SPEEDS.

A man walks about 3 miles or 4 feet.
A horse trots 7 miles or 10 feet.
A fast horse trots 12 miles or 17 feet.
A fast horse runs 20 miles or 29 feet.
A slow river runs 3 miles or 4 feet.

A fast river runs 7 miles or 10 feet.
An ordinary steamboat 12 miles or 17 feet.
A Greyhound Steamship 23 miles or 33 ft.
An ordinary train runs 36 miles or 52 feet.
Fast Express trains up to 60 miles or 88 ft.

per second.

A 5 minute horse travels about 17 feet per second or at the rate of 12 miles per hour.

A 4 minute horse 22 feet or 15 miles.
A 3 minute horse 29 feet or 20 miles.
A 2.40 horse 33 feet or 23 miles.

A 2.30 horse 35 feet or 25 miles.
A 2.20 horse 37 feet or 27 miles.
A 2.10 horse 40 feet or 29 miles.

A passenger train, say of engine and and 6 cars, travelling 40 miles per hour, will pass a given point in 5 seconds; at 200 feet distant it would likely run down an unobservant person crossing the track at an ordinary walk. A 525 foot Greyhound Steamship steaming 23 miles per hour, would pass her length any given point in 15 seconds; and a ten mile vessel of 300 feet in length crossing her bows 1000 feet ahead, and 500 feet aside of the head line, would be struck amidships. Authorities say that if steam was shut off at full speed of a Greyhound Steamship, a mile would be run before the vessel came to a stand still.

RULE TO ESTIMATE SPEED OF TRAINS.

Watch the mile posts. Note the number of seconds that the train takes to pass between two of them By the time in seconds thus obtained divide 3600 (seconds in an hour) and the result will be the speed in hours. Example.—Ninety seconds is the time taken to pass between two posts; therefore $3600 \div 90 = 40$ miles.

NOTE—In jumping from moving trains, street cars, etc., (always a dangerous proceeding) step off, looking forward, with the outside foot forward, and at the same moment brace the body backwards.

LONGITUDE TIME.

To estimate the time east or west of a given meridian. Reduce longitude into time. Multiply the degrees, minutes, etc., by 4 and the product is the time. Example—Required the time corresponding to 82°.10' (say the longitude of Chatham). Then $82° 10' \times 4 = 5h., 28', 40''$ or within a fraction of $5\frac{1}{2}$ hours slower than Greenwich, England. To give the longitude from the time : Reduce the time into minutes and seconds and divide by 4—for example the preceding figures : $5h, 28', 40'' = 328', 40'' \div 4 = 82°, 10'$ longitude west.

GRAND PORTAL.—A Familiar Scene on the Great Lakes.