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1,793,163

METHOD OF MAKING BAGS

Original Filed Aug. 18, 1927

2 Sheets-Sheet 1

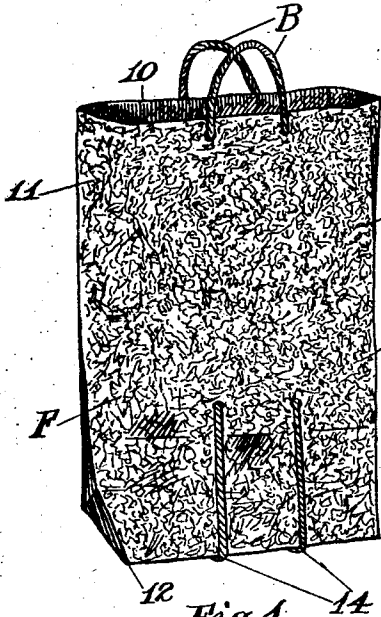


Fig. 1.

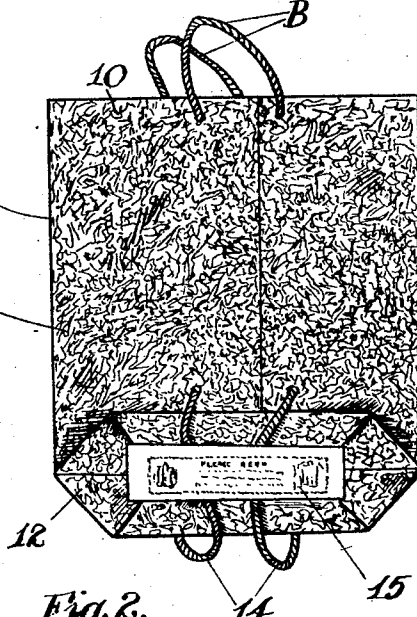


Fig. 2.

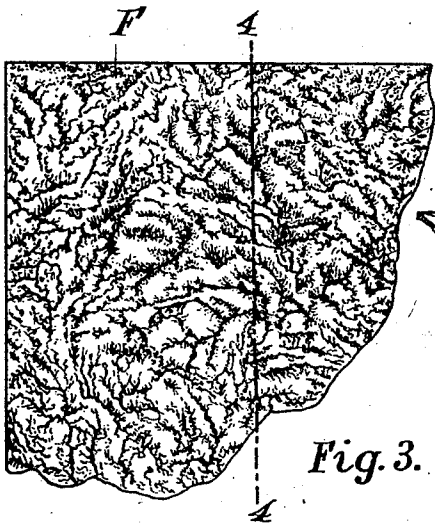


Fig. 3.

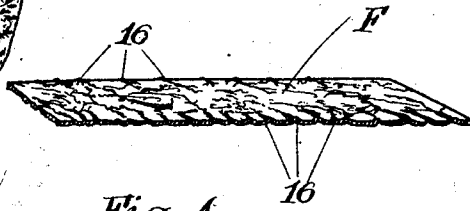


Fig. 4.

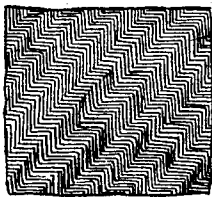


Fig. 5.

