

Nov. 19, 1935.

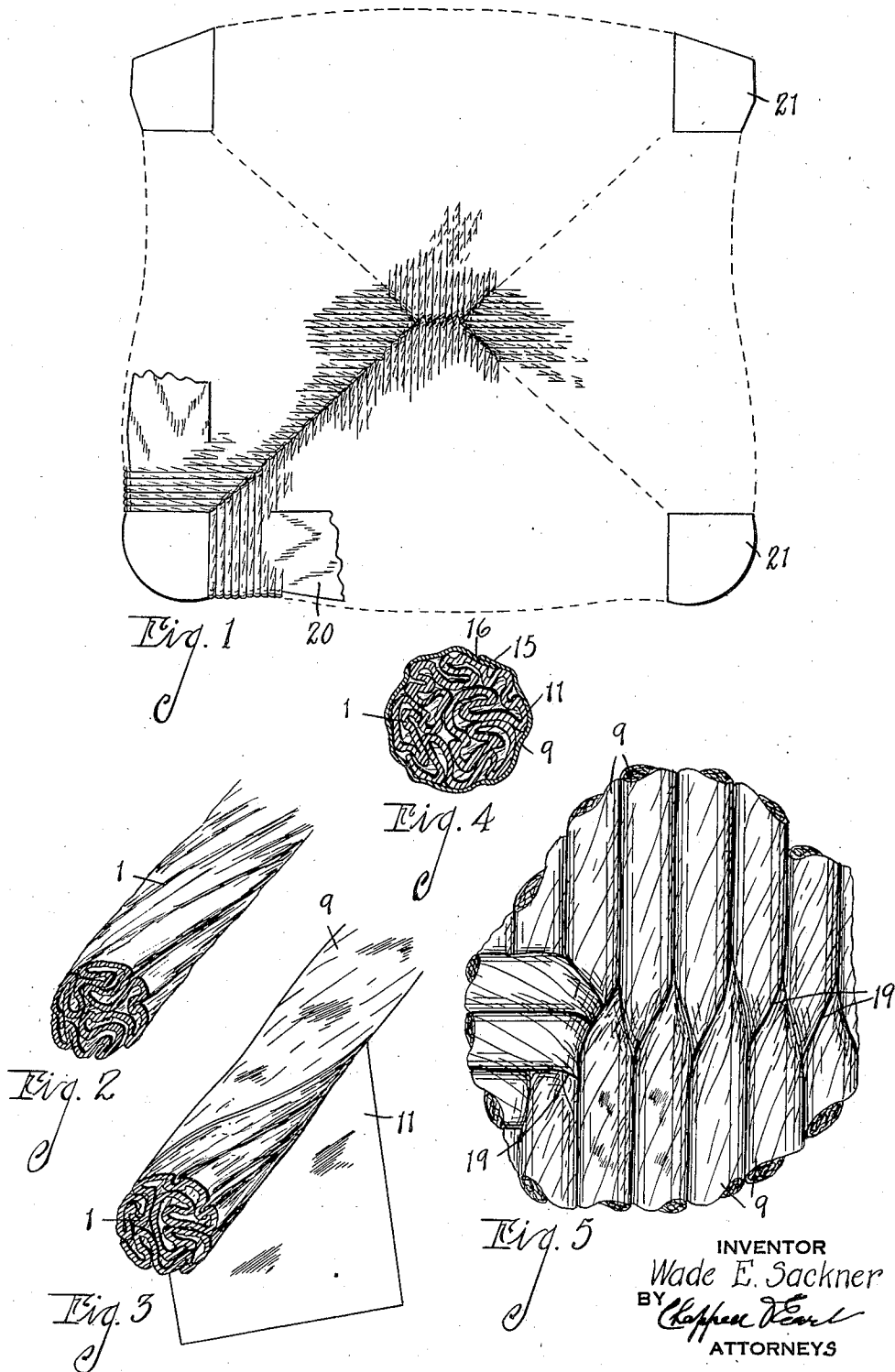
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2,021,331

