

COAL FROM AMERICA.

EUROPE COMES TO THIS COUNTRY FOR FUEL.

The Inadequate Supply Abroad Promotes Our Foreign Trade—Best Coal for Fighting Ships Now Comes from the United States.

Mine operators from the United States and their agents are all over the European continent in the interest of American coal and almost every day vessels loaded with the product of American mines are clearing for European ports, where they are to lay down bituminous coal at English prices. Great Britain, with an estimated coal supply for only 200 years, has been exporting 55,000,000 tons annually. The British public has been looking upon this with disfavor. An export tax upon the product is anticipated, and in the event of it the Mediterranean ports must draw upon the United States for their fuel. Already the United States has been supplying the best coal for use in naval vessels.

In Europe coal deposits cover 27,000 square miles in Russia, 9,000 in Great Britain, 3,600 in Germany, 1,800 in France, and in all the rest of Europe are only 1,400 square miles. In Great Britain, France, and Germany especially these fields have been drawn upon for hundreds of years. Every square mile of resource has been sounded. Some of the English veins are worked to a depth of 3,887 feet,

months ending July 31, amounted to 240,253 tons, an increase of about 90,000 tons over the same period in 1899.

No Demand for Anthracite.

The United States coal which is to replace the product of England and Wales in the markets of the world is the soft coal of Pennsylvania, West Virginia, and Alabama. Anthracite coal has practically no opportunity for foreign exploitation at the present time or in the near future. It is a fuel so much different from the coal that foreign consumers have been accustomed to using that they are not at all inclined to take it up, necessitating, as it does, the use of new grates or new stoves and entirely different methods of firing. Only the several varieties of soft coal now finding a market abroad need be considered.

In Pennsylvania there is produced for the seaboard trade what is known as Clearfield coal, originating mostly on the line of the Pennsylvania railroad, but also reaching market over the Philadelphia and Reading railway. This general name includes the coal from several minor regions and is a comprehensive trade term.

Further to the westward is the Pittsburgh district, closely centering about the metropolis of the western portion of the State. Some coal from the eastern portion of this district reaches tide-water by rail over the Pennsylvania, but the hopes of those who expect an export business in Pittsburgh coal are based upon the fact that during certain portions of the year cheap transportation to the port of New Orleans may be by way of the Ohio and Mississippi Rivers.

local profit to the mine, \$7.50 a ton at the several ports on that sea.

Welsh coal is worth \$7 a ton at Cardiff, and the freight to Gibraltar is \$2.16, making it \$9.16 a ton. These freights vary until this Welsh coal brings \$9.70 a ton at Marseilles and \$9.58 at Naples. Over this coal the American product has a margin of \$1.56 a ton at Gibraltar, \$2.20 at Marseilles, and \$2.68 at Naples, even after the mine profit has been received on the American side.

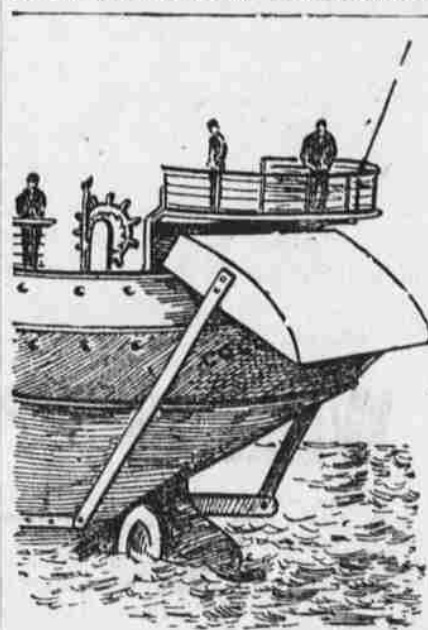
These figures are reached, too, with the inadequate present means of transporting coal across the Atlantic. Most of the vessels now carrying coal were designed for package freight and are about as well adapted for the coal business as is a box car compared with one of the modern 100,000 pound steel coal cars. Colliers especially made for the coal trade will be indispensable to transatlantic business. It has been calculated that the cost of operating a 7,000-ton steamer to such an accessible port as Gibraltar, making the length of the voyage and time of unloading fifteen days, will be as follows:

Insurance, \$875; interest on cost, \$750; depreciation, \$625; crew, \$580; provisions, \$168; port charges, \$184; pilotage, \$330; fuel, \$2,025, allowing full selling price for company's coal used for steam. This, with \$100 for incidentals, gives a total of \$5,637, making 80.4 cents a ton the actual transportation cost on the coal. Vessel owners like to secure and count upon a return cargo, and coal men owning such a vessel would get more or less freight destined for the United States. But suppose that practically nothing could be se-

STOPS A SHIP QUICKLY.

