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VAN. H. MANNING, DIRECTOR

ANALYSES OF COALS

**PURCHASED BY THE GOVERNMENT DURING THE
FISCAL YEARS 1908-1915**

BY

GEORGE S. POPE



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ANALYSES OF COALS PURCHASED BY THE GOVERNMENT DURING THE FISCAL YEARS 1908-1915.

By GEORGE S. POPE.

INTRODUCTION.

The Government of the United States annually expends approximately \$8,000,000 for coal. Prior to 1906, this coal was purchased mainly on its reputation, or trade name, rather than under contracts specifying the heating value of the coal, its contents of ash and moisture, and other characteristics. In recent years the Government and other large consumers have appreciated more and more the desirability of definitely determining by chemical analyses and tests the character and quality of coal deliveries. Studies of engine-room and boiler-room efficiencies and economies point forcibly to the necessity of devoting more thought to the improvement of the boiler-room end. This calls for an intimate knowledge of the character and quality of the fuel used. The analyses and tests of delivered coal furnish such data, whereby the power-plant results can be comprehensively studied and a continuous check maintained on the coal and on the conditions of plant operation.

Under authority of acts of Congress making appropriations for analyzing and testing fuels belonging to or for the use of the United States Government, a laboratory is maintained at the headquarters of the Bureau of Mines, Washington, D. C., where samples representing deliveries of coal purchased for Government use are analyzed and tested.

The Bureau of Mines has been active in promoting the purchase of coal by the Government under specifications,^a that is, by contracts that make definite requirements regarding the heating value of the coal expressed in British thermal units, and the composition as shown by proximate analysis. Under many of these specification contracts the bidders guarantee the quality of the coal offered, and that guaranteed by the successful bidder becomes the standard of his contract. The deliveries are sampled and analyzed to determine whether the coal is of the quality guaranteed by the contractor, and if it is not, the price to be paid is decreased in proportion; but if the coal is of higher quality, the price is proportionately increased.

The analyses of coals or the guaranties offered by the bidders may in some cases be used for determining the award of a contract, but if the coals offered are of widely different characteristics, it may be difficult to determine which would prove the cheapest fuel, without

^a For types of specifications and methods of sampling, see Pope, G. S., Methods of sampling delivered coal and specifications for the purchase of coal for the Government: Bull. 116, Bureau of Mines, 1913, 64 pp.

having their relative evaporative efficiencies. Hence, it may be necessary to conduct evaporative tests under service conditions in order to determine which coal is particularly adapted for successful and economical use in the plant. But once a particular coal is selected, regardless of the procedure of determining the award of a contract, then the greatest advantage of the specification method is realized, in that it guarantees to the purchaser coal of uniform character and quality, thereby insuring the best results in the plant.

The cost of purchases, under such specifications, of fuel for the use of the Government now aggregates approximately \$4,100,000 per annum, and the cost of additional fuel for which samples are taken and submitted to the Bureau of Mines for analysis in order to determine the character and quality of the coal furnished aggregates some \$3,000,000 per annum more. In fact, information is now obtained regarding the quality of fuel purchased on almost all contracts large enough to warrant sampling and analysis and heating-value tests.

It may be said that the purchase of coal under specification is still in the stage of evolution and development, and that experience and time will be required to develop fully standard specifications and methods of sampling and analysis that may be used universally. The success of the specification method for the purchase of coal and the reliability of analysis now rests almost entirely on sampling.^a Improper sampling leads to controversies, with resulting condemnation of the specification method in general and the value of laboratory analyses and tests in particular.

A number of bulletins^b have been published showing the results of the purchase of coal by the Government under specifications. This bulletin is a compilation of the results of coal analyses by the Government, including those made in the fiscal years 1908-1910, which have been previously published, and later analyses representing coals analyzed during the fiscal years 1911-1915. The preceding bulletins gave individual analyses or average monthly analyses, whereas this bulletin gives the average analyses only for the entire contract. It is hoped that this compilation of a series of comparable analyses of the coals purchased by the Government will be of value alike to coal dealers, to Government engineers, to purchasing agents, and to all users of coal.

^a See Pope, G. S., *Loc. cit.*

^b Randall, D. T., The purchase of coal under Government and commercial specifications on the basis of its heating value, with analyses of coal delivered under Government contracts: U. S. Geol. Survey Bull. 339, 1908, 27 pp.; Burrows, J. S., Results of purchasing coal under Government specifications: U. S. Geol. Survey Bull. 378, 1909, 44 pp.; Pope, G. S., The purchase of coal by the Government under specifications, with analyses of coal delivered for the fiscal year 1908-9, Bull. 11, Bureau of Mines (reprint of U. S. Geol. Survey Bull. 428), 80 pp.; Pope, G. S., Government coal purchases under specifications, with analyses for the fiscal year 1909-10, with a chapter on the fuel-inspection laboratory of the Bureau of Mines, by J. D. Davis: Bull. 41, Bureau of Mines, 1912, 97 pp.

The analyses given herein are of samples taken from commercial deliveries. In making a comparison of analyses of commercial shipments with analyses of samples collected from the face of the bed in the mine, due allowance must be made for the larger proportion of impurities that may be included in the commercial operation of the mine. It is difficult to take a mine sample in which the impurities are rejected in exactly the same manner as is done by the miner. The practice of different miners will vary, especially if rigid inspection at the tippie is not enforced. In some mines, for instance, where the coal bed has friable partings or has a soft, flaky roof or floor, the inclusion of some foreign matter is unavoidable. Hence, the analysis of the mine sample usually indicates a better grade of coal, as regards ash content and heating value, than the actual commercial shipments, and for this reason the mine sample should be considered as representing the coal that can be produced under only the most favorable conditions of mining and preparation.

In commercial shipments that are sampled at their destination the moisture content may be either more or less than that in the mine samples, the relative proportions depending on the amount of bed moisture, the size of the coal, and the weather conditions during transit.

Analyses representing many shipments and a large tonnage more truly indicate the general quality of a particular coal than does a single analysis from a specially prepared shipment, or analyses of carefully selected mine samples.

ACKNOWLEDGMENTS.

The analyses presented in this bulletin were made and compiled by the fuel-inspection section of the bureau, which is under the general supervision of O. P. Hood, chief mechanical engineer, with the writer in immediate charge of the section. The work of the section includes the sampling, analyzing, and testing of coal purchased for Government use. The collection of samples^a was in charge of P. M. Riefkin, engineer, assisted by N. H. Snyder, assistant engineer; D. M. Obler, J. B. Riefkin, Royce L. Beers, Max M. Shaw, and E. M. Kearney, junior engineers, and J. J. Conard, skilled laborer. J. D. Davis, chemist in charge of the analytical laboratory, was assisted by H. M. Cooper, assistant chemist; E. L. Wallace, G. Bornscheuer, I. M. Bortman, O. Christie, A. Engel, J. G. Fairchild, W. A. Gonzalez, W. J. Buttner, J. Cullen, W. Freeman, A. S. Thatcher, H. G. Elledge, M. J. Ingle, D. C. Smith, J. P. Bader, B. D. Watts, P. J. Donk, K. J. Osterhout, and J. Norton, junior chemists; O. Ratz, junior computer; H. A. Goodman, skilled laborer; J. W. Peters and J. C. White, expert computers, all of whom contributed to

^a The personnel given is of those who were employed continuously, as well as for various lengths of time during the fiscal years 1911-1915, inclusive.

the success of the work of analyzing and testing the coal purchased by the Government; acknowledgments are due also to C. H. Unger and J. P. Hirth for faithful and efficient clerical services.

