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THE CHILDREN OF MARTHA

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“Then there’s Achilles,—a rare engineer.”

—Shakespeare in *Troilus and Cressida*

“They finger Death at their glove’s end where
they piece and repiece the living wires ”

—Rudyard Kipling in *The Sons of Martha*

Many are the hoary traditions and interesting rituals associated with engineering education as practiced in many engineering schools throughout the world. From a purely literary point of view, one of the most fascinating is the Iron Ring ritual in Canada. Many aspects of the ritual, such as its connection to Rudyard Kipling and the Bible give the story an universal appeal.

During the final year many Canadian engineering graduates attend a ceremony known as The Ritual of the Calling of an Engineer. During the ceremony they take a solemn oath, which is similar in spirit to the Hippocratic oath in medicine. The participants also receive an iron ring which can be worn on the little finger of the engineer’s working hand. (In recent years the wrought iron has been replaced by stainless steel to avoid rusting). The ring symbolizes the pride of the engineers in their profession; but it also reminds them of the need for humility and their responsibility to live up to high expectations in professional conduct. The ritual has been copyrighted in Canada and the United States.

The Ritual has an interesting history dating back to 1922, when seven past presidents of the Engineering Institute of Canada met in Montreal and discussed the need for such a ceremony. Everyone felt that a solemn ritual, along with a statement of ethics for the new engineering graduates, can bind all the Canadian engineers more closely together. They immediately contacted Rudyard Kipling, the famous British author and poet. Since Kipling had referred to engineers in some of his poems and stories, they felt that he would be the ideal person to fashion such a ritual. Kipling responded enthusiastically and favorably and gave the presidents both a statement of ethics and a format for a ritual. That Kipling could do it so quickly was

due to the fact the allegory for the ritual was already contained in one of his earlier poems, known as “The Sons of Martha”.

By “Sons of Martha” Kipling refers to all the engineers of the world, who toil ceaselessly to make sure that the world goes on functioning smoothly, letting the “Sons of Mary” or the rest of the mankind enjoy the fruits of their labor. The roots of the poem can be found in the ‘Story of Martha and Mary’ in Luke, Chapter 10 of the Bible. The story is briefly as follows: During one of his travels, Jesus Christ was invited into the home of two sisters, Martha and Mary, for rest and refreshment. Completely captivated by Jesus, Mary sat down immediately at his feet and would not move. Martha, having to do the work in the house all by herself, lost her temper and addressed Jesus: “Lord, does it not matter to you that my sister has left me alone to attend to things? Tell her, therefore, to join in helping me ”. But Jesus answered her : “ Martha, Martha, you are anxious and disturbed about many things. A few things, though, are needed, or just one. For her part, Mary chose the good portion and it will not be taken away from her ”. The outcome was that Martha had to continue doing all the work by herself.

Taking the cue from the above story, Kipling concluded that all engineers must be “The Sons of Martha”, forever destined to ‘wait upon Mary’s sons, world without end, reprieve or rest’. As Kipling wrote in the poem,

“It is their care, in all the ages, to take the
buffet and cushion the shock.
It is their care that the gear engages — it is
their care that the switches lock ”.

The sense of responsibility and service that Kipling placed on the shoulders of all the engineers —The Children of Martha— became the basis for the Ritual of the Calling of an Engineer.

As a tribute to all engineers, let me end this column by mentioning the name of the world’s first engineer to be known by name and achievement; according to The New Encyclopaedia Britannica, he is Imhotep, builder of the Step Pyramid at Saqqarah, Egypt, *circa* 2550 B.C.