CELLOPHANE COVERED CORD AND METHOD OF MANUFACTURE

Filed Feb. 10, 1933

2 Sheets-Sheet 1



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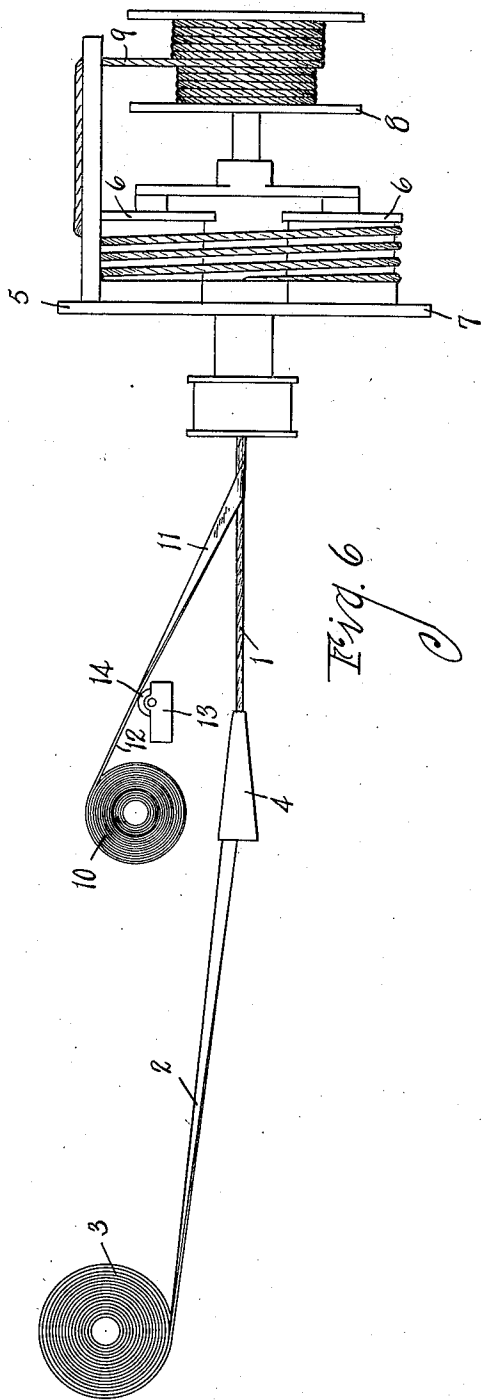


Fig. 6

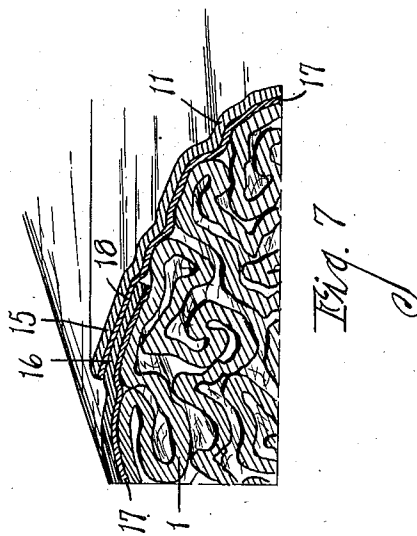


Fig. 7

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CELLOPHANE COVERED CORD AND
METHOD OF MANUFACTUREWade E. Sackner, Grand Rapids, Mich., assignor
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Application February 10, 1933, Serial No. 656,188

1 Claim. (Cl. 155—187)

The objects of my invention are:

First, to produce a "Cellophane" covered paper
cored furniture cord.Second, to provide such a cord that is water
proof, of pleasing appearance, non-fading and
inexpensive to produce.Third, to produce such a cord that is especially
adapted for weaving in imitation rush furniture
and the like.Fourth, to provide a method for making such
a cord.Fifth, to provide an article of furniture that is
pleasing in appearance, non-fading, and which
may be cheaply and easily finished with the elim-
ination of several manufacturing steps.Further objects and advantages pertaining to
details and economies of construction and opera-
tion will appear from the description to follow.
A preferred embodiment of my invention is il-
lustrated in the accompanying drawings, in
which:Fig. 1 is a plan view of an imitation rush chair
seat made from my improved cord.Fig. 2 is a perspective view of the twisted paper
core used in my cord.Fig. 3 is a perspective view of the core in process
of being wrapped.

Fig. 4 is a sectional view of the finished cord.

