightly inwardly toward the longitudinal center of the strip. The lower surface of the strip generally has a resilient padding means thereunder with the combined thickness of the two being approximately equal to the thickness of the carpet padding. The upper surface of the strip has an adhesive means applied thereto in advance which adhesive means is covered by a protective material that can be quickly and easily stripped therefrom. The rigid strip of material can be quickly and easily attached to the floor at the correct location after which a portion of the protective means is stripped from the upper surface and one edge of the rug

is placed in position. During this operation the remaining portion of the upper surface of the strip is protected by the remaining protective means and, thus, does not receive dirt, lint, etc. When the first piece of carpet is in place the remaining portion of the protective material is removed exposing the adhesive, and thereby preparing the strip for the positioning of the second piece of carpeting.

Thus, the present invention greatly simplifies the task of joining two pieces of carpeting by making the entire task a one step operation. In addition, there is no danger of utilizing incorrect quantities or types of materials, since all of the material is embodied in the single device. In addition to the above advantages the present device saves time in the operation of forming a seam and makes the entire task less messy. Other advantages will become apparent upon the following detailed description of several embodiments of the device.

It is an object of the present invention to provide an improved carpet seam securing device.

It is a further object of the present invention to provide a carpet seam securing device, the use of which greatly simplifies the task of joining carpet edges in a seam.

These and other objects of this invention will become apparent to those skilled in the art upon consideration of the accompanying specification, claims, and drawings.

Referring to the drawings, wherein like characters indicate like parts throughout the figures:

FIG. 1 is a fragmentary view in perspective of the present invention operating to form a seam;

FIG. 2 is a fragmentary view in top plan of an embodiment of the present invention, portions thereof removed;

FIG. 3 is an enlarged view in end elevation of the embodiment illustrated in FIG. 2;

FIG. 4 is a fragmentary view in side elevation of the embodiment illustrated in FIG. 1;

FIG. 5 is a sectional view as seen from the line 5—5 in FIG. 1; and

FIG. 6 is a transverse sectional view in perspective of a different embodiment.

In the figures the numeral **10** generally designates a floor covered by carpet padding **11** and carpet **12**. The carpet padding **11** and carpet **12** are laid in the usual manner except for a seam **13** between two sections **14** and **15** of carpet **12**. The seam **13** between the sections **14** and **15** of the carpet **12** is held fixedly in place by a seam securing device **20**, which is one embodiment of this invention and is illustrated in more detail in FIGS. 2 through 5. In FIG. 1 the floor **10** is illustrated partially covered by the carpet **12** to illustrate the operation of the seam securing device **20**. Referring to FIGS. 2 through 5, the seam securing device **20** includes a strip **21** of rigid material, which in this embodiment is a light relatively rigid metal, and a layer **22** of spongy material, such as sponge rubber or the like, attached to the strip **21** by a layer of adhesive **23**. The lower surface of the layer **22** of spongy material has a strip **24** of heavy paper or the like attached thereto by a layer of adhesive **25** to retain the spongy material **22** in approximately its original shape. The metal strip **21** has a plurality of barbs **30** extending generally upwardly therefrom. The barbs **30** are triangular shaped portions of the metal strip **21** which are partially sheared from the metal strip **21** and bent partially upwardly. In this embodiment the longitudinal axis of the seam securing device **20** forms an imaginary seam line along which either edge of the sections **14** and **15** of the carpet **12** lie in abutting relationship to each other. It should be understood that the imaginary seam line might lie in some position other than the longitudinal axis of the seam securing device **20**, but this is considered the most convenient position

for it. The barbs **30** are positioned in two spaced apart rows along either side of the imaginary seam line, and each barb **30** is angled inwardly toward the imaginary seam line. Thus, as illustrated in FIG. 5, the barbs **30** engage the carpet **12** and tend to hold the edges of the sections **14** and **15** in abutting relationship along the seam **13**.

