

## The Manufacture of Gold Leaf.

THE following, says the *Wood Worker*, is the method usually adopted by manufacturers of gold leaf in this country. The extreme malleability of gold has made it a prominent metal in the useful as well as the fine arts. It has been calculated that from two to four million dollars worth of this precious metal is annually used in ornaments, in gilding, in lettering, edging of books, in signs, ornamental paintings, and in dentistry. Of course, the greater proportion of this is for the first-named purpose, although there appears to be a great amount used in other industries. A comparatively small amount, however, is necessary to cover a great deal of space. A cubic inch can be hammered so as to cover a space of thirty-five feet wide and one hundred feet long, and twenty of our dollar gold pieces can be drawn into a wire that would reach round the earth.

The gold-leaf beater's art is one of the most surprising when the result is considered. The minute films are so thin as hardly to retain the light, and yet possess all the brilliancy of colour of the solid block of gold of about twenty-two carats. It is first cast into a bar eight inches long, one inch wide, and one half inch thick, the weight being about thirty-five ounces, and rolled out until it is about as thick as your finger-nail. The "ribbons," as they are called, are now weighed into packages, or "beatings," of two and a-half ounces each. These beatings are what the men first start to work on. A man will cut one of them (of two-and-a-half ounces) into 180 pieces, making the pieces about an inch square. He next puts them into a "kutch," which is made of prepared paper, the size being two-and-a-half inches square. He lays these 180 pieces of gold between these papers, first a paper, then a piece of gold, and beats on the "kutch" with an iron hammer weighing about eighteen pounds, until the gold is the size of the "kutch." These pieces are cut into quarters and filled into a shoder, which is made of gold-beaters' skin, the size being four inches square, and holding all the pieces, numbering 740. The gold-beaters' skin is made from a preparation of a large portion of the large intestines of an ox, and the prepared paper is, or may be, parchment made from calf's skin, rendered clear and white by a peculiar operation that gives it the appearance of writing paper, for which purpose it is used to some extent. The pieces are then beaten out in the "shoder" with a hammer weighing about thirteen pounds, making them all four inches square.

These pieces, or "shoder leaves" (as they are now called), are cut into quarters, making them two inches square, and in all 2,080 pieces or quarters of "shoder leaves." These are filled into three moulds. Each mould is made of the same material as the "shoder." The moulds are five inches square, and hold 900 pieces or quarters of "shoder" each.

The moulds are then beaten out separately with a hammer weighing about eight pounds until the gold is very nearly square with the edge of the moulds. They are then sent to girls for booking. Each girl will take a mould full of gold, taking out each leaf separately and trimming the edges of the leaf off, making them three-and-a-half inches square, and as the leaves are cut they are put into a paper book holding twenty-five leaves. The gold is now ready for sale. It is sold by the single book or by the pack, twenty books making a pack.