

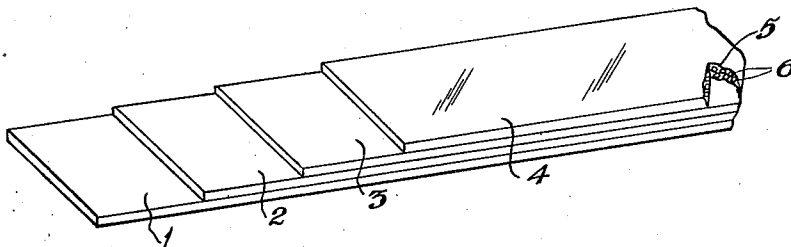
Sept. 25, 1934.

D. D. SWIFT

1,974,883

MANUFACTURE OF GOLD LEAF CARRIER

Filed June 29, 1933



INVENTOR

BY *Ronald D. Swift*
Horatio E. Bellows
ATTORNEY

UNITED STATES PATENT OFFICE

1,974,883

MANUFACTURE OF GOLD LEAF CARRIER

Donald D. Swift, Hartford, Conn., assignor to
M. Swift & Sons, Incorporated, Hartford,
Conn., a corporation of Connecticut

Application June 29, 1933, Serial No. 678,228

7 Claims. (Cl. 154-40)

My present invention relates to an improved gold or metallic leaf sheet or ribbon, for use in the imprinting of ornamentation of leather, cloth, or other surfaces.

5 It is customary to utilize gold or metallic leaf sheets or ribbons for stamping, embossing, and ornamenting compressible surfaces such as leather, cloth, and the like, in order to reduce the number of operations required, to facilitate the
10 application of the metallic leaf to delicate material, and to place the metallic leaf and the sizing therefor in a sales package that does not require excessive care and attention. The metallic leaf ribbons now in use thus include a carrier
15 strip of paper having a coating of beeswax, on which a layer of metallic leaf is placed, a sizing coat of varnish or the like being placed on the layer of metallic leaf.

It has been found that the ribbons of this type,
20 while suitable for good leather and other material capable of forming a satisfactory base for the metallic leaf, do not produce satisfactory results on leathers of poorer grade that are coarse, porous, or resilient, or on imitation leathers that
25 are impregnated with pigments or fillers susceptible to heat, or on fabrics that have resilient threads or that do not properly set off the thin metallic leaf. It is the principal object of my invention to improve the metallic leaf sheet or ribbon
30 so as to produce a more perfect imprinting or ornamentation upon such materials, as well as the better materials.

To this end, I have devised a novel method of manufacture of a novel metallic leaf sheet or
35 ribbon, which may be used in place of the present type, but which includes additional matter to coat with the material to be imprinted or ornamented so as to overcome the deficiencies of the material and to enhance the appearance
40 and the life of the imprinting or ornamentation.

With the above and other objects and advantageous features in view, the invention consists of a novel method of manufacture and a novel
45 product more fully described in the detailed description following, in conjunction with the accompanying drawing, and more specifically defined in the appended claims.

The drawing is a perspective view of a strip or ribbon of metallic leaf made in accordance
50 with the invention.

In manufacturing the novel product, a carrier strip 1 of paper or other suitable flexible material is provided, glassine paper being preferred, and a coating 2 of a combined adherent and
55 burnishing material is placed on the face there-

of, the preferred material being a wax such as beeswax. Over this coating a layer 3 of gold or metallic leaf is applied, and a final coat 4 consisting of an intimate mixture of sizing 5, such as French varnish, and a filler material 6, the
60 most suitable material being yellow ochre. This base is preferably paper, but may be of other suitable flexible material, such as metal foil.

In preparing the completed sheet, the base is first coated with wax, one way of coating comprising spreading liquid wax obtained by dissolving beeswax in carbon tetra chloride or a similar solvent on the paper sheet, the metallic leaf is then placed on the wax, and the yellow ochre
65 sizing is then applied to the leaf, either manually, or by running the sheet over a sizing roller. Preferably, the yellow ochre should be concentrated at the outer surface, and it may therefore be desirable, in certain instances, to apply the
70 sizing and then the yellow ochre; in practice, however, a thorough mixture has been found satisfactory.