TABULATED ANALYSES.

Table 1 shows the general averages by years of the several sizes of anthracite coal delivered to the Government.

Anthracite coal is graded into sizes before shipment, and each size commands a certain price. The size of the openings in screens and the types of screens used in preparing the sizes may vary slightly. However, the following table indicates the commercial sizes of anthracite.

Sizes of anthracite.

Sizes.	Square mesh, inches.		Round mesh, inches.	
	Through.	Over.	Through.	Over.
Broken (furnace).....	4	2½	4½	3¼
Egg.....	2½	2	3¼	2¼
Stove.....	2	1½	2¼	1½
Nut (chestnut).....	1½	¾	1½	¾
Pea.....	¾	½	¾	½
Buckwheat No. 1.....	½	¼	⅝	⅜
Buckwheat No. 2, or rice.....	¼	⅛	⅜	⅜
Buckwheat No. 3, or barley.....	.....	.....	⅜	⅜

Table 2 gives the results of yearly average analyses of coal, except the Pennsylvania anthracite, delivered for Government use during the fiscal years 1908-1915. The details regarding place of delivery, contract guarantees, and price per ton are given on pages 52 to 101. The number of pounds per ton is 2,240 unless otherwise stated.

It was not always possible to obtain complete information on the coals; hence in some cases columns 1, 2, 3, 4, and 5 of the table are not filled in completely. For some contracts the information furnished regarding the origin of the coals was very meager, and in such cases State mine inspectors' reports, commercial coal-mine directories, etc., were freely referred to and additional information obtained in order that the coals could be more fully described and their origin more definitely determined.

TABLE 1.—General average quality of anthracite coal delivered to the Government, fiscal years 1907-1915.

BROKEN (FURNACE).

Fiscal year.	Moisture, as received.	Ash, dry coal.	Heating value per pound.						Number of analyses averaged.
			As received.		Dry coal.		Moisture free and ash free.		
			B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.	
1906-7.....	4.08	10.44	12,861	7,146	13,408	7,449	14,971	8,318	14
1907-8.....	.....	10.00	.....	.....	.....	.....	.....	.....	270
1908-9.....	.....	10.73	.....	.....	.....	.....	.....	.....	276
1909-10.....	.....	10.14	.....	.....	.....	.....	.....	.....	302
1910-11.....	3.88	10.83	12,777	7,099	13,293	7,386	14,907	8,282	107
1911-12.....	.....	10.55	.....	.....	.....	.....	.....	.....	163
1914-15.....	3.87	11.11	12,782	7,102	13,297	7,388	14,959	8,311	13

TABULATED ANALYSES.

TABLE 1.—General average quality of anthracite coal delivered to the Government, fiscal years 1907-1915—Continued.

EGG.

Fiscal year.	Moisture, as received.	Ash, dry coal.	Heating value per pound.						Number of analyses averaged.
			As received.		Dry coal.		Moisture free and ash free.		
			B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.	
1906-7.....	4.16	10.57	12,960	7,201	13,523	7,513	15,121	8,401	17
1907-8.....		10.83							187
1908-9.....		11.55							301
1909-10.....		11.37							373
1910-11.....	3.93	11.08	12,824	7,125	13,349	7,417	15,012	8,341	118
1911-12.....		10.80							263
1914-15.....	4.60	11.30	12,658	7,033	13,268	7,372	14,958	8,311	4

STOVE.

1907-8.....		12.05							32
1908-9.....		13.20							51
1909-10.....		12.91							50
1910-11.....	3.66	12.78	12,595	6,998	13,073	7,263	14,989	8,328	62
1911-12.....		11.78							226
1914-15.....	3.81	12.05	12,585	6,992	13,084	7,269	14,877	8,266	19

CHESTNUT.

1910-11.....	3.62	13.48	12,390	6,884	12,855	7,142	14,858	8,255	5
1911-12.....		12.66							220
1914-15.....	4.80	12.48	12,365	6,870	12,988	7,216	14,840	8,245	6

PEA.

1906-7.....	4.81	16.04	11,886	6,604	12,487	6,938	14,873	8,263	19
1907-8.....		16.23							84
1908-9.....		15.62							135
1909-10.....		15.45							87
1910-11.....	4.20	17.42	11,720	6,512	12,234	6,797	14,815	8,231	39
1911-12.....	4.65	15.72	12,020	6,678	12,606	7,004	14,957	8,310	114
1912-13.....		15.91							17
1913-14.....		15.58							20
1914-15.....	3.85	15.25	12,150	6,751	12,637	7,021	14,911	8,285	119

BUCKWHEAT NO. 1.

1906-7.....	5.09	18.05	11,491	6,384	12,107	6,727	14,774	8,208	15
1907-8.....		15.93							138
1908-9.....		17.81							118
1909-10.....		18.60							682
1910-11.....	4.60	18.80	11,415	6,342	11,965	6,648	14,735	8,187	53
1911-12.....	5.14	18.53	11,318	6,288	11,931	6,629	14,645	8,137	62
1912-13.....	5.06	20.40	11,038	6,133	11,626	6,459	14,606	8,115	13
1913-14.....	6.21	18.84	11,239	6,244	11,983	6,658	14,765	8,203	8
1914-15.....	4.66	18.54	11,449	6,361	12,009	6,672	14,742	8,191	49

BUCKWHEAT NO. 2.

1907-8.....		17.13							6
1908-9.....		19.30							55
1909-10.....		18.60							61
1910-11.....	6.10	20.55	10,842	6,024	11,546	6,415	14,532	8,074	28
1911-12.....	7.55	18.20	10,953	6,085	11,847	6,582	14,483	8,047	13
1912-13.....	7.37	17.61	11,250	6,251	12,145	6,748	14,741	8,190	18
1913-14.....	7.58	19.31	10,962	6,090	11,861	6,590	14,699	8,167	17
1914-15.....	7.56	16.77	11,365	6,314	12,295	6,831	14,772	8,207	18

SCREENINGS.

