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IN THE SENATE OF THE UNITED STATES.

MAY 18, 1866.

Read twice and referred to a Select Committee on Coinage and Weights and Measures.

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## **AN ACT**

To authorize the use of the metric system of weights and measures.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*  
3       That from and after the passage of this act it shall be lawful  
4       throughout the United States of America to employ the  
5       weights and measures of the metric system; and no contract  
6       or dealing, or pleading in any court, shall be deemed invalid  
7       or liable to objection because the weights or measures ex-  
8       pressed or referred to therein are weights or measures of the  
9       metric system.

1       SEC. 2. *And be it further enacted,* That the tables in  
2       the schedule hereto annexed shall be recognized in the con-  
3       struction of contracts, and in all legal proceedings, as estab-  
4       lishing, in terms of the weights and measures now in use in  
5       the United States, the equivalents of the weights and meas-  
6       ures expressed therein in terms of the metric system; and  
7       said tables may be lawfully used for computing, determining,

8 and expressing in customary weights and measures the weights

9 and measures of the metric system.

### MEASURES OF LENGTH.

Metric denominations and values.		Equivalents in denominations in use.
Myriameter .....	10,000 meters.	6.2137 miles.
Kilometer.....	1,000 meters.	0.62137 miles, or 3,280 feet and 10 inches.
Hectometer.....	100 meters.	328 feet and 1 inch.
Dakameter.....	10 meters.	393.7 inches.
Meter.....	1 meter.	39.37 inches.
Decimeter.....	$\frac{1}{10}$ of a meter.	3.937 inches.
Centimeter.....	$\frac{1}{100}$ of a meter.	0.3937 inches.
Millimeter.....	$\frac{1}{1000}$ of a meter.	0.0394 inches.

### MEASURES OF SURFACE.

Metric denominations and values.		Equivalents in denominations in use.
Hectare .....	10,000 square meters	2.471 acres.
Are.....	100 square meters	119.6 square yards.
Centare.....	1 square meter	1,550 square inches.

### MEASURES OF CAPACITY.

METRIC DENOMINATIONS AND VALUES.			EQUIVALENTS IN DENOMINATIONS IN USE.	
Names.	Number of liters.	Cubic measure.	Dry measure.	Liquid or wine measure.
Kiloliter, or stere..	1,000	1 cubic meter.....	1.308 cubic yards.....	264.17 gallons.
Hectoliter.....	100	$\frac{1}{10}$ of a cubic meter..	2 bushels and 3.35 pecks	26.417 gallons.
Dekaliter .....	10	10 cubic decimeters ..	9.08 quarts .....	2.6417 gallons.
Liter.....	1	1 cubic decimeter ..	0.908 quarts .....	1.0567 quarts.
Deciliter .....	$\frac{1}{10}$	$\frac{1}{10}$ of a cubic decimeter	6.1022 cubic inches.....	0.845 gills.
Centiliter .....	$\frac{1}{100}$	10 cubic centimeters.	0.6102 cubic inches.....	0.338 fluid ounces.
Milliliter .....	$\frac{1}{1000}$	1 cubic centimeter ..	0.061 cubic inches.....	0.27 fluid drams.

## WEIGHTS.

METRIC DENOMINATIONS AND VALUES.			EQUIVALENTS IN DENOMINATIONS IN USE.
Names.	Number of grams.	Weight of what quantity of water at maximum density.	Avoirdupois weight.
Millier, or Tonneau.....	1,000,000	1 cubic meter.....	2204.6 pounds.
Quintal.....	100,000	1 hectoliter.....	220.46 pounds.
Myriagram.....	10,000	10 liters.....	22.046 pounds.
Kilogram, or kilo.....	1,000	1 liter.....	2.2046 pounds.
Hectogram.....	100	1 deciliter.....	3.5274 ounces.
Dekagram.....	10	10 cubic centimeters.....	0.3527 ounces.
Gram.....	1	1 cubic centimeter.....	15.432 grains.
Decigram.....	$\frac{1}{10}$	$\frac{1}{10}$ of a cubic centimeter.....	1.5432 grains.
Centigram.....	$\frac{1}{100}$	10 cubic millimeters.....	0.1543 grains.
Milligram.....	$\frac{1}{1000}$	1 cubic millimeter.....	0.0154 grains.

Passed the House of Representatives May 17, 1866.

Attest :

EDWARD McPHERSON, *Clerk.*