

# BELIEVERS of NORSE in ANCIENT AMERICA

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Many People, including NORSE, came to Ancient America in many boats from many places at many times.

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## FUTURE NEWSLETTERS

Contact with Ancient America

Reider T. Sherwin's 15,000 comparisons between Old Norse and the Algonquin Language.

Join the believers. Please send evidence that Norse were in Ancient America

## REASONS TO BUY

*FROZEN TRAIL to MERICA*

1. Read a good historical fiction book.
2. Give to history teacher. Change history.
3. Flying Footnotes, A better way to read.
4. Accurate information. See Reviews.
5. Collector's item, CD is signed and dated.
6. Raise book sales ranking above 50,000.

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# KIMAL, the NORSE LATITUDE DEVICE

The Vikings used a handheld device, 4.7 inches long by an inch wide, to determine latitude.

The Arabs called similar devices "Al Kemal." The Vikings may have called their device simply a "Ki mal,," meaning "peek picture." The Kimal was more precise and versatile than the Al-Kemal, which could only determine one preset latitude. (Slaughter, 1957)

The height of the North Star above the horizon varies with the latitude of the viewer. To measure the North Star's height the viewer held a Kimal tethered to his head by two necklaces, which established a set distance from his eyeball. The angle seen from the eye to the Kimal is the same angle from the eye to the distant horizon and the North Star.

The viewer rapidly scanned along the horizon until he saw the North Star in the slit. Then he lowered the Kimal until the North Star peeped through the hole. He moved a slender needle onto the notches until the needle looked as if it was on the horizon, which could be seen behind the Kimal. Then he clamped the needle with his thumb. While holding the needle in place, he could move to a lamp to make an accurate count of the notches.

One necklace was secured to the top of the Kimal. During the day, the Kimal hung around the viewer's neck like a pendant.

The second necklace just hung loose around the neck. When the Kimal was being used, the second necklace was slipped up around the center prong of the three pronged base. The two necklaces were tied together at a point determined by stretching the necklaces away from the Kimal.



This Kimal was calibrated by adjusting the necklaces so that the distance from the star hole to the bottom of the solid crosspiece was the same as the distance as from the Kimal to the eyeball. Known measurements on the ship's deck and main spar created an equal sided triangle to verify that the Kimal was in calibration for 45 degrees latitude. The exact latitude, in degrees, was not always needed. The correct Kimal notch required to sail at a given latitude was easier to remember and simpler to determine.

The Kimal illustrated to the left indicates that the ship is south of 45 degrees latitude. The Captain will adjust course to the north. By taking repeated measurements with the Kimal, the ship will eventually arrive within 15 miles, north or south, of Nova Scotia.

The ancient, but real, Kimal is now in the British Museum and is shown in the Beothuk chapter of the *Handbook of North American Indians*, Vol. 15, p. 104, fig. 5, left.