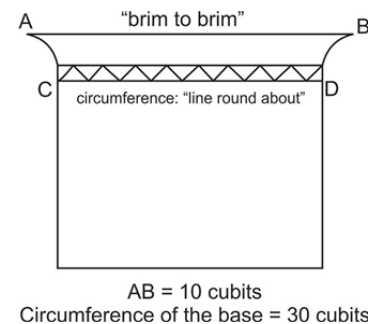# "Pi" revealed in I Kings

By James D. Nickel

T he following passage in I Kings is often ridiculed by sceptics because it "appears" to give a wrong answer of the value of π (e.g., 3, not 3.14). The relefant readin from I Kings 7:23-26 is:

> "And he made the molten sea of ten cubits from brim to brim, round in compass, and the height thereof was five cubits; and a line of thirty cubits compassed it round about. And under the brim of it round about there were knops which did compass it, for ten cubits, compassing the sea round about: the knops were in two rows, cast when it was cast. It stood upon twelve oxen, three looking toward the north, and three looking toward the west, and three looking toward the south, and three looking toward the east; and the sea was set upon them above, and all their hinder parts were inward. And it was a handbreadth thick: and the brim thereof was wrought like the brim of a cup, like the flower of a lily: it held two thousand baths."

The object described is a huge cylinder, cast in bronze, holding close to 12,000 gallons of water (2000 baths). Old Testament priests used this basin for washing and ceremonial cleansing (II Chronicles 4:6). The circumference of the cylinder's base circle was 30 cubits (measured with a line or a string) and the diameter of its brim (it looked like the flower of a lily) was 10 cubits, the distance from point A to point B in the figure, or AB. By inspection we notice that the diameter of the main body is less than the diameter of the brim. *This construction is what the sceptics either are ignorant of or ignore.*

AB = 10 cubits
Circumference of the base = 30 cubits

The Molten Sea

Using the formula $\pi = \frac{\text{circmference}}{\text{diameter}}$, we can calculate the length between point C and point D in the figure (or CD, the diameter of cylinder below the brim): $\pi = \frac{30}{CD}$.

To solve for CD, we first let $\pi = \frac{22}{7}$ (approximate value). We get this proportion: $\frac{22}{7} = \frac{30}{CD}$

Solving for CD, we get:

22(CD) = 210

CD = 9.5 cubits (approximate value)

CD (9.5 cubits) is indeed a little less than AB (10 cubits) in the construction of the Molten Sea. Hence, there is no basis for the conclusion that the Bible is in error.