objection to the metric system of weights and measures, which is, on the contrary, vastly less liable to errors of computation than that now in use. Sir Frederick also furnishes an extensive extract, giving the views of the first Napoleon on the subject of reform in weights and measures. Many of the stock arguments are repeated, and if they had not been thrashed over long ago it would be perfectly easy to take them up one by one and show their absurdity. An entire lack of any really accurate knowledge of the subject and an absence of any sort of conception of the simplest metrological principles are shown in a single quotation: "A toise, a foot, an inch, a line, a point, are fixed portions of extensions, which the imagination conceives independent of their relations one to another; if, then, we ask for the third of an inch, the mind goes into instant operation. The length called an inch is divided into three parts. By the new system, on the contrary, the mind has not to divide an inch into thirds, but a metre into a hundred and eleven parts." It is difficult to properly characterize such utter nonsense, but, fortunately, the French people, who are to-day the leaders in the world's metrology, were not obliged to take their science, as they were most other things, from the first consul. A group of the most distinguished Frenchmen of any period had perfected this system, even in the very midst of the bloody revolution which closed the last century, and when their final report was made in an address to the legislative chambers by the celebrated La Place, the event was described by Adams as a "spectacle at once so rare and so sublime . . . that not to pause for a moment, were it even from occupations not essentially connected with it, to enjoy the contemplation of a scene so honorable to the character and capacities of our species, would argue a want of sensibility to appreciate its worth. This scene formed an epoch in the history of man. It was an example and an admonition to the legislators of every nation and of all after times."

Mr. Spencer also quotes from an auditor who had to go over £20,000 of accounts, and who was "very thankful that it was not in francs." At first blush it seems entirely natural and creditable to him as an Englishman to rejoice that his twenty thousand is in pounds sterling rather than francs; but, after all, his remark is only a reflection of that not uncommon English sentiment that the imperial monetary system is more perfect than any other in the wide world. This sentiment is doubtless the outgrowth of national pride and intellectual inactivity; it is not entertained by the majority of the more thoughtful and scholarly Englishmen, and, furthermore, it is in every respect false. It is unnecessary to consume time in quoting the opinion of England's most distinguished scholars, to show this.

I must be content to stop without reference to a few other points raised by Mr. Spencer, for they are essentially all of a kind. There is a sentiment underlying much of his argument, to which I must briefly refer, however, because it has shown itself in other recent discussions of this subject. I refer to an anxiety lest the "poor man" be in some way injured by the proposed reform. It has come to be the fashion in all political or economical controversies to exhibit a consuming interest in the poor man's welfare; indeed one marvels that there should continue to be any poor, so universal and so intense appears to be this anxiety to shield them from all harm. Fortunately, the so-called "poor man" is not so blind to his own interests as some would have it appear, and he is quite alive to the fact that the proposed metrological reform is fully as important to him as to anybody.

Finally, it ought to be understood that the advocates of the metric system do not assume that it can come into use immediately or without considerable hardship. It took nearly a century to fairly establish the decimal money system in the United States, which no one would now think of giving up. During all this time old units and denominations continued to be used in a lessening degree, although not authorized by law. Something of the kind must occur in the transfer from our illogical, brain-destroying, time-consuming system of weights and measures for the more perfect system for which it is sure to make way. Furthermore, they heartily welcome and desire the presentation of all arguments against or objections to the metric system, believing that the more widely it is known and discussed the more supporters it will have. They expect to meet occasionally such "intelligent prejudice" as is exhibited by Mr. Herbert Spencer, whose contribution to the discussion of the subject is sure to be considered in the years to come as altogther the most remarkable to be found in any time or tongue.

THE PRACTICAL MAN.

Weights of square and round bars of wrought iron in pounds per lineal foot.—Kent.