Fig. 5 is a detail view of the weaving of the
cord into the chair seat shown in Fig. 1.Fig. 6 is a view showing the method of manu-
facturing the cord.Fig. 7 is a detail perspective sectional view of a
portion of the finished cord.The parts will be identified by their numerals
of reference which are the same in all the views.My cord comprises a paper core covered with a
"Cellophane" wrapper. The core 1 is made by
loosely twisting a strip of paper. In making the
core I have found that it is desirable to use a
strip of fifty pound basis paper cut in strips three
and five-sixteenths inches wide.Referring to Fig. 6, which shows the method
of making my cord, the strip of paper 2 is fed
from a roll 3 through a forming die 4 for twisting
by a throstle 5 or any conventional twisting or
spinning machine. The die 4 is of the funnel-
shaped type which folds the paper on itself lon-
gitudinally before the twisting operation. The
throstle shown has drawing rolls 6 mounted on a
revolving frame 7 and is provided with a roll 8
on which the finished cord 9 is wound. The
throstle frame rotates to give a twist to the cord
while the drawing rolls 6 are advancing the cord
through the forming die 4.The strip 2 is given a loose twist to produce a
twisted cord having about seven turns to the foot.
This cord is compressible to about one-half its
size when woven and has a creased, irregular sur-
face as is shown in Figs. 4 and 7.In Fig. 6 I show the machine as a unit for mak-
ing the cord, although the cord could be twisted
on a separate machine and the "Cellophane"
wrap could be applied in a different operation.
In Fig. 6 I show a roll 10 from which a water-
proof "Cellophane" strip 11 is fed to the core 1.
The strip is about three-fourths of an inch wide
and its core contacting face 12 passes over a glue
pot 13 having a roller 14 which supplies a water-
proof glue adapted for use with "Cellophane" to
the strip. The core 1 is rotated by the throstle
5 and advanced along its longitudinal axis so as
to wrap the "Cellophane" strip 11 around the core
1 in a spiral, which is accomplished because the
"Cellophane" 11 is fed to the core diagonally.
The twisting and advancing of the core feeds the
"Cellophane" strip 11 and the "Cellophane"
conforms to the irregularities of the surface of
the cord, as is shown in Fig. 7, and is cemented
thereto.The resulting structure is a paper core 1 with
a spirally wound "Cellophane" strip 11 having its
edges 15 and 16 overlapping. The "Cellophane"
is cemented to the core 1 by means of a film of
glue 17 which is shown in Fig. 7. As illustrated
there, the layer of glue appears to be very thick.
This is done only for the purpose of illustration.
The overlapping edges 15 and 16 are held together
by the layer 18 of glue.The core 1 may be made of any colored paper
and may be of variegated color to imitate rush,
as is pointed out in my co-pending application
Serial No. 538,073, filed May 18, 1931.In using my cored cord with the "Cellophane"
wrapper, I can use the transparent "Cellophane"
which is cheaper than colored "Cellophane" and
can color the cord. I also use less "Cellophane",
which is a saving, at the same time giving a cord
having the appearance of being solid "Cello-
phane". The cord itself is compressible to half
its size, which would not be feasible with solid
"Cellophane", and makes it especially adapted
for use in imitation rush woven chair seats, such
as the one shown in Fig. 1.As shown in Fig. 5, the cords 9 are compressed
at the point 19 to permit the weaving while leav-
ing the cords 9 at the places other than at 19 in
close proximity to one another. The chair seat
shown in Fig. 1 comprises a frame 20 having
corner pieces 21 of usual design.

In using my cord, it is possible to speed up manufacturing operations because it is not necessary to apply a glue size to the cords after they are wound and they can be lacquered immediately. In making fully woven furniture it is possible to lacquer the finished piece and have it out of the factory half an hour from the time it is woven, which leads to a considerable saving on floor space.

10 In the chair seat the cords 9 are woven around the frame in the usual manner, leaving the corner pieces 21 exposed. Lacquer is applied and the corner pieces do not have to be re-finished because of glue size thereon. The cords stand out individually and the spaces between them are not filled with glue size as is the case in ordinary woven chair construction wherein a glue size has to be applied.

20 The finished cord is covered with a waterproof air-tight "Cellophane" wrapper and moisture will not injure the cords. The "Cellophane" conforms to the surface of the cord, lending a pleasing appearance and not giving too artificial an appearance to imitation rush furniture made in this manner. The covering, being air-tight, eliminates oxidation of the coloring matter, which is an important consideration. The furniture thus made does not fade as does the ordinary type in which the coloring matter is exposed to oxidation.

Although I have described the use of a definite weight of paper and size of strip, it will be well understood by those skilled in the art that this is not the only size of paper that can be used. It will also be understood that although I have specified a certain looseness of twist, any loose twist can be used.

I have described my invention in the embodiment preferred by me, but wish to claim the same broadly as well as specifically, as pointed out in the appended claim.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

As an article of manufacture, a chair seat made to imitate a rush bottom chair seat comprising a frame having side members and an open center, and a cord woven to form a seat thereon, said cord being looped around said side members and crossed upon itself and compressed to about half its size at the points of crossing in the central portion of said seat frame, said cord comprising a loosely twisted paper core having an irregular creased surface, said cord being compressible to about half its size and having a waterproof "Cellophane" strip wrapped spirally thereon with its edges overlapping and cemented and conforming to the irregularities of the surface of the core.

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