Drag Brake for Vessels Which May Prevent Many Collisions.

The necessity for stopping a vessel in a short distance often occurs and has led Frederick Wendler, of New York City, to devise the drag brake shown in the accompanying cut. Its use may be the means of saving many a collision or the grounding of a ship when shoal water appears suddenly. In either case the vessel cannot be stopped in too short a space of time, and this device would be a material aid in accomplishing the desired result. The illustration

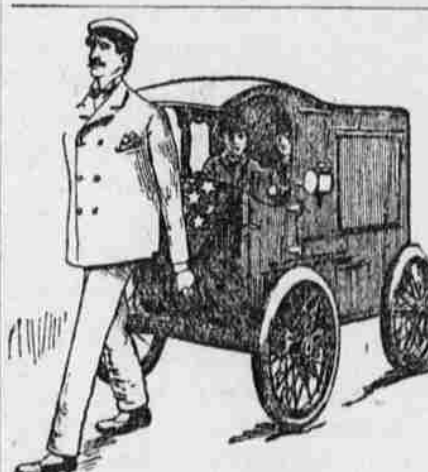


shows the device housed on the stern of the vessel, in position to be dropped instantly into the water by pulling the lever located adjacent to the winding drum. The brake is shaped like an immense scoop and is supported by an arm attached to either side of the hull near the water line. When the lever is pulled forward it releases the ratchet and allows the drum to revolve, the scoop falling into the water of its own accord. It instantly exerts such a resistance to the water that the vessel is readily brought to a standstill. After accomplishing its purpose the brake is returned to its housing by the revolution of the drum on deck, winding up the cable connected to the top of the brake.

MACHINE MAN A BOGY.

New Yorker Has Invented a Giant Automaton That Walks.

Louis Perew, of Tonawanda, N. Y., has been trying for nine years to make a mechanical man. At last he has succeeded. His man stands 7 feet 5 inches high and is as strong as steel rods and wires can make it. The man wears a special suit of clothes, made to order because of its great size, and its wax face is as natural as such things ever are. When properly wound up and connected with an engine the man can walk at a great rate of speed and can pull a heavy load behind it. It is in this



way that Mr. Perew proposes to make his invention useful as well as ornamental. He proposes to take the man and its wagon to New York and there start on a walking tour across the country. He claims that his man can be forced to walk at a steady rate of twenty miles an hour over ordinary country roads.

The man's skin is composed largely of aluminum, and inside its chest a phonograph is located, so that when spoken to it can, as its creator presses the proper lever, make some sort of an answer.

End-of-Century Fight.



He—Give me back my necktie.
She—I want my shirt waist.

Justifiable Scolding.

A Cleveland judge has decided that "any woman is justified in scolding her husband if he comes home drunk and ill-treats her and the children."

When as many as three members of a family are invited out to different society affairs in an evening, there is great excitement.



"You seem to like his attentions. Why don't you marry him?" "Because I like his attentions."—Brooklyn Life.

"My wife is helping run one of these rummage sales." "Well, don't you like it?" "Like it? Oh, yes; I lived all last week on a ham bone, and this week I suppose I shall have to subsist on lettuce."—Indianapolis Press.

Automatic grand opera: Mrs. Brown (at Mrs. Smith's tea)—Oh, dear, that dreadful Miss Smith is singing again. I wonder what started her? Tom Brown (aged 7)—I dropped a penny down her back when she wasn't looking.—Chicago Journal.

"I must confess to a great deal of egotism," said Willie Wishington. "Indeed?" responded Miss Cayenne. "Yes, I think about myself entirely too much." "Oh, that isn't egotism. That's merely the usual human tendency to worry over trifles."—Washington Star.

