

MANUFACTURES AND MATERIALS

GREEK MARBLE.

As the ancient marble quarries of Pentelicon, in Greece, are about to be developed on a large scale with the aid of modern appliances by an English company, it will not be out of place to mention that these famous sources of the material employed in the finest art and architecture that the world ever witnessed, after remaining undisturbed for a period of over 1,500 years, were drawn upon to some extent during the present century in the construction of modern Athens.

WOOD MOSAIC.

Mosaic work in a variety of forms is always pleasing when well done. Although its origin is obscure, yet for centuries it has been one of the most favored mediums of decoration. In one of the southern counties of England there is still plied a quaint inlaid wood industry which is a modern example of this art. This inlaid woodwork, known as "tonbridge ware"—a name suggestive of pottery—consists of views, flowers, borders and so forth, in all their natural colors, with minute pieces of variously colored woods, each measuring about a twentieth of an inch square. So accurately are these pieces of wood cut, even at these minute dimensions, and so neatly and closely are they glued together, that they resemble one solid piece of wood with the design painted upon it. Curiously enough it was painted drawings upon white wood that originally suggested and subsequently evolved into the present craft.

The principal woods employed in the art, says the Scientific American, are American birch, mahogany, tustic, walnut—American and Spanish—plum tree, tulip—with its beautiful fruit—red grain, cocus, snake wood, nutmeg, rosewood, mulberry, lurnum, box, peach, acacia, maple and Hungarian ash, with its charming silky lustre and moire grain. In short, no wood is useless for the craft so long as it does not contain too great a quantity of sap, although a remedy is found in the case of one or two necessary woods, such as the holly, which is boiled for several hours, an operation not only removing all the sap, but bleaching the wood considerably as well. There is one color, however, which has always puzzled the artist. Up to the present no tree has been discovered the hue of whose wood is gray, and to supply this deficiency birds' eye maple and Hungarian ash are steeped for several weeks in the indigenous chalybeate waters, which convert the yellowish whiteness of these two woods into a soft steel gray.

When it is proposed to inlay a certain view, border or collocation of flowers in wood, a colored design is first of all prepared upon a piece of paper divided into squares of about the eighth of an inch in measurement. The design prepared, the workman proceeds to set it up in wood. This entails great labor and care, for in addition to being a skilled mechanic some artistic sense is absolutely essential in the judicious selection and composition of the different colored woods to obtain the necessary realistic effect. On all sides of him, within an arm's length, are ranged little piles of thin, narrow slips of wood, each slip measuring about an inch broad and varying from a twentieth to a twelfth of an inch in

thickness. The workman begins at the bottom left hand corner of the squared design and takes the first set of squares and works across the drawing in a vertical direction. Suppose, for instance, he has to make a bouquet of flowers. He refers to the bottom left hand corner square of the pattern and finds that it forms part of the ground work of the design; that is to say, no portion of the drawing encroaches upon that square. As the ground work is invariably white, he selects a slip of white wood from one of the little piles and lays it flat down upon his bench. Then he proceeds to the next square above. This occupies a portion of the design—the end of a petal or a leaf. This is green, and he therefore selects a piece of wood of the correct greenish shade and places this piece upon the former slip and proceeds to the next square above, and so on until he has worked his way right across the design, taking each square one by one and superposing their corresponding colored slips of wood, in their order of sequence in a little pile by his side. He then glues and presses these little slips tightly together in a little block, three and a half inches long, one inch wide and two or three inches in thickness, composed of thin little strips of variegated wood. He labels this "number one," and proceeds to set up the second line of squares upon the drawing in a similar manner, which he afterwards glues up and consecutively numbers; and so on until he has so constructed the whole design. If the drawing is a very large one, he may have as many as two hundred of these blocks of glued strips of wood. A thin veneer about the twentieth of an inch thick is now longitudinally cut from block number one. As he has now cut the reverse way of the wood, this veneer consists of a number of little frail sticks, three and a half inches in length and about a twentieth of an inch square, firmly held together by the glue. He lays this upon his bench, cuts a similar veneer from each of the other blocks, and glues them together in the regular order. This block is now subjected to tremendous pressure to drive out all the superfluous glue and to unite the thin, frail pieces of wood together. In this block the artist has obtained an exact and complete facsimile, square for square, of the drawing. When thoroughly dry, veneers are again longitudinally cut from this block, and each veneer is a replica of the pattern. Out of a block three and a half inches in thickness it is possible to obtain as many as thirty veneers.

NOTES.

Mr. F. J. D. Smith, who holds a mortgage on the works of the Toronto Pressed Brick & Terra Cotta Co., at Milton, Ont., has applied to the courts to grant him an absolute title.

The Gurney Foundry Co., Limited, of Toronto, have recently published an attractive and interesting illustrated catalogue and price list of Oxford warm air and combination furnaces.

The works of the Toronto Plate Glass & Importing Co., in Toronto, were seriously damaged by fire recently. This is the second time that these works have been partially destroyed by fire. The present loss is partially covered by insurance.

The National Wall Paper Company, of the United States, capitalized at \$38,000,000 will be dissolved by unanimous consent of the stockholders. The company was formed in 1892 by the absorption of twenty-four separate companies. Outside competition and the demands of the trade for goods identified with individual manufacturers forced the abandonment of the combination.

Vancouver bricklayers, who were on strike for 56½ cents per hour, have accepted the 50 cents per hour offered by the contractors and returned to work.