## **KNOW YOUR KNOTS**

A <u>knot</u> is a unit of speed used for ships and aircraft. It equals one nautical mile per hour. An LCT with an 8-knot speed can go 8 nautical miles in an hour.

The International Nautical Mile is 6,076 feet long, or about 1/60 of one degree, or a minute of arc, of the earth's circumference. The nautical mile is equal to 1.15 statute (land) miles. To change an LCTs 8 nautical miles to statute miles, multiply 1.15 by 8, which equals approx. 9.2 statute miles. The statute mile has only 5,280 feet, and is equal to 0.87 of a nautical mile.

The term knot came into use in the earlier days of sailing when ships carried a speed measuring device called a **log chip and line**. The line was wound up on a reel. The chip, a piece of wood shaped like a quarter of a circle and weighed along its circular edge so that it would float upright, was allowed to drag in the water behind the ship. The weight of the chip caused the line to unreel as the ship moved along.

The line was knotted at intervals of 47 feet 3 inches. At the end of the first interval was one knot. Two knots marked the end of the second, and so on. The line was allowed to run for 28 seconds. Twenty-eight seconds are to one hour what 47 feet 3 inches are to 6,076 feet. Therefore, if the log had pulled out 5 intervals of line in 28 seconds, the sailors knew the ship was moving at 5 knots, or 5 nautical miles an hour.

*Editor's Note:* Thanks go to Clem Siebenmorgen for sending us this bit of nautical history.



Your typical log chip and line.

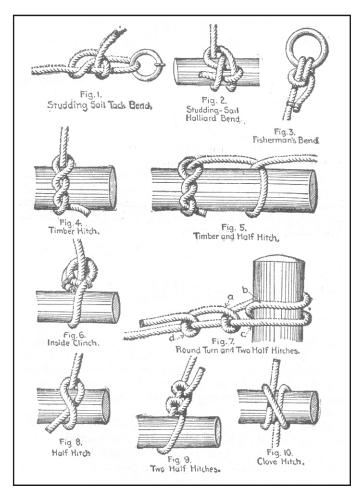
Every sailor should take pride in knowing how to make the <u>knots</u> ordinarily used in our modern Navy. Only the ones most commonly used will be described here but others are shown in Fig. 12-2. Practice making them so that you can tie them perfectly and quickly. Many time speed in making these knots is very important. Knots are divided into four general classes:

Knots in the end of a rope. These are for fastening a line upon itself or around some other object.

## Knots for bending ropes together.

Knots for securing lines to a ring or spar. These are called hitches or bends.

Knots worked in the end of a rope. These are fancy knots which finish off the end of a rope and also prevent its pulling through a ring. They are usually used on bell ropes, hand ropes, etc. The following knots are used for bending two ropes together: square knot; two bowlines; single carrick bend; and reeving line bend (used where line is to be rove through block).



Bending a rope to a post or spar. Illustration and text taken from the **BlueJacket's Manual**, 1940.