1910-11.....	6.07	12.62	12,244	6,803	13,035	7,242	14,918	8,288	31
1911-12.....	7.32	12.75	12,006	6,671	12,954	7,197	14,847	8,249	33
1912-13.....	6.42	13.84	11,997	6,666	12,820	7,123	14,879	8,267	19
1913-14.....	7.76	13.48	11,806	6,559	12,799	7,111	14,793	8,219	24
1914-15.....	6.98	13.61	11,923	6,624	12,818	7,122	14,837	8,243	24

TABLE 2.—*Coals analyzed for the United States*
FOREIGN COALS.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
AUSTRALIA.					
NEW SOUTH WALES.					
Newcastle.....	Aberdare.....		Aberdare.....	Run of mine.....	191
Do.....	Hebburn.....	Middle.....	Hebburn.....	Lump, over 1½-inch bar screen.	819
Do.....	Pelaw Main.....			Lump, over ¾-inch bar screen.	765
Do.....	do.....			do.....	1,084
Do.....	do.....			do.....	1,896
Do.....	do.....			do.....	621
Do.....	do.....			do.....	500
Do.....	do.....			Lump.....	115
Do.....	Pelaw Main and Alber Main.			Lump, over ¾-inch bar screen.	649
Do.....	do.....			do.....	2,901
Do.....	do.....			do.....	304
Do.....	do.....			do.....	294
Do.....	do.....			do.....	1,799
Do.....	Stanford-Richmond.			Lump, over ¾-inch screen.	4,206
Do.....	do.....			do.....	236
Do.....	do.....			do.....	200
Do.....	do.....			do.....	198
Do.....	do.....			do.....	400
Do.....	do.....			Lump, over 1½-inch bar screen.	1,989
Do.....	do.....			do.....	135
CANADA.					
BRITISH COLUMBIA.					
Michel and Fernie.	Michel and Coal Creek.		Crows Nest Pass..	Lump, over 2-inch screen.	2,210
Do.....	do.....		do.....	Lump.....	707
VANCOUVER ISLAND, BRITISH COLUMBIA.					
Cumberland.....	Comox.....		Comox.....	Run of mine.....	3,113
Do.....	do.....		do.....	Pea, through ¾-inch screen (washed).	3,252
Ladysmith.....	Dunsmuir-Wellington.		Dunsmuir-Wellington.	Lump, over ¾-inch screen.	200
Do.....	do.....		do.....	do.....	600
Do.....	do.....		do.....	do.....	2,369
Do.....	Extension.....		do.....	Lump, over 1½-inch bar screen.	911
Do.....	Dunsmuir-Wellington and Extension.		do.....	do.....	1,294
Nanaimo.....	Nanaimo.....			Lump.....	431
Do.....	do.....			Lump, over 3-inch bar screen.	2,157
Do.....	New Wellington.			Lump.....	850
Do.....	do.....			do.....	235
Do.....	do.....			Lump, over ¾-inch bar screen.	1,100
Do.....	Wellington.....		Wellington.....	Lump, over 3¼-inch screen.	2,100

Government during the fiscal years 1908-1915.

FOREIGN COALS.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number. ^a
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
2.95	43.48	52.14	4.38	0.75	13,859	7,699	14,280	7,933	14,934	8,297	4	1
3.51	42.62	52.02	5.36	.79	13,630	7,572	14,126	7,848	14,926	8,292	13	2
2.80	41.65	52.99	5.36	.90	13,830	7,683	14,228	7,904	15,034	8,352	8	3
2.58	42.09	52.64	5.27	.87	13,937	7,743	14,306	7,948	15,102	8,390	13	4
2.69	42.54	52.30	5.16	.84	13,863	7,702	14,246	7,914	15,021	8,345	26	5
2.62	40.81	53.07	6.12	.88	13,708	7,616	14,077	7,821	14,995	8,331	11	6
2.76	44.36	51.40	4.24	.77	13,956	7,753	14,352	7,973	14,987	8,326	5	7
2.72	43.64	52.28	4.08	.88	13,958	7,754	14,348	7,971	14,958	8,310	5	8
2.83	43.22	50.70	6.08	.83	13,660	7,589	14,058	7,810	14,968	8,316	11	9
2.74	44.30	50.63	5.07	.74	13,872	7,707	14,263	7,924	15,025	8,347	22	10
2.60	43.83	52.04	4.13	.73	14,052	7,807	14,427	8,015	15,049	8,361	3	11
2.73	43.61	50.60	5.79	.76	13,687	7,604	14,071	7,817	14,936	8,298	5	12
2.79	43.89	50.81	5.30	.77	13,813	7,674	14,209	7,894	15,004	8,336	29	13
2.90	42.22	51.90	5.88	.84	13,704	7,613	14,113	7,841	14,995	8,331	32	14
2.57	41.73	51.98	6.29	.82	13,704	7,613	14,065	7,814	15,009	8,338	6	15
2.83	42.74	52.08	5.18	.84	13,825	7,681	14,228	7,904	15,005	8,336	4	16
2.80	42.30	52.48	5.22	.98	13,844	7,691	14,243	7,913	15,027	8,348	4	17
2.50	39.62	53.91	6.47	.88	13,833	7,685	14,188	7,882	15,169	8,427	4	18
2.36	41.44	51.52	7.04	.90	13,685	7,603	14,016	7,787	15,077	8,376	29	19
2.00	42.45	52.55	5.00	.75	14,149	7,861	14,438	8,021	15,198	8,443	3	20
1.73	24.38	61.10	14.52	.47	12,898	7,166	13,125	7,292	15,354	8,530	19	21
1.53	23.80	64.09	12.11	.48	13,331	7,406	13,538	7,521	15,403	8,557	6	22
2.91	32.91	51.27	15.82	1.43	12,208	6,782	12,574	6,986	14,937	8,298	45	23
7.23	34.53	47.71	17.76	.93	11,097	6,165	11,962	6,646	14,545	8,081	22	24
2.92	41.13	44.58	14.29	1.23	11,991	6,662	12,352	6,862	14,411	8,006	3	25
2.63	40.01	48.87	11.12	.90	12,623	7,013	12,964	7,202	14,586	8,103	5	26
2.92	39.55	46.67	13.78	1.12	12,175	6,764	12,541	6,967	14,545	8,081	15	27
2.10	39.56	51.16	9.28	.47	13,107	7,282	13,388	7,438	14,757	8,198	5	28
1.78	38.53	49.49	11.98	.45	12,788	7,104	13,020	7,233	14,792	8,218	6	29
2.13	40.52	46.28	13.20	1.58	12,386	6,881	12,656	7,031	14,581	8,101	7	30
3.09	40.45	47.30	12.25	1.09	12,388	6,882	12,783	7,101	14,568	8,093	21	31
2.96	40.76	45.10	14.14	.98	12,107	6,726	12,476	6,931	14,531	8,073	6	32
3.26	40.79	48.00	11.21	1.08	12,415	6,897	12,833	7,129	14,453	8,029	9	33
3.72	41.22	47.45	11.33	1.18	12,410	6,894	12,890	7,161	14,537	8,076	11	34
2.70	39.87	47.53	12.60	1.13	12,365	6,869	12,708	7,060	14,540	8,078	21	35

^a See p. 52 to 101 of this bulletin for kind of coal, point of delivery, contract guaranties, and price.

TABLE 2.—*Coals analyzed for the United States*
FOREIGN COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
CANADA—Contd.					
VANCOUVER ISLAND, BRITISH COLUMBIA—con.					
Nanaimo	Wellington		Wellington	Lump, over 3½-inch screen.	1,549
Do.	do.		do.	do.	600
Do.	do.		do.	do.	310
Do.	do.		do.	Lump, over 4-inch screen.	1,562
South Wellington.	South Wellington.			Lump.	665
Do.	do.			do.	1,007
Do.	do.			Lump, over 1-inch round-holes shaking screen.	838
Do.	do.			Lump, over 1-inch bar screen.	1,620

UNITED STATES COALS.