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METHOD OF MAKING BAGS

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2 Sheets-Sheet 2

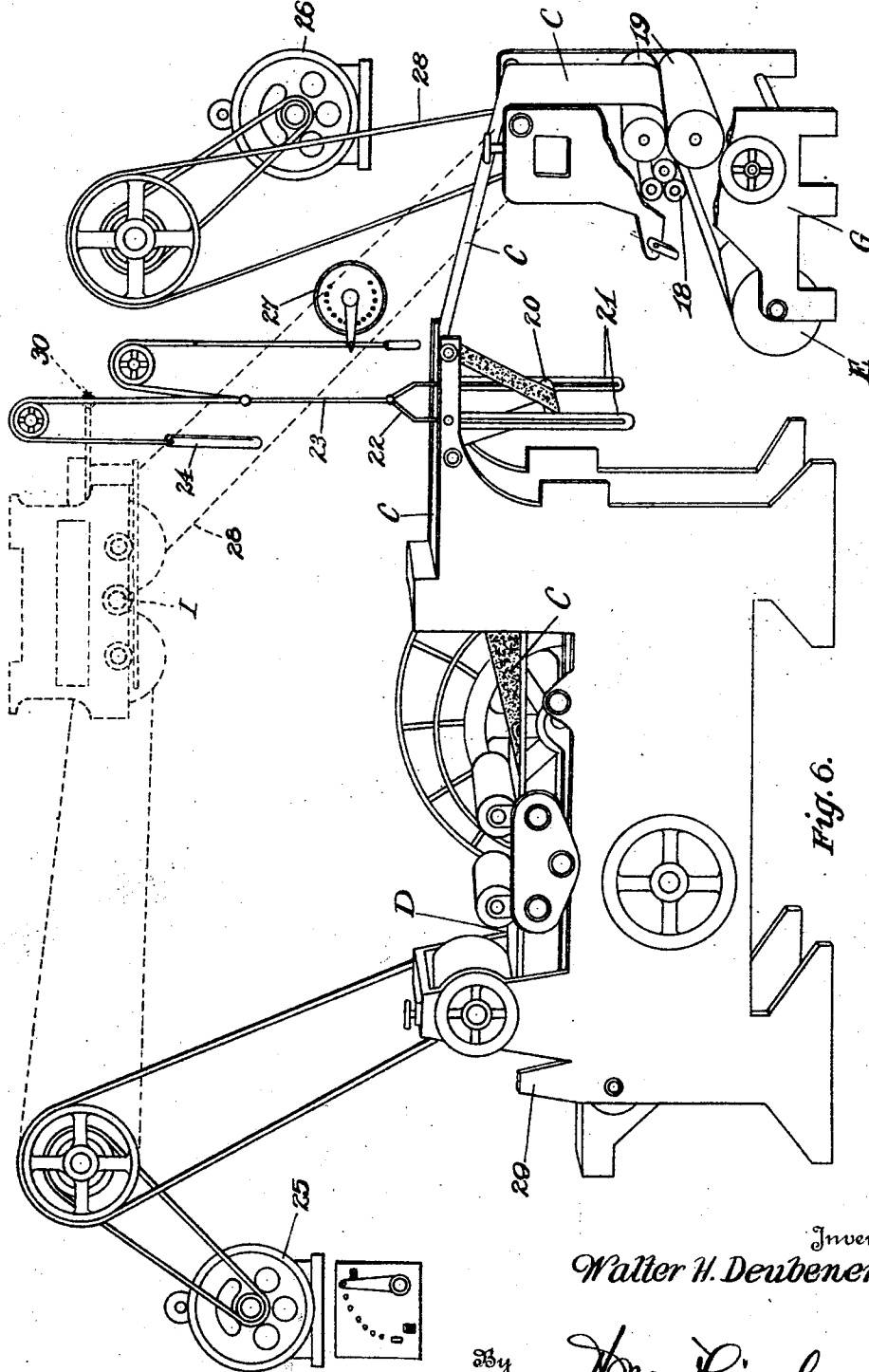


Fig. 6.

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UNITED STATES PATENT OFFICE

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METHOD OF MAKING BAGS

Original application filed August 18, 1927, Serial No. 213,789. Divided and this application filed June 9, 1928. Serial No. 284,229.

This invention relates to shopping bags and the method of making the same to provide a paper bag with a decorative outer face over the entire surface to provide a utility of a desirable nature. An important feature of the invention resides in providing a shopping bag which can be sold at a very reasonable price and yet giving an appearance commensurate with a high grade article, thereby providing a shopping bag of a highly desirable nature. This is a division of my application Serial Number 213,789.

It is a feature of the invention to provide means for embossing the paper and decorating the same on the face thereof automatically as the flat sheets are fed through the machines and in forming the same into a bag as it passes on through into the finished form, thus decorating the entire outer surface of the bag without delay in making the same owing to the fact that the decorative means is applied by the method herein set forth in such a manner as to accomplish a result with practically little or no increase in cost in the manufacture of the finished bag.