Iron weighing 480 lbs. per cubic foot. For steel add 2 per cent

Thickness or Diameter in Inches.	Weight of Square Bar One Foot Long.	Weight of Round Bar One Foot Long.	Thickness or Diameter in Inches.	Weight of Square Bar One Foot Long.	Weight of Round Bar One Foot Long.
0			4	53.33	41.89
1-16	.013	.010	1-16	55.01	43.21
1-8	.052	.041	1-8	56.72	44.55
3-16	.117	.092	3-16	58.45	45.91
1-4	208	.164	1-4	60.21	47.29
5-16	326	.256	5-16	61.99	48.69
3-8	469	.368	3 8	63.80	50.11
7-16	.638	501	7-16	65.64	51.55
1-2	833	.654	1-2	67.50	53.01
9-16	1 055	828	9 16	69.39	54.50
5-8	1 302	1.023	5 8	71.30	56.00
11-16	1 576	1.237	11-16	73.24	57.52
3-4	1.875	1 473	3-4	75.21	59.07
13-16	2.201	1 728	13-16	77.20	60.63
7-8	2 552	2.004	7-8	79.22	62.22
15-16	2 930	2 301	15-16	81.26	63.82
1	3 333	2 618	5	83.33	65.45
1-16	3 763	2.955	1-16	85.43	67.10
1-8	4 219	3 313	1 8	87.55	68.76
3-16	4 701	3 692	3 16	89.70	70.45
1-4	5 208	4 091	1-4	91.88	72.16
5-16	5 742	4 510	5-16	94.08	73.89
3-8	6.302	4.950	3-8	96.30	75.64
7-16	6.888	5.410	7-16	98.55	77.40
1-2	7 500	5.890	1-2	100.8	79.19
9-16	8 138	6 392	9-16	103.1	81.00
5-8	8 802	6 913	5-8	105.5	82.83
11-16	9 492	7 455	11-16	107.8	84.69
3-4	10 21	8.018	3-4	110.2	86.56
13-16	10 95	8.601	13-16	112 6	88.45
7-8	11 72	9 204	7 8	115.1	90.36
15-16	12 51	9.828	15-16	117.5	92.29
2	13.33	10.47	6	120.0	94.25
1-16	14 18	11.14	1-8	125.1	98.22
1-8	15 05	11.82	1-4	130.2	102.3
3-16	15 95	12 53	3-8	135.5	106.4
1-4	16.88	13.25	1-2	140.8	110.6
5-16	17 83	14.00	5 8	146.3	114.9
3-8	18.80	14.77	3-4	151.9	119.3
7-16	19 80	15.55	7-8	157.6	123.7
1-2	20.83	16.36	7	163.3	128.3
9-16	21.89	17.19	1-8	169.2	132.9
5-8	22.97	18.04	1-4	175.2	137.6
11-16	24.08	18.91	3-8	181.3	142.4
3-4	25.21	19.80	1-2	187.5	147.3
13-16	26.37	20.71	5-8	193.8	152.2
7-8	27.55	21.64	3-4	200.2	157.2
15-16	28.76	22.59	7-8	206.7	162.4
3	30.00	23.56	8	213.3	167.6
1-16	31.26	24.55	1-4	226.9	178.2
1-8	32.55	25.57	1-2	240.8	189.2
3-16	33.87	26.60	3-4	255.2	200.4
1-4	35.21	27.65	9	270.0	212.1
5-16	36.58	28.73	1-4	285.2	224.0
3-8	37.97	29.82	1-2	300.8	236.3
7-16	39.39	30.94	3-4	316.9	248.9
1-2	40 83	32.07	10	333.3	261.8
9-16	42.30	33.23	1-4	350.2	275.1
5 8	43.80	34.40	1-2	367.5	288.6
11-16	45.33	35.60	3-4	385.2	302.5
3-4	46.88	36.82	11	403.3	316.8
13-16	48.45	38.05	1-4	421.9	331.3
7-8	50.05	39.31	1-2	440 8	346.2
15-16	51.68	40.59	3-4	460.2	361.4
			12	480.	377.

To compute the weight of sheet steel—Divide the thickness, expressed in thousandths, by 25; the result is the weight, in pounds, per square foot.

For weight of sheet brass, add 11 per cent.

For weight of sheet copper, add 10 per cent.