ALABAMA.					
BIBB COUNTY.					
Blockton	Blockton	Thompson	Blockton Cahaba	Lump	382
Do.	do.	do.	do.	do.	81
Do.	do.	do.	do.	Lump, over 6-inch shaking screen.	384
Do.	Blockton Nos. 2, 3, and 7.	do.	do.	Lump, over 2-inch screen.	590
Do.	do.	do.	Old Tennessee Blockton Cahaba.	do.	483
Garnsey	Garnsey	do.	Garnsey	Washed steam	1,666
Marvel	Marvel Nos. 1 and 2.	Clark and Gholson.	Marvel Washed	Steam, over 2-inch screen.	2,067
Do.	do.	do.	Marvel	Mixed sizes and washed.	1,586
JEFFERSON COUNTY.					
Blossburg	E.	Pratt	Blossburg Pratt	Run of mine	1,242
Docena	Docena	do.	Old Pratt	Lump, over 2-inch shaking screen.	261
Edgewater	Edgewater	do.	do.	Lump, over 2½-inch shaking screen.	3,011
Do.	do.	do.	do.	Screened steam	3,161
Ensley	Pratt No. 4.	do.	do.	Lump, over 2½-inch screen.	401
Mineral Springs	Pratt	do.	do.	Lump	1,595
Do.	do.	do.	do.	Lump, over 2-inch bar screen.	1,337
Do.	do.	do.	do.	do.	808
Palos	Palos Nos. 1 and 2.	Mary Lee	Pratt (Palos grade)	Run of mine	3,675
Do.	do.	do.	do.	do.	840
Do.	do.	do.	do.	do.	518
Pinson	Dixiana	Black Creek	Imperial	Pea (washed)	5,278
Pratt City	Pratt	Pratt	Old Tennessee Pratt.	Run of mine	1,616
Do.	do.	do.	do.	Lump, over 4-inch shaking screen.	1,306
Do.	do.	do.	do.	Lump, over 2-inch shaking screen.	841
Do.	do.	do.	Pratt	Lump, over 1½ to 2½-inch round hole screen.	1,280
Do.	do.	do.	do.	do.	148
Do.	do.	do.	do.	Lump	981

Government during the fiscal years 1908-1915—Continued.

FOREIGN COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17		
2.89	40.17	48.22	11.61	1.06	12,500	6,944	12,872	7,151	14,563	8,091	9	36
4.22	39.96	48.52	11.52	1.20	12,336	6,853	12,880	7,156	14,557	8,087	5	37
2.60	39.57	49.30	11.13	1.00	12,542	6,968	12,877	7,154	14,490	8,050	3	38
3.53	38.76	48.68	12.56	1.00	12,284	6,824	12,733	7,073	14,562	8,090	14	39
2.83	39.14	50.28	10.58	.69	12,754	7,086	13,125	7,292	14,678	8,154	8	40
2.64	40.14	45.70	14.16	1.72	12,225	6,792	12,556	6,976	14,627	8,126	12	41
2.40	39.96	47.34	12.70	1.70	12,557	6,976	12,866	7,148	14,738	8,188	5	42
2.46	40.44	49.75	9.81	.55	12,934	7,186	13,260	7,367	14,702	8,168	7	43

UNITED STATES COALS.

2.29	36.52	57.66	5.82	0.73	13,852	7,696	14,177	7,876	15,053	8,363	11	44
2.18	37.13	56.44	6.43	.70	13,722	7,623	14,028	7,793	14,992	8,329	3	45
2.24	37.93	56.29	5.78	.62	13,803	7,668	14,119	7,844	14,985	8,325	7	46
2.37	36.70	58.13	5.17	.53	13,925	7,736	14,263	7,924	15,041	8,356	3	47
2.18	37.55	56.58	5.87	.59	13,711	7,617	14,017	7,787	14,891	8,273	6	48
3.83	32.53	55.46	12.01	1.52	12,842	7,134	13,353	7,418	15,176	8,431	54	49
4.59	34.20	55.05	10.75	1.19	12,919	7,177	13,541	7,523	15,172	8,429	83	50
3.75	33.98	55.18	10.84	1.17	13,014	7,230	13,521	7,512	15,165	8,425	36	51
1.42	29.67	62.15	8.18	1.54	13,976	7,764	14,177	7,876	15,440	8,578	18	52
1.00	30.00	63.15	6.85	1.50	14,320	7,956	14,465	8,036	15,529	8,627	2	53
.99	29.82	64.12	6.06	1.68	14,481	8,045	14,626	8,126	15,570	8,650	16	54
1.50	29.50	63.21	7.29	1.50	14,160	7,867	14,376	7,987	15,506	8,614	28	55
1.05	31.70	62.15	6.15	1.38	14,377	7,987	14,530	8,072	15,482	8,601	2	56
1.45	28.81	59.90	11.29	1.65	13,419	7,455	13,616	7,564	15,349	8,527	12	57
1.33	30.96	59.68	9.36	2.13	13,843	7,691	14,030	7,794	15,479	8,599	25	58
1.55	31.39	59.94	8.67	1.95	13,886	7,714	14,105	7,836	15,444	8,580	14	59
3.44	28.95	61.39	9.66	.96	13,382	7,434	13,859	7,692	15,341	8,523	25	60
2.04	28.06	60.96	10.98	.78	13,375	7,431	13,654	7,586	15,338	8,521	5	61
1.53	28.87	61.70	9.43	1.08	13,665	7,592	13,877	7,769	15,322	8,512	3	62
2.83	31.90	61.39	6.71	.62	13,911	7,728	14,316	7,953	15,346	8,526	32	63
1.99	30.24	62.26	7.50	1.26	14,053	7,807	14,338	7,966	15,501	8,612	43	64
1.35	30.90	62.80	6.30	1.40	14,339	7,966	14,535	8,075	15,512	8,618	30	65
1.51	29.59	63.63	6.78	1.75	14,243	7,913	14,461	8,034	15,513	8,618	21	66
1.07	29.37	62.88	7.75	1.52	14,136	7,853	14,289	7,938	15,489	8,605	24	67
1.26	29.42	64.03	6.55	1.57	14,399	7,999	14,583	8,102	15,605	8,669	6	68
1.34	.....	.....	9.36	.....	13,916	7,731	14,105	7,836	15,562	8,646	14	69

