

of parts at the moveable block, minus the one-fourth, or 13.3, gives 40.1 tons as the weight required.

To find what size rope you need, when roven as a tackle, to lift a certain weight:

Divide the weight to be raised by the number of parts at the moveable block to obtain the strain on a single part. To this add one-third for the increased strain brought by friction and reeve the rope of corresponding strength.

One-sixth of forty tons is six and two-thirds tons, which, with one-third added, is nine tons, nearly, for which you should reeve a two-inch and a quarter inch rope.

FOREIGN WEIGHTS AND MEASURES.

Reduced to the Canadian standard.

(The two right hand figures are the hundredth parts of a whole number.)

France.

Metre.....	3.28 feet.
Decimetre.....	1.10th metre.... 3.94 inches.
Velt.....	2.00 galls.
Hectolitre.....	26.42 galls.
Decalitre.....	2.64 galls.
Litre.....	2.11 pints.
Kilolitre.....	35.32 feet.

Spain.

Quintal, or 4 arrobas.....	101.44 lbs.
Arroba.....	25.36 lbs.
Arroba of wine.....	4.43 galls.
Fanega of grain.....	1.60 bushels.

Portugal.

100 lbs.....	101.19 lbs.
22 lbs. (1 arroba).....	22.26 lbs.

France.

Hectolitre.....	2.84 bushels.
Decalitre.....	9.08 qts.
Millier.....	2.205 lbs.
Quintal.....	220.54 lbs.
Kilogramme.....	2.21 lbs.

Holland.

100 lbs, 1 centner.....	108.93 lbs.
Last of grain.....	85.25 bushels.
Ahm of wine.....	41.00 gallons.
Amsterdam foot.....	0.93 foot.
Antwerp foot.....	0.94 foot.
Rhineland foot.....	1.03 foot.
Amsterdam ell.....	2.26 feet.
Ell of the Hague.....	2.28 feet.
Ell of the Brabant.....	2.30 feet.

Netherlands.

Ell.....	3.28 feet.
Mudde of Znaak.....	2.84 bushels.
Vat hectolitre.....	26.42 gallons.
Kan litre.....	2.11 pints.
Pond kilogramme.....	2.21 lbs.

Hamburg.

Last of grain.....	89.64 bushels.
Ahm of wine.....	38.25 gallons.
Hamburg foot.....	0.96 foot.
Last.....	1.92 feet.

Portugal.

4 arro. of 22 lbs. (1 quint.)	89.05 lbs.
Alquiere.....	4.75 bushels.
Mojo of grain.....	23.03 bushels.
Last of salt.....	70.00 bushels.
Almude of wine.....	4.37 gallons.

Sicily and Naples.

Cantaro grosso.....	192.50 lbs.
Cantaro sottile.....	175.00 lbs.
100 lbs.....	70.00 lbs.
Salma grossa of grain.....	9.77 bushels.
Salma generale.....	7.85 bushels.
Salma of wine.....	23.06 gallons.
Cantaro grosso.....	196.50 lbs.
Cantaro Picolo.....	106.00 lbs.
Carro of grain.....	52.24 bushels.
Carro of wine.....	264.00 gallons.

Rome and Genoa.

Rubbio of grain.....	8.36 bushels.
Barth of wine.....	15.31 gallons.
100 lbs. or peso grosso.....	76.87 lbs.
100 lbs. or peso sottile.....	69.89 lbs.
Mina of grain.....	3.43 bushels.
Mezzarola of wine.....	39.22 gallons.

Florence and Leghorn.

100 lbs. or 1 cantaro.....	74.86 lbs.
Moggio of grain.....	16.59 lbs.
Barile of wine.....	12.04 gallons.

Prussia.

100 lbs of 2 Cologne marks.....	103.11 lbs.
Quintal, 110 lbs.....	113.42 lbs.
Shffel of grain.....	1.56 bush.
Eimar of wine.....	18.14 galls.
Ell of cloth.....	2.19 feet.
Foot.....	1.03 feet.

Denmark.

100 lbs, 1 centner.....	110.28 lbs.
Barrel or toende of corn.....	3.95 bush.
Viertel of wine.....	2.04 galls.
Copenhagen foot.....	1.03 feet.

Sweden.

100 lbs of 5 lispunds.....	73.76 lbs.
Kan of corn.....	7.42 bush.
Last.....	75.00 bush.
Cann of wine.....	69.09 galls.
Ell of cloth.....	1.95 feet.

Russia.

100 lbs of 32 laths each.....	90.26 lbs.
Chertweart of grain.....	5.95 bush.
Vedro of wine.....	3.25 galls.
Petersburg foot.....	1.18 feet.
Moscow foot.....	1.10 feet.
Pood.....	36.00 lbs.

Venice.

100 lbs, peso grosso.....	105.18 lbs.
100 lbs, peso sottile.....	64.04 lbs.
Moggio of grain.....	9.08 bush.
Anifora of wine.....	137.00 galls.