The mature maiden who was preparing to go down-town to have her photograph taken, surveyed herself critically once more in the mirror. "I think I prefer to do my own retouching," she said, opening another jar, and reaching for the necessary implements.—Chicago Tribune.

"Were you interested in the piano recital?" asked the musician. "Well, answered Mr. Cumrox, "it was a little slow at first; but after I caught the spirit of it and got to guessing with the others whether it was time to applaud or only a rest, it got to be quite a game."—Washington Star.

"I'll tell you how you can find out," said her big brother. "Next Tuesday is his birthday; make him a present of a box of cigars like you gave me Christmas." "But how will that prove his love?" asked the innocent maid. "If he smokes them himself he loves you; if he gives them away he doesn't."—Chicago News.

"Did you say this was a comic opera war?" asked the Filipino soldier who came into camp with a flag of truce. "That remark has been made," "Well, our general says he's willing to take you at your word. He wants to know if you can fix the show up so there will be fewer marches and more dialogue."—Washington Star.

"Dear me!" she said, "I wonder what has become of that household journal?" He didn't say a word. "There was another recipe in it that I wanted to try." He smiled, for now he was assured that he had done wisely, when he burned it. Even a good-natured man may grow weary of having experiments tried upon him.—Chicago Post.

"Now, boys," said the teacher to the juvenile class in history, "who can tell me what Gen. Washington said to his lieutenant while crossing the Delaware amid the floating ice?" "I can," replied a youngster at the foot of the class. "Well, Tommy, what did he say?" queried the teacher. "He said, 'How'd you like to be the ice man?'" replied the incorrigible Tommy.—Trained Motherhood.

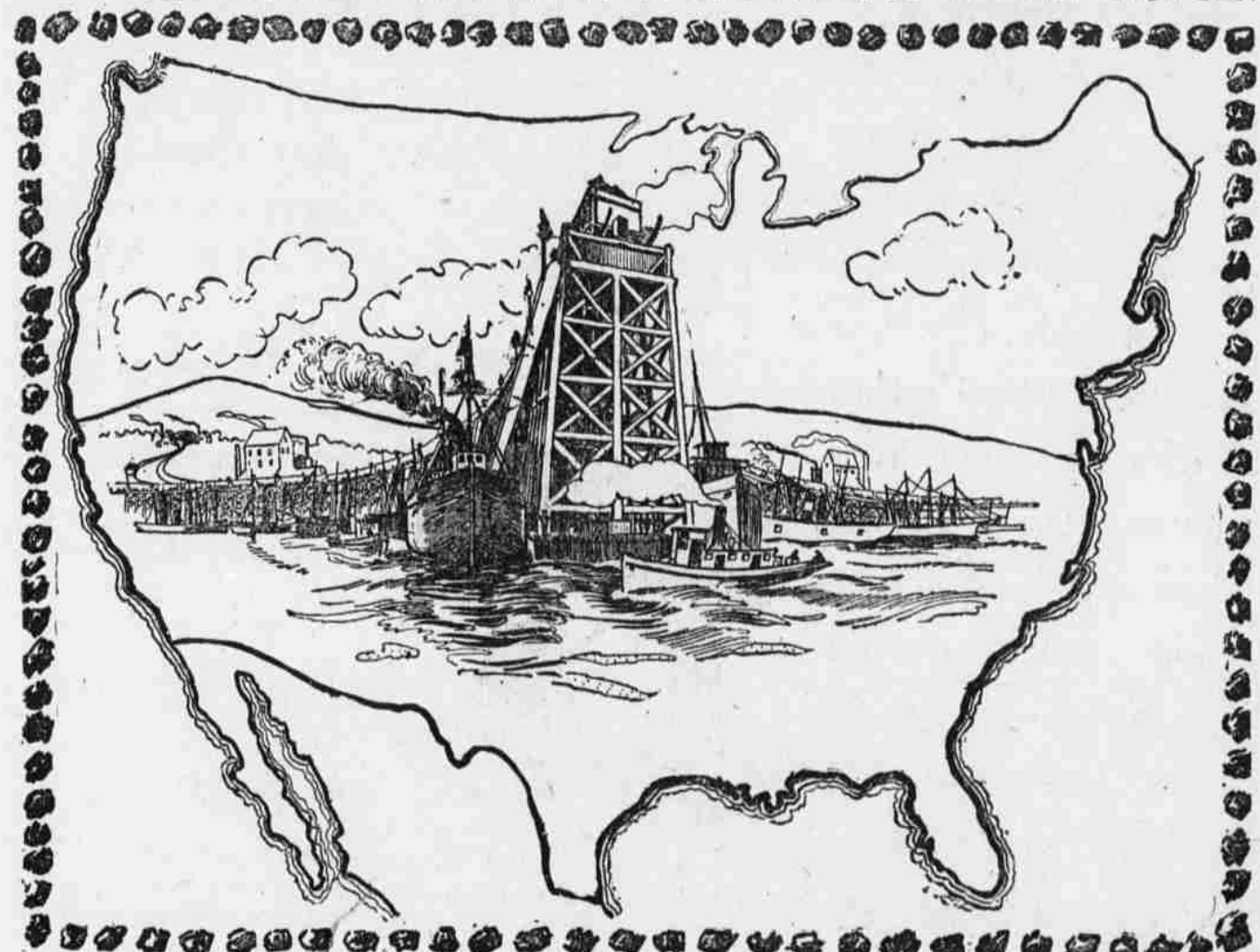
"I don't see why people growl so about the crowds of shoppers," she said; "I have had no trouble at all." "How do you manage it?" they asked. "I take my two boys with me." "And can they really help you?" "Can they really help me?" she exclaimed; "well, I should say so. One of them played right tackle on his college football team and the other is champion catch-as-catch-can wrestler of his class."—Chicago Post.