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
ALABAMA—Con.					
JEFFERSON COUNTY—con.					
Pratt City and Edgewater.	Pratt and Edgewater.	Pratt.....	Pratt.....	Lump, over 2-inch screen.	2, 074
Pratt City and Ensley.	Various.....	.....do.....	.....do.....	Run of mine.....	494
Warrior.....	.....	Black Creek...	Sibleys Black Creek.	.....do.....	515
Warrior and El Vista.	.....	.....do.....	Warrior Black Creek.	.....do.....	263
Watson.....	Eldorado.....	Pratt.....	Pratt.....	.....do.....	1, 216
Do.....	.....do.....	.....do.....	.....do.....	.....do.....	765
Wylam.....	Pratt No. 5.....	.....do.....	Old Pratt.....	Lump, over 2-inch shaking screen.	556
Do.....	.....do.....	.....do.....	Pratt steam lump.	Lump, over 1½ to 2½-inch shaking screen.	1, 450
Do.....	.....do.....	.....do.....	.....do.....	Lump, over 2½-inch round-hole screen.	1, 348
Do.....	Pratt No. 8.....	.....do.....	Old Pratt.....	Lump, over 2-inch shaking screen.	165
Do.....	Eldorado, Arcadia, Blossburg, and Banner.	Pratt and Mary Lee.	Pratt.....	Run of mine.....	1, 316
SHELBY COUNTY.					
Acton.....	Acton.....	Helena.....	Acton.....	Through 3-inch screen (washed).	866
TUSCALOOSA COUNTY.					
Cottondale.....	Gilmore.....	Brookwood.....	.....	Run of mine.....	2, 271
Rock Castle.....	Rock Castle.....	Jagger.....	Jagger.....	.....do.....	1, 243
WALKER COUNTY.					
Corona.....	Corona.....	Corona.....	Corona.....	Lump, over 2-inch shaking screen.	300
Sipsey.....	Sipsey.....	Black Creek...	Sipsey.....	Lump, 3-inch and 5-inch (washed).	18, 274
Townley.....	Townley.....	Jagger.....	Carbon Hill.....	Lump.....	372
ARKANSAS.					
FRANKLIN COUNTY.					
Denning.....	Denning.....	Denning.....	Denning.....	Lump, over 2-inch round-hole screen.	2, 711
SEBASTIAN COUNTY.					
Hoffman and Huntington.	Hoffman, No. 7, and Huntington, No. 3.	Hart.....	.....	Lump, over 2-inch round-hole screen.	2, 877
Midland.....	Midland Valley.....	.....	Bache-Denman.....	.....do.....	818
Do.....	.....do.....	.....	.....do.....	.....do.....	982
Do.....	.....do.....	.....	.....do.....	Run of mine.....	74
Do.....	.....do.....	.....	.....do.....	.....do.....	217
Do.....	.....do.....	.....	.....do.....	.....do.....	553

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
2.18	29.78	64.31	5.91	1.41	14,299	7,944	14,618	8,121	15,536	8,631	14	70
1.39	30.73	63.45	5.82	1.19	14,366	7,981	14,569	8,094	15,469	8,594	9	71
3.03	30.73	63.15	6.12	.77	14,076	7,820	14,516	8,064	15,462	8,590	12	72
2.60	30.51	58.99	10.50	1.76	13,333	7,407	13,689	7,605	15,295	8,497	6	73
2.75	30.84	56.89	12.27	1.33	13,025	7,236	13,393	7,441	15,266	8,481	26	74
3.36	30.27	60.74	8.99	1.24	13,478	7,488	13,947	7,748	15,325	8,514	10	75
1.15	30.40	63.77	5.83	1.66	14,430	8,017	14,598	8,110	15,502	8,612	4	76
1.12	28.26	64.07	7.67	1.49	14,197	7,887	14,358	7,977	15,551	8,639	32	77
1.42	30.41	62.67	6.92	1.36	14,235	7,908	14,440	8,022	15,513	8,618	18	78
1.30	33.40	60.00	6.60	1.78	14,203	7,891	14,390	7,994	15,407	8,559	2	79
2.94	30.10	58.60	11.30	1.31	13,222	7,346	13,622	7,568	15,357	8,532	30	80
4.40	35.53	56.87	7.60	.47	13,288	7,382	13,900	7,722	15,043	8,357	3	81
6.96	35.04	52.72	12.24	1.01	12,161	6,756	13,071	7,262	14,894	8,274	11	82
1.81	28.24	61.86	9.90	.89	13,660	7,589	13,912	7,729	15,441	8,578	16	83
2.73	39.27	52.23	8.50	1.43	13,197	7,332	13,567	7,537	14,827	8,237	3	84
3.16	35.87	58.68	5.45	1.07	13,723	7,624	14,171	7,873	14,988	8,327	19	85
4.50	33.78	53.55	12.67	.95	12,146	6,748	12,718	7,066	14,563	8,091	8	86
1.54	14.74	75.00	10.26	2.55	13,644	7,580	13,857	7,698	15,441	8,578	23	87
1.53	19.37	71.08	9.55	1.60	13,702	7,612	13,915	7,731	15,384	8,547	23	88
3.40	17.80	72.37	9.83	1.38	13,487	7,493	13,962	7,757	15,484	8,602	20	89
2.09	18.32	70.52	11.16	1.85	13,408	7,449	13,694	7,608	15,414	8,563	11	90
3.30	16.64	68.21	15.15	.81	12,639	7,022	13,070	7,261	15,404	8,558	2	91
2.33	17.25	69.45	13.30	1.86	13,039	7,244	13,350	7,417	15,398	8,554	5	92
2.15	15.05	68.90	16.05	2.88	12,557	6,976	12,833	7,129	15,286	8,492	6	93

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
ARKANSAS AND OKLAHOMA.					
SEBASTIAN AND LE FLORE COUNTIES.					
Hackett, Huntington, and Witteville.	Hackett, Huntington, and Witteville.	.....	Hackett-Huntington.	Lump, over 2-inch shaking screen.	2,283
COLORADO.					
GUNNISON COUNTY.					
Crested Butte.....	Floresta.....	Ruby.....	Ruby.....	Anthracite, through $\frac{3}{4}$ -inch, over $\frac{3}{8}$ -inch screen.	298
Do.....	Horace.....	.....	.....	Anthracite, No. 6..	360
Do.....	do.....	.....	.....	do.....	350
Do.....	do.....	.....	.....	do.....	448
Do.....	do.....	.....	.....	do.....	325
LAS ANIMAS COUNTY.					
Aguilar.....	Royal.....	.....	Royal.....	Lump, over 1 $\frac{1}{2}$ -inch screen.	761
Do.....	do.....	.....	do.....	Lump, over 1 $\frac{1}{2}$ -inch bar screen.	3,336
Beacon.....	Beacon.....	.....	Green Canon.....	Lump, over 1 $\frac{1}{2}$ -inch round-hole shaking screen.	16,929
Do.....	do.....	.....	do.....	do.....	2,491
Do.....	do.....	.....	do.....	do.....	2,000
Do.....	do.....	.....	do.....	do.....	3,460
Do.....	Green Canon.....	.....	do.....	Run of mine.....	1,280
Primero.....	North and East Primero.	Primero.....	Primero.....	Lump, over 1 $\frac{1}{2}$ -inch bar screen.	749
Do.....	First West Primero.	do.....	do.....	Lump, over 2 $\frac{1}{2}$ -inch bar screen.	259
Do.....	First West and North and East Primero.	do.....	do.....	Mixture of lump over 1 $\frac{1}{2}$ -inch and 2 $\frac{1}{2}$ -inch screens.	1,008
Do.....	do.....	do.....	do.....	do.....	900
Rugby.....	Primrose.....	.....	Primrose.....	Lump, over 1 $\frac{1}{2}$ -inch round-hole shaking screen.	9,304
Do.....	do.....	.....	do.....	do.....	4,324
Do.....	do.....	.....	do.....	do.....	2,737
MESA COUNTY.					
Grand Junction...	Book Cliff.....	Cameo.....	Book Cliff.....	Run of mine.....	319
ROUTT COUNTY.					
Oak Creek.....	Pinnacle.....	Mammoth.....	Pinnacle.....	Run of mine.....	1,441
Do.....	do.....	do.....	do.....	do.....	799
Do.....	Yampa Valley.....	McKinley.....	Yampa Valley.....	do.....	700
Do.....	do.....	do.....	do.....	do.....	1,212
Do.....	do.....	do.....	do.....	do.....	326
WELD COUNTY.					
Firestone.....	Russell.....	Emerson.....	Russell.....	Run of mine.....	129

