

TO MEASURE A TON OF HAY.—One hundred cubic feet of hay in a solid mow or stack, will weigh a ton.

TO MEASURE CATTLE TO COMPUTE WEIGHT.—Ascertain the girth back of the shoulders, and the length along the back, from the square of the buttock, to a point even with the point of the shoulder blade; say the girth is 6 feet 4 inches, and the length 5 feet 3 inches, which, multiplied together gives 31 feet. Multiply this by 23, the number of pounds allowed to the foot, between 5 and 7 feet girth, and the result is 713 pounds for the number of pounds of beef in the four quarters. Girths from 7 to 9 feet allow 31 pounds to the foot. Cattle must be fat and square built to hold out weight.

TO MEASURE GRAIN IN BINS. multiply the length and width together; and that product by the height in cubic inches, and divide by 2.150 and you have the number of bushels.

TO MEASURE CORN IN THE EAR, find the cubic inches as above, and divided by 2.815, the cubic inches in a heaped bushel, and take two-thirds of the quotient for the number of bushels of shelled corn. This is upon the rule of giving three heaping half bushels of ears to make a bushel of grain. Some fall short and some overruns this measure.

BOARD MEASURE.—Boards are sold by face measure. Multiply the width in inches or any number of pieces of equal length, by the inches of the length. Divide by 144, and the quotient is the number of feet, for any thickness under an inch. Every fourth inch in crease of thickness, adds a fourth to the number of feet in the face measure.

LAND MEASURE.—Every farmer should have a rod measure, a light, stiff pole, just 16½ feet long, for measuring land. By a little practice he can learn to step just a rod at five steps, which will answer very well for ordinary farm work. Ascertain the number of rods in width and length of any lot you wish to measure, and multiply one into the other, and divide by 160 and you have the number of acres, as 160 square yards make a square acre. If you wish to lay off one acre square, measure 13 rods upon each side. This lacks one rod of being full measure.

U.S. GOVERNMENT LAND MEASURE.—A township is 6 miles square, and contains 36 sections, 23 040 acres. A section, one mile square, 640 acres. A quarter section, half a mile square, 160 acres. As this is 160 rods square, a strip one rod wide or every rod in width is an acre. A half quarter section, is half mile long, north and south, almost universally, and a fourth of a mile wide. 80 acres. A quarter-quarter section, is one fourth of a milesquare, 40 acres, and is the smallest sized tract, except fractions, ever sold by the government. The price is \$1.25 an acre.

MEASURE OF A MILE.—While engaged in the compilation of this valuable article, we received the following table from a friend in Maine, who, in remarking upon the indisposition of some persons to take an agricultural paper, "because" they say "it pertains to the system of book farming," says some object to take *The Plow* because "they can't afford it." We are sorry for their poverty, but more so for their ignorance, and stupid determination to remain in it. This single article which is less than the fifteenth part of what we give them for fifty cents, would cost any one of them fifty times the price of *The Plow*, in labor, to glean this information from fifty dollars worth of books. Our measure of distance is by the standard English mile, which is 5,280 feet in length, or 1,760 yards, or 320 rods.

An English geographical mile, is equal to 2025 yards.

Ancient Scottish mile,	1	mile	224 yds.	English.
Ancient Irish mile,	1	"	480	"
German short mile,	3	"	1579	"
German long mile,	5	"	1326	"
Hanoverian mile,	6	"	994	"
Tuscan mile,	1	"	48	"
Russian mile,	4	"	1197	"
Danish mile,	4	"	1204	"
Dantzic mile,	4	"	1435	"
Hungarian mile,	5	"	313	"
Swiss mile,	5	"	353	"
Swedish mile,	6	"	1110	"
Arabian mile,	1	"	330	"
Modern Roman mile 132 yards less than English.				

LENGTH OF LEAGUES.

French posting league,	2	"	743	"
French league,	3	"		"
English league,	3	"		"
Spanish judicial league,	2	"	1115	"
Portugal league,	3	"	1480	"
Flanders league,	3	"	1584	"
Spanish common league,	5	"	376	"

LENGTH OF OTHER MEASURES.

Persian Parasang,	3	"	806	"
Russian Werst,	6	"	593	"
Turkish Bein,	1	"	66	"

A German geographical mile is equal to 4 English miles or 8100 yards.

SCRIPTURE MEASURES.

"A Sabbath's Day's Journey" is 1,153 yard—about two thirds of a mile. A *day's journey* is 33½ miles. A *reed* is 10 feet, 11½ inches. A *palm* is 3 inches. A *fathom* is 6 feet. A *Greek foot* is 12½ inches. A *Hebrew foot* is 1.212 English foot. A *cubit* is 2 feet. A *great cubit* is 11 feet. An *Egyptian cubit* is 21.888 inches. A *span* is 10.944 inches.

As the superficies of all our States and Counties are expressed in square miles, it should be borne in mind that the contents of a mile is 640 acres.

NUMBER OF SQUARE YARDS IN AN ACRE.—English 4,840; Scotch, 6,150; Irish, 7,840; Hamburg, 11,545; Amsterdam, 9,722; Dantzic, 6,650; France, [hectare,] 11,960; Prussia, [morgen,] 3,053.

MANURE MEASURE.—This is generally estimated by the load, which is about as definite as the phrase about as big as a piece of chalk. It ought to be measured by the cubic yard or cord. A *cubic yard* is 27 cubic feet, each of which contains 1,728 cubic inches. A *cubic cord* is 12½ cubic feet. As the most of farmers have an idea in their minds of the size of a pie of wood containing a cord, they would readily compare that with the quantity of manure if stated in cords. Every cart or waggon box, before it leaves the maker's shop, ought to have the cubic feet and inches it will contain indelibly marked upon it. This would enable the owner who has read *The Plow*, to calculate the amount of his load of grain, roots, earth, or one or manure.

WEIGHT OF MANURE.—A solid foot of half rotten stable manure, will weigh, upon an average, 56 pounds. If it is coarse or dry, it will average 43 pounds to the foot. A load of manure, or 36 cubic feet, of first quality, will weigh 2,016 pounds; of second quality, 1,728 pounds. Weight to the acre. Eight loads of first kind, weighing 16,128 pounds will give 108 pounds to each square rod, and less than two and a half pounds to each square foot. Five loads will give 63 pounds to the rod. An acre con-