

## Analysis of certain Organic Substances.

	Carbon.	Hydrogen.	Oxygen.	Nitrogen.	Total.
Sugar .....	42 225	6 600	51 175	—	100
Starch .....	44 250	6 674	49 076	—	100
Gum .....	42 682	6 874	50 944	—	100
Lignin .....	52 53	5 69	41 78	—	100
Tannin .....	52 590	3 825	43 585	—	100
Indigo .....	73 260	2 500	10 43	13 81	100
Camphor ...	73 38	10 67	14 61	84	100
Caoutchouc	87 2	12 8	—	—	100
Albumen ...	52 883	7 540	23 872	15 705	100
Fibrin .....	53 36	7 021	19 635	19 934	100
Casein .....	59 781	7 429	11 409	21 381	100
Urea .....	18 9	9 7	26 2	45 2	100
Gelatine ...	47 881	7 914	27 207	16 998	100
Picromel ...	54 53	1 82	43 65	—	100
Hordein ...	44 2	6 4	47 6	1 8	100
Emellin .....	64 57	7 77	22 95	4 3	100
Veratrin ...	66 75	8 54	19 60	5 04	100
Quinchonin ..	77 81	7 37	5 93	8 89	100
Cuinin .....	75 76	7 52	8 61	8 11	100
Bruicin .....	70 88	6 66	17 39	5 07	100
Strychnin ...	76 43	6 70	11 06	5 81	100
Narcotin ...	65 00	5 50	26 99	2 51	100
Morphin....	72 840	6 366	16 299	4 995	100

## Conducting Power of Metals.

The relative conducting power of forged iron, steel, and cast-iron, are 436, 397 and 359, taking silver, which is the best conductor, at 1,000.

## Atmospheric Pressure.

The body of an average sized man presents a surface of about 2,160 square inches, or 15 square feet, and consequently sustains at the sea level a total pressure of 34,400 lbs., or nearly fourteen tons and a half.

## Statistical Information.

## Gold and Silver.

In forty years, from 1790 to 1830, Mexico produced, according to the *Mining Journal*, about \$32,000,000 worth of gold, and \$699,000,000 of silver. Chili, \$13,000,000 of gold and \$91,000,000 of silver. Russia, \$18,000,000 of gold, and \$7,000,000 of silver. Buenos Ayres \$20,000,000 of gold, and \$136,000,000 of silver. Total 1,016 millions of dollars, or \$25,400,000 per annum. The *London Engineer* says silver was formerly found in such quantities in Spain, that, according to Pliny, Hannibal extracted a daily quantity equal in value to about \$1,500, from a mine worked by him near Carthage. Cato delivered into the Treasury 2,500 lbs. of silver in bars, and 120,000 in money, besides 400 lbs. of gold, all of which he accumulated in Spain. Helvetius, who was once Governor of Andalusia, delivered 37,000 lbs. of silver coin, and 40,000 lbs. in bars.

More than 500,000 oz. of silver are annually obtained from British lead ores, by Pattinson's process; and during 1864 there was obtained from five mines in Merionethshire 2,336 tons of auriferous quartz, which, when crushed by the amal-

gamating process, produced 2,887 oz. of gold, the value of which was nearly \$50,000.

## Export Trade from 1850 to 1864-5.

	Totals.	Other Countries.	U. States.*	BRITISH COLONIES.		
				In North America.	In West Indies.	Exports to Gt. Britain.
1850...	\$12,943,795	\$108,281	\$5,933,243	\$1,808,776	\$3,376	\$3,803,399
1851...	13,810,804	164,144	4,917,429	1,037,519	8,912	6,021,401
1852...	15,807,607	188,495	7,536,155	812,189	13,961	6,756,857
1853...	23,801,303	189,974	10,725,455	1,380,466	8,989	11,465,408
1854...	23,019,190	225,829	10,418,883	1,529,275	8,749	10,876,714
1855...	28,188,461	420,538	20,002,291	1,023,447	10,808	6,738,441
1856...	32,047,017	263,775	20,218,654	1,086,041	8,755	10,467,744
1857...	27,006,624	266,699	14,762,641	875,239	960,428	11,102,045
1858...	23,472,609	24,482	13,873,138	840,475	7,025	8,898,611
1859...	24,766,981	355,806	15,586,917	723,534	8,407	9,776,758
1860...	34,631,890	376,889	20,698,896	1,030,939	12,382	12,839,069
1861...	36,614,295	380,395	16,263,374	826,871	13,775	13,907,705
1862...	33,596,125	550,252	16,980,810	936,196	18,775	15,224,417
1863...	31,831,532	841,002	22,534,074	348,090	17,463	17,463,718
1864...	13,883,508	94,029	8,699,093	1,065,057	41,313	4,728,230
1864-5	42,481,151	835,850	26,812,923	1,065,057	41,313	14,726,008

\* The exports to the United States include the "Estimated amounts not returned at inland ports."

Thus our Total Export Trade has trebled since 1850. Our exports to the States have quadrupled. These to other countries have, however, expanded most, being now eight times what they were fifteen years ago. Our exports to the British North American Colonies have remained about the same figure.—*Trade Review*.

## Marine Disasters, U. S., 1865.

The New York *Shipping List* gives the following Statistics of the whole number of vessels belonging to the United States which have been lost during the last twelve months:

	No.	Value.	No.	Value.
January	31...	\$690,000	July	22... \$500,000
February	26...	302,000	August	35... 1,092,000
March	29...	625,000	Septem.	34... 603,000
April	23...	795,000	October	49... 850,000
May	18...	330,000	Novem.	77... 1,500,000
June	18...	650,000	December	80... 1,800,000

445 9,737,000

## British Railway Locomotives.

At the close of 1863 the railways of Great Britain had 6,643 locomotives; at the close of 1846