

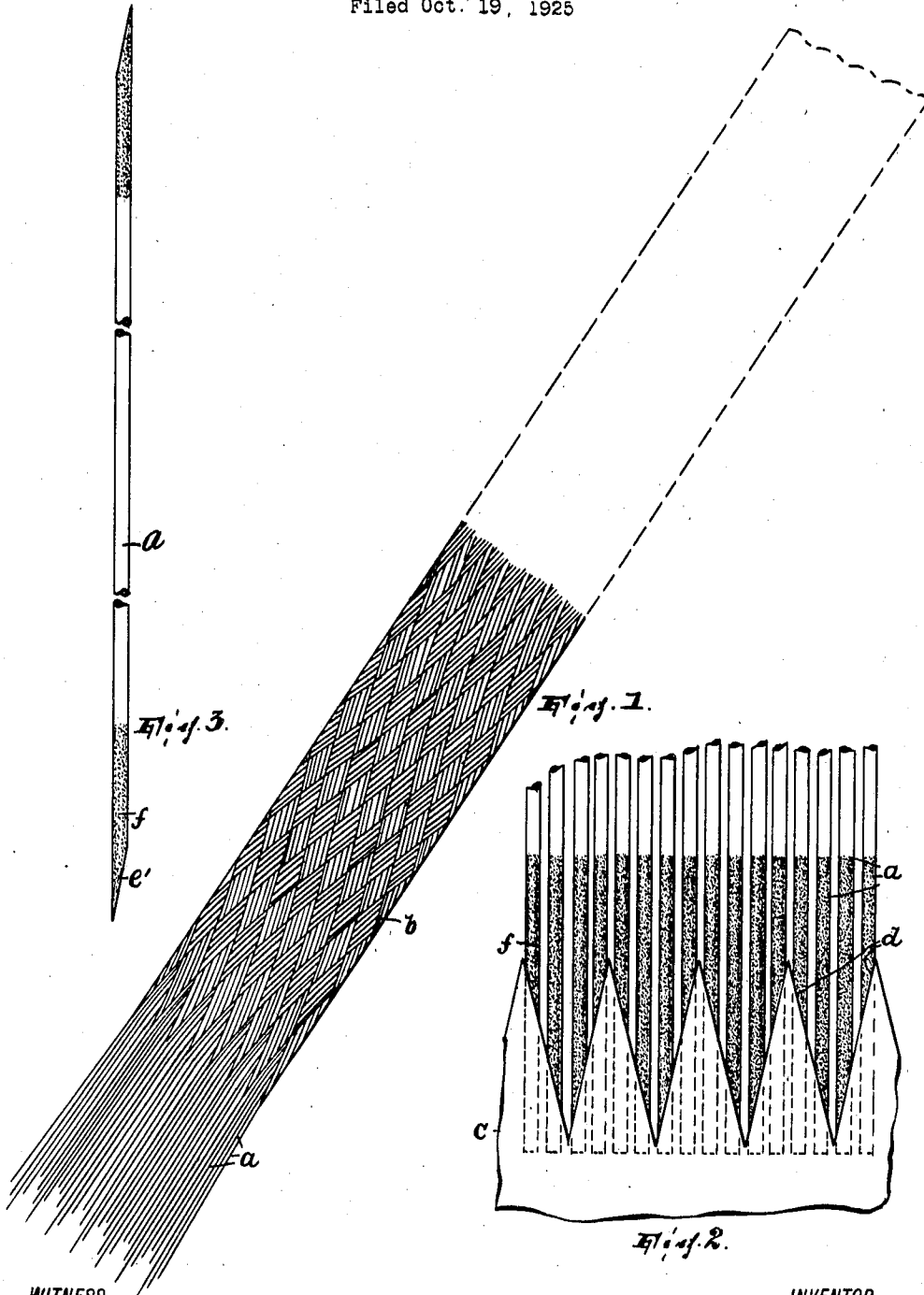
Dec. 28, 1926.

1,612,553

J. VAN HOOK

STRAND PACKAGE AND METHOD OF FORMING THE SAME

Filed Oct. 19, 1925



WITNESS

Wm. Bell

INVENTOR,

Joseph Van Hook,

BY *John Howard*
ATTORNEY.

Patented Dec. 28, 1926.

1,612,553

UNITED STATES PATENT OFFICE.

JOSEPH VAN HOOK, OF PATERSON, NEW JERSEY, ASSIGNOR TO J. E. BARBOUR COMPANY, OF PATERSON, NEW JERSEY.

STRAND PACKAGE AND METHOD OF FORMING THE SAME.