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	13	14	15	16	17	18	19
1.52	24.62	60.30	15.08	3.65	12,863	7,146	13,062	7,257	15,382	8,546	15	94
3.62	4.85	78.57	16.58	.81	11,826	6,570	12,270	6,817	14,709	8,172	15	95
1.76	7.42	82.33	10.25	1.08	13,508	7,504	13,750	7,639	15,320	8,511	12	96
2.26	7.72	82.24	10.04	.93	13,470	7,483	13,781	7,656	15,319	8,511	7	97
2.57	8.93	79.44	11.03	1.16	13,189	7,327	13,537	7,521	15,319	8,511	10	98
2.37	8.63	81.20	10.17	.93	13,408	7,449	13,733	7,629	15,288	8,493	3	99
2.07	36.02	50.24	13.74	.60	12,672	7,040	12,940	7,189	15,001	8,334	10	100
1.78	33.21	50.28	16.51	.59	12,298	6,832	12,521	6,956	14,997	8,332	17	101
2.53	36.90	52.00	11.10	.74	12,856	7,142	13,190	7,328	14,837	8,243	75	102
2.37	37.60	55.55	6.85	.65	13,572	7,540	13,901	7,723	14,923	8,291	45	103
2.50	37.74	52.99	9.27	.63	13,148	7,304	13,485	7,492	14,863	8,257	22	104
2.66	37.65	50.77	11.58	.68	12,770	7,094	13,119	7,288	14,837	8,243	25	105
3.87	36.91	49.91	13.18	.75	12,320	6,844	12,816	7,120	14,762	8,201	11	106
1.47	30.91	56.03	13.06	.53	13,081	7,267	13,276	7,376	15,270	8,483	12	107
1.27	29.80	53.03	17.17	.59	12,462	6,923	12,622	7,012	15,238	8,466	6	108
1.40	30.54	55.03	14.43	.55	12,875	7,153	13,058	7,254	15,260	8,478	18	109
1.60	29.72	55.37	14.91	.61	12,738	7,077	12,945	7,192	15,213	8,452	6	110
2.91	36.65	53.48	9.87	.48	12,858	7,143	13,243	7,357	14,693	8,163	62	111
2.90	37.06	52.42	10.52	.48	12,713	7,063	13,093	7,274	14,632	8,129	38	112
3.22	38.51	51.72	9.77	.46	12,730	7,072	13,154	7,308	14,578	8,099	15	113
7.50	36.38	53.42	10.20	.57	11,785	6,547	12,741	7,078	14,188	7,882	2	114
8.12	40.07	54.39	5.54	.71	12,195	6,775	13,273	7,374	14,051	7,806	41	115
8.07	41.31	52.15	6.54	.73	12,061	6,701	13,120	7,289	14,038	7,799	19	116
8.45	41.08	52.84	6.08	.68	12,125	6,736	13,244	7,308	14,101	7,834	9	117
8.15	41.95	52.14	5.91	.73	12,128	6,738	13,204	7,336	14,033	7,796	10	118
7.96	40.83	52.01	7.16	.89	12,030	6,683	13,070	7,261	14,078	7,821	7	119
23.55	40.45	53.30	6.25	.55	9,445	5,247	12,355	6,864	13,179	7,322	2	120

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
GEORGIA.					
WALKER COUNTY.					
Pittsburg.....	Durham.....	Durham.....	Durham.....	Run of mine.....	2,335
Do.....	do.....	do.....	do.....	do.....	2,065
ILLINOIS.					
BOND COUNTY.					
Pocahontas.....	No. 1.....	No. 6.....		Lump.....	1,028
CHRISTIAN COUNTY.					
Pana.....	Pana.....	No. 6.....		Nos. 1 and 2 washed nut.	564
Do.....	do.....	do.....		do.....	6,065
CLINTON COUNTY.					
Breeze.....	Breeze.....	No. 6.....	Breeze.....	Lump, over 2-inch screen.	2,694
Do.....	do.....	do.....	do.....	do.....	1,263
FRANKLIN COUNTY.					
Christopher.....	No. 1.....	No. 6.....	Purity.....	Lump, over 3-inch screen.	240
Do.....	North.....	do.....	Brighton.....	do.....	171
Do.....	do.....	do.....	do.....	do.....	68
Do.....	do.....	do.....	do.....	Run of mine.....	120
Do.....	do.....	do.....	do.....	do.....	1,144
Do.....	North and Chris- topher, No. 1.	do.....	do.....	Lump, over 3-inch screen.	184
MACOUPIN COUNTY.					
Mount Olive.....	Mount Olive, No. 8	No. 6.....	Mount Olive.....	Lump, over 3-inch screen.	7,793
Staunton.....	Staunton, No. 2.....	do.....	Staunton.....	Through 2-inch screen, over 1½- inch screen.	395
Do.....	do.....	do.....	do.....	do.....	3,205
Do.....	do.....	do.....	do.....	Lump.....	3,284
Do.....	Staunton, No. 7.....	do.....	do.....	do.....	3,468
Do.....	Staunton, No. 14.....	do.....	do.....	Lump, over 2-inch screen.	7,338
Do.....	Staunton.....	do.....	do.....	Lump, over 3-inch screen.	6,351
MADISON COUNTY.					
Collinsville.....	Cantine.....	No. 6.....	Cantine.....	Lump, over 1½- inch screen.	2,656
Do.....	do.....	do.....	do.....	Lump, over 6-inch screen.	72
Do.....	do.....	do.....	do.....	Lump.....	200
PEORIA COUNTY.					
Bartlett.....	Empire, No. 2.....	No. 5.....	Empire.....	Lump.....	641
Do.....	do.....	do.....	do.....	Run of mine.....	4,118

