"Musical Angles," by John Cargill, Designer with Chas. G. Blake & Co., Chicago, Illinois, in *Design Hints For Memorial Craftsman* Magazine, Vol. 5, No. 7, January 1929, pp. 10-13. (The old cross on the Island of Canna & the old cross near Dupplin Castle, Scotland)

DESIGN HINTS

## 10

## "Musical Angles"

By John Cargill, Designer With Chas. G. Blake & Co., Chicago, Ill.

Editor's Note:

In the September 1928 issue of Design Hints, we published an article entitled "Notes on the Old Cross at Canna" by Mr. Cargill. The article was written by Mr. Cargill after a thorough review of Celtic ornament and a study of the "Musical Angles" relating to their supposed use by the old Irish designers. The author though that if the monks employed the intervals of the musical string to fix the outlines of monuments, they would also be likely to use these intervals in the planning of ornament, and possibly in such a manner as to indicate melodies. With this thought in mind, Mr. Cargill prepared his splendid paper which he

presented to us for publication. Because a part of this article refers to the previous one by Mr. Cargill, we will republish those parts necessary in explaining the illustrations. We previously mentioned that Mr. Cargill is not only one of the foremost designers of the country, but a talented musician as well or he would not have been capable of so properly arranging in modern style the musical notes he found in the ornament of the Old Cross at Canna. Because of space limitations, we are publishing the modern arrangement of Canna No. 1 only.

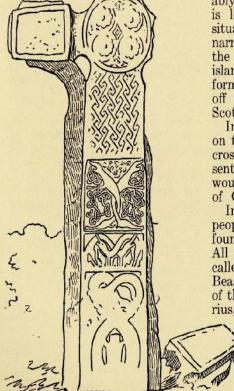
# The Old Cross on the Island of Canna.

This monument, which probably dates from the 10th Century, is located in an old cemetery, situated in the bottom of a narrow glen, near the center of the small island of Canna. The island is one of several which form the parish of Small Isles off the coast of Invernesshire, Scotland.

In the upper Zoomorphic panel on the front of the shaft are two crossed animals supposed to represent the panther, which here would typify the Resurrection of Christ.

In the early Middle Ages the people had a Christian symbolism founded on the habits of animals. All this was explained in works called Bestiaries or "Books of Beasts," which contained stories of the lion, the lizard, the charadrius, the pelican, the phoenix, etc.

These stories formed the basis of Christian allegories. Only fragments of one Bestiary in the English language now remains. "This was probably translat-



ed says J. Romilly Allen, "from Latin into Saxon rhyme of the same character as Caedmon's metrical paraphrase of the Scriptures." The following lines from the poem of the Panther, as given in this Saxon Bestiary, appear to have inspired the sculptor of the panel at Canna, mentioned above.

"When the bold animal rises up gloriously endowed, on the third

day suddenly from sleep a sound comes

of voices sweetest through the wild beast's mouth."

If we may be allowed to define "voices sweetest" as melody or singing, it will appear as if the designer intended these interlaced lines to symbolize melodies. The subjects in the two lower panels present antithesis of the song idea, for here we have discord and strife, as witnessed by the hold the dragons have on The panther and each other. the dragon then, considered as parts of one composition, illustrate the power of sacred song to overcome evil. Now, if, at either panther, we trace along the line which springs from the animal's mouth and count each intersection where this ornamental line crosses itself or other ornamental line as a musical note and arrange the progression of notes as a song, we may feel assured we are simply carrying out the old artist's intention. This is shown in Fig. 2 which is an enlarged drawing of the lefthand panther, referred to as Canna No. 1.

As Celtic art reached its highest stage during the darkest period in the history of Church song, so we can do no better than consider these notes under the light given by their contemporary song—the Gregorian chant.

The Gregorian melodies were composed in different scales or modes, each having its special character, as grave, solemn, devotional, expressed in its tonality.

The notation from Canna, which is from a symbol of the Resurrection, evidently was intended to give Easter songs of a joyful character.

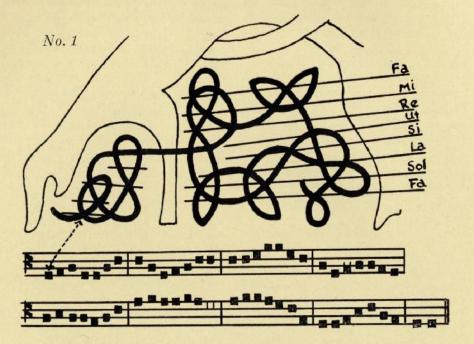
Now the melodies composed in the Lydian, or fifth, Gregorian mode, Fa to Fa, have a joyful character, and so it is the appropriate mode in which to arrange the notes from Canna.

The chants in the Gregorian modes are also characterized by the succession of certain notes (different in each mode) called the principal chord.

The principal chord in the fifth mode is Fa-La-Do, it is the prominence of these notes which give the distinctive tonal character to the songs composed in this mode.

That these songs from Canna were composed in the fifth mode, Fa to Fa, appears evident. They each sound the principal chord of this mode, Fa-La-Do, at or near their beginning. Separately, these character tones, counting Fa in each octave, occur thirty-eight times in one song, and thirty-two in the other, numbers sufficient to give the desired tone quality, and prove the intelligent musical intention of Canna's unknown author.

The fifth mode, when Si is flatted, becomes the modern major mode, and as Hurley writes, "Pieces in the fifth mode, with Si natural are very rare," so it is also proper to arrange the Canna notation in the modern major scale.



The lines Fa, Sol, La, etc., are drawn through the intersections of the ornamental lines to assist in the reading.

On the staff the line running between the two points of the clef is Ut, or Do, also Middle C.



Music unlike poetry cannot prove itself, however, the old songs from Canna are abundantly proven to be true music by the most ancient art ideals. Of course there is something in these songs as arranged that we do not know about; possibly the notes were never intended for a song with words. The old Egyptian priests in invoking their gods, sang on the vowels an inarticulate song and this very likely would be the proper rendering of the Canna Songs.

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The Old Cross Near Dupplin Castle.



But little or no music has been recovered from the Ancient or Classical monuments hence the importance of the following. The sketch is of a 10th century cross originally erected near Dupplin Castle, Scotland, but now in a museum at Edinburgh. It is given here because in the lowest panel is carved an old Scotch musical symbol or hieroglyphic determinative of Psalm tune

chant. To find the notes follow the center line of the symbol and consider each intersection as a note. This has been done and the notes arranged and harmonized in modern style in Fig. 1. As no indication is given, the mode or scale is a subject of conjecture.

The old artist told a complete story for besides David with the harp and Psalm symbol he also presents the evil spirit which departed at the sound of David's harp.

The endless song line is a conceit from the age when music was influenced by the orbits of the heavenly bodies.



## WHOOPEE! A Future President.

Max Earl Comolli arrived at the home of his parents Mr. and Mrs. Joseph C. Comolli, Concord, New Hampshire, December 16th, 1928, weight eight and one-half pounds. The proud father in his modest way informs us that little Max is good looking like his mother. To this we might add that if the little chap is as handsome as his father, he will have but little trouble getting along. Papa Comolli, the John Gilbert of the Granite Industry, is sales manager with the John Swenson Granite Company, Concord, New Hampshire. Last reports indicate that the father is improving and bearing up well under the strain on his vest buttons. We predict a brillant future for the little boy and we extend felicitations to the happy parents.