Application filed October 19, 1925. Serial No. 63,564.

This invention relates to strand packages, and especially packages of thread, twine or the like used in tailoring, carpet and various other sewing operations, in which the strands are arranged side by side. The object of the invention is both to provide a package of this class the individual strands of which will be treated at the ends so as to facilitate threading them through the eyes of needles and to form a package with such treated strand ends in as simple and expeditious a manner as possible.

The accompanying drawing illustrates my invention,

Fig. 1 showing a plan of a package having a bias-cut end;

Fig. 2 a magnified view of a strand assembly in process of being bias-cut; and

Fig. 3 a magnified view of one of the strands, showing both its ends bias-cut and also waxed.

The strands *a* in Fig. 1 are first arranged so as to lie in some side by side arrangement and so as to be bound loosely together, to the end that an individual strand may be drawn from the resulting assembly by drawing upon one end thereof. For example, the strands may be arranged in groups and these groups braided together loosely as indicated at *b* in Fig. 1.

According to the preferred procedure one or each end of the package is then treated with a waxing substance, by which I mean to include any substance suitable for the purpose which will lay the fibres of each strand or form a binder therefor. When the strands are treated with this substance the latter is in the liquid state, and before it sets or hardens the assembly may be shaken out so as to remove the surplus waxing substance and leave the individual strands separated from each other when the waxing substance sets.

Thereupon the end or each end of the assembly, so treated with the waxing substance, is severed on the bias. Preferably this is done not on a single bias line, which would leave the cut end of the assembly skewed, but on different bias lines arranged so that the alternates converge with respect to the remainder and so that the points of the serrations consequently formed are all approximately in the same transverse line at right angles to the length of the assembly.

In Fig. 2 *c* is a knife or die for severing

the assembly in the way just described, the lines at *d* indicating the cutting lines of this knife or die *c*.

Of course the result of cutting the assembly on bias lines is to cut each of the strands on the bias, leaving each strand *a* with a tapered end *e'* as shown in Fig. 3. *f* in Figs. 2 and 3 designates the waxing substance.

While I prefer to sever the strands after the waxing treatment because they become by the waxing stiffened and thereby and in other respects more readily handled in the operations incident to the severing, it is not indispensable that the waxing precede the severing.

So far as the pointing of the strands is concerned actual severing is not indispensable, the invention in respect to the method involving first loosely binding the strands together in side by side arrangement and then removing (by any means) from this strand assembly by a single operation so much of an end portion of such assembly as is between the free end of such portion and a bias line across the assembly; and in respect to the product involving the forming (by any means) of one end thereof on the bias, whereby the individual strands at such end are tapered.

I claim:

1. The herein described method of forming a strand package with ends of the component strands thereof pointed which consists in assembling strands side by side, treating the strands of the assembly thus formed with a waxing substance, and severing the assembly on the bias in the region of so treating each strand.

2. The herein described method of forming a strand package with ends of the component strands thereof pointed which consists in assembling strands side by side, treating the strands of the assembly thus formed with a waxing substance, and after so treating the strands severing the assembly on the bias in the region of so treating each strand.

3. The herein described method of forming a strand package in which the individual strands are removable and have pointed ends which consist in loosely binding the strands together in side by side arrangement and then removing by a single operation from the strand assembly thus formed so

much of an end portion thereof as is between the free end of such portion and a bias line across the assembly.

4. The herein described method of forming a strand package in which the individual strands are removable and have pointed ends which consist in loosely binding the strands together in side by side arrangement and then severing strands of the assembly thus formed on the bias and by a single operation.

5. A strand package consisting of lengths of strands loosely bound together and having one end thereof formed on the bias, whereby the individual strands are tapered at such end of the package.

6. A strand package consisting of lengths of strands loosely bound together and having one end thereof cut on the bias, whereby the individual strands are tapered at such end of the package.

7. A strand package consisting of lengths of strands loosely bound together and having one end thereof formed on different bias lines, whereby the individual strands are

tapered at such end of the package and such formed end of the package is serrated.

8. The herein described method of forming a strand package with ends of the component strands thereof pointed which consists in assembling strands side by side, treating the strands of the assembly thus formed with a waxing substance, and removing from such assembly so much of an end portion thereof as is between the free end of such portion and a bias line across the assembly.

9. A strand package consisting of lengths of strands loosely bound together and having one end formed on different bias lines the alternates of which lines converge with respect to the remaining lines, whereby the individual strands are tapered at such end of the package and each serration at such formed end of the package has both sides on the bias.

In testimony whereof I affix my signature.

JOSEPH VAN HOOK.