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
2.76	20.33	73.89	5.78	1.06	14,364	7,980	14,772	8,207	15,678	8,710	35	121
1.21	21.50	71.73	6.77	.83	14,393	7,996	14,569	8,094	15,627	8,682		
10.69	39.16	47.65	13.19	4.24	10,951	6,084	12,262	6,812	14,125	7,847	17	123
6.76	36.82	51.33	11.85	2.54	11,907	6,615	12,770	7,094	14,487	8,048	20	124
7.08	37.60	52.30	10.10	2.36	12,150	6,750	13,076	7,264	14,545	8,081	114	125
10.90	41.14	45.50	13.36	4.22	10,916	6,064	12,251	6,806	14,140	7,856	25	126
9.66	40.49	44.67	14.84	4.57	10,867	6,037	12,029	6,683	14,125	7,847	15	127
7.83	36.29	53.58	10.13	1.12	12,049	6,694	13,073	7,263	14,547	8,082	10	128
7.73	35.75	55.05	9.20	.82	12,081	6,712	13,093	7,274	14,420	8,011	10	129
8.58	35.54	54.53	9.93	.57	11,903	6,613	13,020	7,233	14,455	8,031	4	130
7.90	36.08	53.45	10.47	.80	11,879	6,599	12,898	7,166	14,406	8,003	4	131
8.59	37.29	52.27	10.44	.84	11,811	6,562	12,921	7,178	14,427	8,015	14	132
8.72	39.28	51.66	9.06	.67	11,965	6,647	13,108	7,282	14,414	8,008	5	133
11.97	43.23	44.93	11.84	4.64	10,925	6,069	12,410	6,894	14,077	7,821	52	134
10.80	40.30	46.95	12.75	3.82	10,889	6,049	12,207	6,782	13,991	7,773	22	135
10.60	40.22	45.93	13.85	4.48	10,842	6,023	12,127	6,737	14,077	7,821	64	136
10.89	41.44	44.67	13.89	4.38	10,828	6,016	12,151	6,751	14,111	7,839	28	137
11.29	40.53	46.68	12.79	4.28	10,903	6,057	12,291	6,828	14,094	7,830	23	138
11.87	40.93	46.42	12.65	4.55	10,872	6,040	12,336	6,853	14,122	7,846	55	139
11.89	43.84	44.78	11.38	4.54	10,971	6,095	12,452	6,918	14,051	7,806	20	140
10.90	42.56	43.59	13.85	4.56	10,890	6,050	12,222	6,790	14,187	7,882	31	141
8.90	41.82	44.29	13.89	4.31	11,082	6,157	12,165	6,758	14,127	7,848	7	142
10.54	43.47	45.44	11.09	4.59	11,265	6,258	12,592	6,996	14,163	7,868	5	143
12.41	37.70	45.16	17.14	3.08	10,426	5,792	11,903	6,613	14,365	7,981	10	144
13.70	39.64	44.80	15.56	3.09	10,517	5,843	12,187	6,771	14,433	8,018	38	145

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
ILLINOIS—Contd.					
ERRY COUNTY.					
Duquoin.....	Majestic.....	No. 6.....	Majestic.....	Through 3-inch screen, over 1½-inch screen.	2,355
Do.....	do.....	do.....	do.....	Lump, over 1½-inch screen.	5,357
Do.....	do.....	do.....	do.....	Lump, over 2-inch screen.	9,630
Do.....	do.....	do.....	do.....	Screened lump.....	5,123
Do.....	do.....	do.....	do.....	Through 3-inch screen.	11,739
Do.....	Paradise.....	do.....	Paradise.....	Run of mine.....	1,362
Do.....	do.....	do.....	do.....	Screenings.....	2,026
Do.....	Queen.....	do.....	Queen.....	Run of mine.....	26,634
Do.....	Security.....	do.....	Security.....	do.....	7,533
ST. CLAIR COUNTY.					
Belleville.....	Prairie.....	No. 6.....	Prairie.....	Lump.....	423
Do.....	do.....	do.....	do.....	do.....	3,676
Do.....	do.....	do.....	do.....	do.....	1,255
Do.....	do.....	do.....	do.....	do.....	2,908
East St. Louis.....	O'Fallon.....	do.....	O'Fallon.....	do.....	2,844
Do.....	do.....	do.....	do.....	do.....	1,087
SALINE COUNTY.					
Eldorado.....	Eldorado.....	No. 5.....	Eldorado.....	Lump, over 6-inch screen.	528
Do.....	do.....	do.....	do.....	Lump, over 1½-inch round-hole screen.	675
Do.....	do.....	do.....	do.....	do.....	394
Harrisburg.....	Big Creek, No. 2.....	do.....	do.....	Through 3-inch screen; over 1½-inch screen.	5,622
Do.....	do.....	do.....	do.....	do.....	390
Do.....	Big Creek.....	do.....	Premium.....	do.....	2,203
Do.....	do.....	do.....	do.....	Nos. 1 and 2 nut.....	6,504
Do.....	do.....	do.....	do.....	do.....	505
Harrisburg and Eldorado.....	do.....	do.....	do.....	do.....	4,589
Near Harrisburg..	O'Gara, No. 1 to No. 15.....	do.....	Harrisburg.....	Run of mine.....	2,719
Ledford.....	No. 2.....	do.....	Premium white ash.....	Lump, over 3-inch screen.	568
Do.....	do.....	do.....	do.....	Lump.....	387
SANGAMON COUNTY.					
Springfield.....	Peerless.....	No. 5.....	do.....	Run of mine.....	5,733
VERMILLION COUNTY.					
Danville.....	Electric.....	No. 7.....	Electric.....	Through 3½-inch screen.	14,422
Do.....	do.....	do.....	do.....	do.....	18,958
Do.....	do.....	do.....	do.....	do.....	18,060
Do.....	do.....	do.....	do.....	do.....	15,832
Do.....	do.....	do.....	do.....	do.....	140
Do.....	Mission Field, Nos. 1, 2, and 3.....	do.....	do.....	No. 1 lump.....	140
				Lump and slack.....	16,845