"Yes, George, you very distinctly said in your sleep, 'Is it my ante?' Now, what did you mean by that?" "Mean? Why, that's simple. I was dreaming I was a boy again, waiting for Christmas. And when another boy asked me if I didn't know who Santa Claus was, I said, questioning, 'Is it my auntie?' The dear old lady brought me up, you know." "Oh, you darling, big-hearted boy."—Cleveland Plain Dealer.

"I suppose," said the woman who had sampled every kind of candy she could reach by thrusting her arm over the protective railing, and finally had bargained for five cents' worth of butterscotch, "all this is adulterated. You couldn't sell it so cheap if it wasn't." "Yes, ma'am," returned the salesman, solemnly, "it's all adulterated. That butterscotch you're getting, for instance, has mighty little butter and not a bit of Scotch."—Chicago Tribune.

She had asked the advice of the family physician. "Old Mr. Kreesus has a weak heart, hasn't he?" she inquired. "Yes," replied the doctor. "A very weak heart. He is likely to drop off after the slightest excitement." "And there is no doubt about his wealth?" "None. He is a very rich man." "The reason I inquire is that he has asked me to be his wife," said the frank young woman. "Indeed!" "Yes, I am glad I went for you. I know now just what to do." "Yes?" "Yes," said the noble girl. "We will have a very quiet wedding followed by a large and exciting reception. Thank you so much, doctor."—Cleveland Plain Dealer.

AMERICA IS SUPPLYING EUROPE WITH COAL.



with 4,000 the estimated maximum possible. Russia, of all these countries, may develop unexpected deposits. British India shows only 35,000 square miles of coal beds, and the total of all these is only 77,800 for Europe and India. As against this are the United States deposits of 194,000 square miles, with thousands of possible miles unexplored and undeveloped. To this Alaska is promising inexhaustible deposits of anthracite, which at least must replace the English coal that is now supplying the Pacific slope of the United States.

Aside from the United States in this coming world supply of fuel, only China and Japan can be looked to. These countries have deposits about as large as those of the United States, but are lacking in means of development. Their positions upon the map, too, are not favorable to the European trade.

World's Yield of Coal.

As to how the mines of the world have been drawn upon, the figures for 1898 are accurate enough for comparison. They show in long tons of 2,240 pounds:

	Tons.
Great Britain	202,042,000
United States	191,282,000
Germany	91,655,000
France	39,337,000
Belgium	21,720,000
Russia	9,229,000
Japan	5,080,000
India	4,060,000
New South Wales	3,750,000
Canada	3,380,000
Spain	1,850,000

It will be seen from this that Great Britain, with only 9,000 square miles of coal beds, already lean from long mining, is drawing more heavily on her resources than is the United States, with more than twenty times the deposits, and they scarcely sounded in comparison.