The invention includes the method of making a shopping bag with a decorative outer surface which is embossed into the surface or body of the paper as the same travels through the apparatus which forms the same into the finished bag. This method includes an automatic means of running a continuous flat sheet of paper through a decorating and embossing means and then passing the same through the apparatus adapted to fold and glue the edges so as to provide a bag with a decorated face appearing on the outside of the same. The method is carried out rapidly and the decorating and embossing means is adapted to be synchronized with the bag making mechanism so that the bags come out uniformly finished and decorated, with the decoration embossed right into the body and surface of the bags. A very important feature resides in the economically embossing and simultaneously decorating the body or surface of the paper forming the bag in such a manner as to simulate or have the appearance of a leather bag, thereby providing a high grade and very attractive finished article.

An essential part of my method is in economically providing the decorated finished article, otherwise it would be prohibitive as a finished product for the reason that articles of this nature must sell very reasonable.

These features, together with other details of the method, together with the stiffening and reinforcing of the side walls of the bag by reason of the embossed decorative finish therein without extra cost in the manufacture thereof, will be more fully and clearly set forth together with other objects in the specification and claims.

Figure 1 illustrates my new bag as it would appear in use.

Figure 2 illustrates my bag in folded position.

Figure 3 is an enlarged detail of a portion of the bag.

Figure 4 is a section on the line 4—4 of Figure 3.

Figure 5 is a small detail showing a textile surface indented into the body of the sheet adapted to make my bag.

Figure 6 is a diagrammatic side view of a machine for carrying out my method.

My shopping bag A is made preferably of paper having a strong texture adapted to withstand wear and of a construction having the side walls 10 and 11 which fold flat against each other while the bottom 12 may fold over onto either side. This structure of a bag permits the folding of the same in a flat compact state so that the bags may be packed together in shipment or displayed folded so as to take up a small amount of room. The folding of the bag in a flat state is also important to the user as when the bag is not being used as a shopping bag to carry articles therein it is preferred to have the bag so that it will fold flat.

My bag A is provided with carrying handles B which are adapted to carry the load of the bag and these handles may be connected to the loop portions 14 which extend over and around the bottom 12. A suitable retaining member 15 may be employed across the bottom 12 to hold the loops 14 in place in relation to the bottom.

My bag A is made up of paper or thin

sheet material C which is illustrated in enlarged formation in Figures 3 and 4. This material C is adapted to be fed in sheet form into a bag making machine D and this sheet material is preferably supplied in rolls such as E so that the same may be fed through the machine D rapidly to make the bags A as the sheet material C passes through the same.

The sheet material C is fed into the machine D at one end and comes out finished at the other end in the form of the shape and design of the shopping bag A illustrated in Figures 1 and 2, excepting that the handles and the loops are not attached thereto. This is an important feature in considering my new bag as the bag is formed with a decorative outer surface F over the entire body of the bag such as the sides 10 and 11 and the bottom 12 to provide a very attractive bag.

My method of making the bag not only provides an outer decorative finish but includes the embossing of the same into the body of the material illustrated more clearly by the indentations 16 in Figure 4 which makes the decorative surface F on the bags stand out very clearly.

My method is carried out in a practical manner by providing a suitable apparatus G for decorating and embossing the material C as it passes from the roll E to the decorating means 18 and from there through the embossing members 19 and up over the top of the apparatus G under the synchronizing roller 20 and into the machine D.

The synchronizing roll 20 is carried in a guide frame 21 which permits it to raise and lower and is held by the yoke 22 in proper position. The yoke 22 is connected by the cable 23 to the weight 24 so that the roll 20 is held balanced and may be easily operated up or down by the tension of the sheet C passing over the same.

The machine D is adapted to be operated by a suitable motor 25 while the machine G is operated by the motor 26. It is important that these machines run in synchronism so that the sheets C will be fed through properly and will not bind against the operation of either machine. By means of my synchronizing roll 20 which is connected to the rheostat 27 which controls the motor 26, the motor 26 is adapted to be operated at the proper speed to keep the apparatus of the machine G operating through the belt 28 in the proper synchronism with the operation of the machine D which makes the bags into the proper form and shape.