The metal strip **21** has a coating of adhesive **31** over the upper surface thereof to hold the carpet **12** securely along the seam **13** and prevent horizontal movement thereof. The adhesive **31** may be any convenient type which will effectively hold the carpet **12** securely. The upper surface of the adhesive layer **31** is covered with a flexible peel-away strip **32** of material which may be plastic, coated paper, or the like. The peel-away strip **32** should be easily removable from the adhesive **31** and should be perforated along the seam line, as illustrated in FIG. 2 so that the adhesive **31** to one side of the seam line can be exposed without exposing the adhesive **31** to the other side of the seam line.

In the operation of the seam securing device **20**, the person first determines where the seam **13** will lie. Then the seam securing device **20** is secured to the floor **10** by some means such as nails **35** (illustrated in FIG. 5), or some other convenient means such as screws, glue, etc. Once the seam securing device **20** is securely in place, a portion **36** of the flexible protective material **32** is removed from the upper surface of the adhesive **31** along the perforated seam line. The section **14** of the carpet **12** is then placed on the seam securing device **20** so the edge thereof lies along the seam line. Once the carpet sectional **14** is in place, the remaining portion **37** of the flexible protective material **32** is removed from the upper surface of the adhesive layer **31** and the section **15** of the carpet **12** is positioned so the edge thereof abuts the edge of the section **14** to form the seam **13**. As illustrated in FIG. 1, the portions **36** and **37** of the flexible protective material **32** are removed only as the sections **14** and **15** of the carpet **12** are placed in position. This protects the layer of adhesive material **31** until the carpet **12** is actually in place so that lint and other foreign materials do not adhere thereto and decrease its efficiency. Referring to FIG. 5, it can be seen that the padding **11** is cut so that it abuts the edges of the seam securing device **20** and the thickness of the seam securing device **20** is approximately equal to the thickness of the carpet padding **11** so the carpet **12** lies flat thereover.

Another embodiment of the seam securing device **20** is illustrated in FIG. 6 and designated **20'**. The various components of the seam securing device **20'** which are similar to the components of the device **20** are designated with a similar numeral having a prime added to indicate that it is another embodiment. The device **20'** has a rigid strip **21'** which consists of a formable plastic material, rather than metal. A plurality of barbs **30'** are formed by imbedding staples or the like in the plastic **21'** while it is still in the formable or soft state. Thus, once the plastic strip **21'** hardens, the staples are held rigidly in place to form barbs **30'**. All of the remaining parts of the seam securing device **20'** are similar to the parts of the device **20** designated with similar numerals.

While I have shown and described a specific embodiment of this invention, further modifications and improvements will occur to those skilled in the art. I desire it to be understood, therefore, that this invention is not limited to the particular form shown, and I intend in the appended claims to cover all modifications which do not depart from the spirit and scope of this invention.

I claim:

1. A carpet seam securing device comprising:
   (a) a relatively flat, elongated strip of rigid material adapted to receive thereon along an imaginary seam line extending parallel with the longitudinal axis of said strip both edges of a carpet making up a seam in overlying relationship relative to said strip and in abutting relationship relative to each other;
   (b) carpet engaging means attached to said strip adjacent either side of said seam line and extending generally upwardly from the surface of said strip for substantially preventing horizontal movement of the edges of the carpet away from each other;
   (c) adhesive means preapplied to the upper surface of said strip for engaging the carpet and substantially preventing vertical separating movements of the carpet and said strip;
   (d) protective means removably engaged in overlying relationship with said adhesive means for preventing foreign materials from contacting said adhesive prior to use of said seam securing device;
   (e) resilient padding means secured to the lower surface of the strip, the thickness of said padding means and said strip combined being approximately equal to the thickness of standard carpet padding; and
   (f) means associated with said strip for securing said strip to a floor.

2. A carpet seam securing device as set forth in claim **1** wherein the strip is constructed of metal and the carpet engaging means are integral barbs sheared and bent outwardly from said strip.

3. A carpet seam securing device as set forth in claim **1** wherein the protective means includes two separable portions of flexible material one of which overlies the portion of the strip to one side of the seam line and the other of which overlies the portion of the strip to the other side of the seam line, said flexible portions further being separately removable.

4. A carpet seam securing device as set forth in claim **1** wherein the strip of rigid material is formed from plastic material and the carpet engaging means are imbedded therein when the plastic material is still formable.

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