The resulting novel sheet or strip is smooth and pliable, non-sticky, can be handled without loss of gold or metal, may be made in any width or
80 length, and contains all the ingredients necessary for perfect imprinting and ornamentation.

Although different fillers may be used, such as other clays and metallic oxides in comminuted form, yellow ochre has been found very satisfactory, as it improves the application of gold leaf and compensates for deficiencies of the material to which the gold leaf is applied. The yellow ochre, because it is comminuted, fills up all pores and interstices in coarse material, cooperates
85 with the sizing to matte material having resilient threads or material that is coarse grained, forms a smooth, even surface for the metallic leaf, and has sufficient opaqueness to serve as a backing and thus enhance the final appearance of the
90 imprinted or burnished metal. Moreover, the fine yellow ochre has a heat insulating effect and also mixes with and apparently absorbs surface material which has a tendency to melt or run when subjected to the impressing or burnishing
100 of the heated imprinting dies. This useful effect increases the latitude of heating for the die, thus producing better burnishing, and opens up a wide range of artificial leathers and other composition material that have low melting point pigments
105 and fillers. It has been found possible to obtain satisfactory metallic leaf applications, because of the yellow ochre, with die temperatures as low as 140° F. and as high as 300° F., the present range being from 160° F. to 250° F.

110

The advantageous results produced by the novel strip or sheet thus include a better effect because the base for receiving the metallic leaf is improved, the metallic leaf is backed, a higher burnishing temperature may be used, and a clearer clean-cut impression is obtained, a more permanent effect because deficiencies in the material are compensated for and the material is matted to prevent breaking up of the imprinted metallic leaf, and an increase in the available materials to which metallic leaf can be advantageously applied because the filler has an insulating and an absorbing effect.

Instead of utilizing metallic leaf, the gold or other metal may be deposited on the waxed carrier by plating, it being preferred to utilize metal foil as the carrier strip for this purpose.

While I have described a specific material for use as a filler, it is obvious that other materials and mixtures of materials having similar physical and chemical characteristics may be used instead, within the spirit and the scope of the invention as defined in the appended claims.

I claim:

1. A metallic leaf sheet comprising a carrier strip, a coat of releasable composition thereon, a layer of metallic leaf on said coat, and an outermost layer comprising sizing containing a substantial amount of comminuted yellow ochre.
2. A metallic leaf sheet comprising a carrier strip, a coat of wax thereon, a layer of metallic leaf on said coat, and an outermost layer comprising sizing containing a substantial amount of comminuted yellow ochre.

3. A metallic leaf sheet comprising a carrier strip, a coat of releasable composition thereon, a layer of metallic leaf on said coat, and an outermost layer comprising sizing containing a substantial amount of comminuted particles of substantially the same color as the color of the metallic leaf.

4. A metallic leaf sheet comprising a carrier strip, a coat of wax thereon, a layer of metallic leaf on said coat, and an outermost layer comprising sizing containing a substantial amount of comminuted particles of substantially the same color as the color of the metallic leaf.

5. A gold leaf sheet comprising a carrier strip, a coat of wax thereon, a layer of gold leaf on said coat, and an outermost layer of sizing containing a substantial amount of comminuted yellow ochre.

6. The process of manufacturing metallic leaf sheets comprising applying a coat of releasable composition to a carrier strip, then applying a layer of metallic leaf to said coat, then applying a coat of sizing on the layer of metallic leaf, and then applying comminuted yellow ochre to the surface of the sizing.

7. A metallic leaf sheet comprising a carrier strip, a coat of releasable composition thereon, a layer of metallic leaf on said coat, and a layer of sizing on said metallic leaf layer, said layer of sizing having a layer of comminuted yellow ochre concentrated at the outer surface thereof.

DONALD D. SWIFT.