Thus my method of making my new bag A with the decorative and embossed finish over the entire surface of the same consists in passing sheet material through decorating and embossing or indenting means and then feeding the same into the bag making machine and automatically synchronizing the opera-

tion of the machines to permit the finished bags to be discharged from the end 29 of the machine D, decorated and indented to make the decoration on the surface stand out, and folded with sides and bottom portions ready to receive the carrying members to provide a finished shopping bag.

My shopping bag may be provided with just the handles B at the top which can be attached in any suitable manner so as to provide a shopping bag having carrying handles extending from the top of the same. It is also obvious that my bag may be used without the handles wherein a decorative bag of this nature is desired.

The decorative means F on the outer face of my bag can be impressed so as to be indented into the body of the material or sheet C or placed on the smooth surface of the sheet to provide the desired decorative outer finish to the bags. The decoration F is applied by the apparatus G in a manner to dye the material C passing through this apparatus or to impress the same on the surface with ink or any suitable material to give the desired result in the decorating of the surface of the sheets C. It is also obvious that the impression of the decoration in different colors may be applied and the impressing of the sheet C to emboss or indent the same may be applied with the decorating of the sheet or separately.

My method of making my bag A provides an article of utility which may be offered at a very reasonable price to the customer but having a nature far superior to an ordinary paper bag. It has become common practice to use bags for shopping of a nature as covered by my Patent No. 1,305,198, and I have produced in this bag an entirely new idea in so far as I know in providing a bag having an economical construction yet of an attractive design wherein the user may obtain the same at the same cost as heretofore but of a much more desirable nature.

Figure 6 illustrates diagrammatically the machine for carrying out my method and the full lines of the drawing indicate where direct current is used and two motors 25 and 26 are used to drive the machine. If it is necessary to use alternating current to drive the machine, then the motor 25 is connected to the automatic speed regulator I illustrated in dotted outline. From this regulator the drive belt 28 illustrated in dotted outline is adapted to extend to the machine G to operate the same. The equalizer I maintains the decorating and embossing machine G in synchronism with the machine D. When this equalizer I is used then the motor 26 is not necessary. The equalizer I is provided with a regulating arm 30 which is connected to the member 23 so as to connect the equalizer with the regulating roll 20.

Heretofore there has been no reason for

making bags of the nature that I have herein described but it will now be readily appreciated that a bag of this nature is of extreme importance and will provide to the customer an attractive shopping bag at the same cost as has been paid heretofore and yet having the similitude of textile material, leather or other similar materials applied to the paper shopping bag automatically in the manufacture of the same to produce a new article of manufacture.

In accordance with the patent statutes I have described the principles of my invention in producing a new article of manufacture in a low cost shopping bag and while I have illustrated a particular method of making my bag and a particular design for the body and surface of the same, I desire to have it understood that this is only illustrative and that the invention may be carried out by other means and applied to uses other than those above set forth within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. The method of making a shopping bag consisting in indenting, impressing, and automatically forming sheet material into a bag with a decorative indented surface extending throughout the entire body of the bag.

2. The method of making a paper shopping bag consisting in impressing into the sheet material a finish to simulate fabric or leather, and automatically making it into a bag with sides and bottom portions.

3. The method of making decorative bags from a continuous sheet of material which consists in decorating and indenting the said sheet to stiffen the same, and then forming the same into bags having an outer decorative indented finish.

4. The method of making a decorative bag which consists of indenting and impressing a material and then forming the same into a bag.

5. The method of making a shopping bag which consists first in impressing a continuous sheet of material, and then forming the same into a bag having sides and bottom portion wherein the decorative surface extends over the entire body of the same.

6. The method of making a shopping bag which consists of impressing and indenting a continuous sheet of material to stiffen the same and then forming the same into a bag with sides and bottom portions having an impressed surface over the entire bag, said steps being continuous and synchronized.

7. The method of making a shopping bag consisting of dyeing a decorative finish to simulate fabric or leather on a continuous sheet from a roll and then forming a bag thereof, wherein the sides and bottom portions have an outer decorative finish.

8. The method of making bags which consists of the following synchronized steps; first indenting and impressing a material and then forming the same into a bag.

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