The exports of coal from the United States within the seven months ending July 31, aggregated 992,481 tons of anthracite and 3,609,274 tons of bituminous coal. The total exports showed an increase of 1,595,663 tons over the corresponding period of 1899. This increase was largely in shipments of bituminous coal. Export shipments of American coke during the seven

In Maryland the famous Cumberland coal is produced, but this is decidedly soft, breaking into small pieces rather than crumbling, yet not in favor with foreign consumers notwithstanding its richness in fuel properties. The foreign trade demands a lumpy coal, and for that reason the Cumberland can be left out of calculations concerning export trade.

In West Virginia three important railroad lines handle the products of the Elk Garden and Fairmont regions—in which Senators Davis and Elkins are widely interested—the New River and Kanawha districts, and the Pocahontas regions. Of these sections the New River, the Fairmont, and the Elk Garden mines promise to contribute the greater share of the State's coal for export. The Pocahontas coal, however, will be in limited but strong demand for naval steaming. In Alabama the coal fields lie in the northern part of the State, near Birmingham, and the way of outlet will be through Mobile or Pensacola.

With these coals from these States, and paying even \$5 a ton for ocean freights, the American shipper may have a margin of \$1.56 profit at Gibraltar, \$2.20 at Marseilles, and \$2.68 at Naples, in addition to the profit in the home price of \$2.50 a ton. Yet this freight charge is vastly greater than would hold if colliers, especially constructed, were to do the carrying.

All of the possibilities lending to this new exploiting of American coal have found source in the high rates of freight in Great Britain, the cost of mining, and in the unmistakable limitation of the coal supply. The foreign production of coal is not decreasing, of course; it is increasing steadily.

Freight Chief Factor.

With freight rates from the United States at \$5 a ton, some one has figured the comparative showing that the United States product can make with that of Great Britain in continental ports. Bituminous coal, with the mines' profits already added, is worth \$2.50 a ton. The freight to the Mediterranean is \$5 a ton, making the cost, with only

cured and that the freight charge would be \$1.50, it will be seen that American coal can be laid down in Cardiff, in the seat and center of the greatest coal industry in the world, at \$4 a ton, \$3 below the selling price of the Welsh coal.

Leads in Production.

As an index to what the United States may fall into in case the British coal trade may be encroached on to any great extent by American trade, the following tables are reproduced from the British official reports ending Dec. 31, 1899. They show the long tons of 2,240 pounds and show comparisons with the years 1898 and 1897. The figures are as nearly accurate as such figures can be:

	1897.	1898.	1899.
Russia	2,015,525	2,195,967	3,397,791
Sweden and Norway	3,490,974	3,612,445	4,403,386
Denmark	1,879,182	2,045,708	2,051,423
Germany	5,042,781	4,711,370	5,059,696
Holland	947,235	931,134	1,277,792
France	5,637,292	5,710,113	6,863,887
Portugal, the Azores and Madeira	681,602	741,623	755,395
Spain and Canaries	2,257,306	1,789,896	2,292,395
Italy	4,834,654	4,995,194	5,513,432
Turkey	534,355	516,983	490,088
Egypt	1,860,723	1,907,505	2,125,021
Brazil	1,046,975	1,010,109	997,778
Gibraltar	332,806	399,605	325,837
Malta	454,784	462,143	419,461
British East Indies	589,016	658,716	863,477
Other countries	5,441,808	5,211,483	6,210,349

Totals, gross tons.....37,006,918 36,562,706 43,108,508
In addition, coal for steamers in foreign trade, 10,455,758 11,264,204 12,226,801
Compared with these shipments are the 5,051,933 tons exported by the United States in the year ending June 30, 1899, and the 7,188,621 tons exported in the twelve months ending June 30, 1900.

The Gray Matter Test.

"What did Aunt Minerva say about the shirt-waist man?"

"She said now he had to keep his belt in the right place all the time, he'd find out he wasn't any smarter than woman."—Indianapolis Journal.

If you once get into the habit of telling the truth you will find it much easier than lying.