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and-ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
8.40	36.37	50.57	13.06	0.86	11,387	6,326	12,431	6,906	14,298	7,943	13	146
9.15	38.42	53.50	8.08	.92	12,006	6,670	13,215	7,342	14,377	7,987	23	147
9.16	38.03	50.11	11.86	1.14	11,463	6,368	12,619	7,011	14,317	7,954	59	148
9.18	38.38	52.31	9.31	1.31	11,805	6,558	12,998	7,221	14,332	7,962	21	149
9.28	37.39	51.57	11.04	1.09	11,532	6,407	12,712	7,062	14,290	7,939	41	150
10.63	35.48	49.82	14.70	1.05	10,903	6,057	12,200	6,778	14,302	7,946	6	151
10.39	36.83	48.29	14.88	1.15	10,828	6,016	12,083	6,713	14,195	7,886	10	152
9.11	37.92	50.99	11.09	.98	11,546	6,414	12,703	7,057	14,287	7,937	56	153
10.24	37.87	51.04	11.09	1.57	11,400	6,333	12,700	7,056	14,284	7,936	37	154
9.22	40.91	44.81	14.28	4.12	11,034	6,130	12,155	6,753	14,180	7,878	21	155
9.34	40.70	43.88	15.42	4.64	10,921	6,067	12,046	6,692	14,242	7,912	56	156
9.46	42.64	42.03	15.33	4.99	10,890	6,050	12,028	6,682	14,206	7,892	12	157
9.46	43.68	42.46	13.86	4.48	11,077	6,154	12,234	6,797	14,202	7,890	25	158
9.34	43.30	43.15	13.55	4.41	11,138	6,188	12,286	6,826	14,212	7,896	26	159
8.14	42.53	42.50	14.97	5.18	11,074	6,152	12,055	6,697	14,177	7,876	13	160
7.12	36.50	53.83	9.67	2.31	12,257	6,809	13,197	7,332	14,610	8,117	12	161
6.72	36.96	53.84	9.20	2.21	12,382	6,879	13,274	7,374	14,619	8,122	5	162
6.58	38.04	53.92	8.04	1.98	12,584	6,991	13,470	7,483	14,648	8,138	5	163
6.71	37.11	54.36	8.53	2.32	12,514	6,952	13,414	7,452	14,665	8,147	83	164
5.86	35.75	52.85	11.40	2.75	12,212	6,784	12,972	7,207	14,641	8,134	24	165
5.38	37.91	50.39	11.70	3.82	12,148	6,749	12,839	7,133	14,540	8,078	13	166
5.59	36.15	54.08	9.77	2.51	12,467	6,926	13,205	7,336	14,635	8,131	61	167
5.18	35.81	52.04	12.15	3.15	12,144	6,747	12,807	7,115	14,578	8,099	22	168
6.74	39.29	49.60	11.11	2.90	12,056	6,698	12,927	7,182	14,543	8,079	39	169
6.83	37.20	53.49	9.31	2.26	12,380	6,878	13,288	7,382	14,652	8,140	59	170
6.45	37.84	53.12	9.04	2.59	12,454	6,919	13,313	7,396	14,636	8,132	11	171
5.57	38.60	53.37	8.03	2.01	12,811	7,117	13,567	7,537	14,752	8,196	10	172
13.86	.....	.....	13.79	.....	10,517	5,843	12,209	6,783	14,162	7,868	157	173
12.47	39.14	44.67	16.19	3.33	10,535	5,853	12,036	6,687	14,361	7,978	106	174
12.17	39.61	42.53	17.86	3.77	10,374	5,763	11,812	6,562	14,380	7,989	126	175
12.63	40.53	43.93	15.54	2.96	10,576	5,876	12,105	6,725	14,332	7,962	72	176
12.56	41.77	43.60	14.63	3.00	10,721	5,956	12,261	6,812	14,362	7,979	32	177
11.65	40.20	49.45	10.35	2.58	11,450	6,361	12,960	7,200	14,456	8,031	4	178
11.61	41.62	44.41	13.97	2.94	10,962	6,090	12,402	6,890	14,416	8,009	37	179

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
ILLINOIS—Contd.					
WILLIAMSON COUNTY.					
Carterville.....	Burr C.....	No. 6.....	Carterville.....	Lump, over 6-inch screen.	1,428
Do.....	do.....	do.....	Burr.....	Lump, over 3 inch shaking screen.	2,050
Do.....	do.....	do.....	do.....	Slack, through 2-inch shaking screen.	1,056
Johnston City....	Black Brier.....	do.....	Black Brier.....	Slack, over 1½-inch round-hole screen.	2,294
Do.....	do.....	do.....	do.....	do.....	9,439
Do.....	do.....	do.....	do.....	do.....	1,047
Do.....	do.....	do.....	do.....	do.....	991
Do.....	do.....	do.....	do.....	do.....	2,254
Do.....	do.....	do.....	do.....	do.....	1,294
Do.....	do.....	do.....	do.....	Through 3-inch screen, over 1½-inch screen.	
Marion.....	Seranton Big Muddy.	do.....	do.....	Run of mine.....	224
				Lump.....	64
INDIANA.					
GREEN COUNTY.					
Jasonville and Midland.	Lattas Creek and Gilmore.	No. 4.....		Lump, over 1½-inch screen.	652
VIGO COUNTY.					
			Vigo.....	Nos. 1 and 2 nut..	5,753
WARWICK COUNTY.					
Booneville.....	John Bull.....	No. 5.....		Run of mine.....	199
IOWA.					
MONROE COUNTY.					
Avery.....	Smoky Hollow.....			Run of mine.....	1,476
KANSAS.					
CHEROKEE COUNTY.					
Mineral.....			Cherokee.....	Lump, over 2-inch round-hole screen.	5,076
Do.....			do.....	do.....	632
Do.....			do.....	Lump, over 1½-inch round-hole screen.	8,753
Do.....			do.....	Run of mine.....	660
Weir.....			do.....	do.....	998
CRAWFORD COUNTY.					
Englevale.....		Cherokee.....	Cherokee.....	Run of mine.....	1,605
Do.....		do.....	do.....	do.....	1,645
Mulberry.....	Cherokee, No. 3.		do.....	do.....	1,443

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
7.11	32.05	55.62	12.33	1.35	11,803	6,557	12,706	7,059	14,493	8,052	10	180
7.88	34.94	55.98	9.08	1.04	12,216	6,787	13,261	7,367	14,585	8,103	8	181
7.38	34.60	56.28	9.12	1.09	12,224	6,791	13,198	7,332	14,522	8,068	4	182
7.93	34.54	55.31	10.15	1.31	12,033	6,685	13,069	7,261	14,545	8,081	12	183
7.43	35.66	54.27	10.07	1.29	12,079	6,711	13,049	7,249	14,510	8,061	92	184
7.33	35.09	56.02	8.89	1.57	12,280	6,822	13,251	7,362	14,544	8,080	12	185
8.07	34.42	53.17	12.41	1.28	11,671	6,484	12,695	7,053	14,494	8,052	8	186
7.79	36.48	54.89	8.63	1.17	12,243	6,802	13,277	7,376	14,531	8,073	10	187
6.90	35.80	53.70	10.50	1.43	12,092	6,718	12,988	7,216	14,512	8,062	8	188
7.98	33.80	55.42	10.78	1.55	11,895	6,608	12,926	7,181	14,488	8,049	5	189
7.76	37.29	50.47	12.24	3.06	11,671	6,484	12,653	7,029	14,418	8,010	6	190
13.13	40.90	50.02	9.08	1.69	11,536	6,409	13,280	7,378	14,606	8,114	9	191
10.85	40.54	50.91	8.55	1.18	11,808	6,560	13,245	7,358	14,483	8,046	52	192
10.75	43.15	44.10	12.75	4.21	11,181	6,212	12,528	6,960	14,359	7,977	4	193
13.24	40.45	38.68	20.87	5.23	9,775	5,431	11,267	6,259	14,239	7,911	13	194
3.05	33.79	51.71	14.50	5.26	12,436	6,877	12,827	7,126	15,002	8,334	13	195
3.37	36.53	51.40	12.07	4.99	12,717	7,065	13,160	7,311	14,966	8,314	4	196
4.21	32.49	54.28	13.23	3.86	12,503	6,946	13,053	7,252	15,043	8,357	82	197
4.41	30.33	51.24	18.43	4.24	11,694	6,497	12,233	6,796	14,997	8,332	3	198
4.60	34.83	52.80	12.37	6.04	12,443	6,913	13,043	7,246	14,884	8,269	12	199
4.74	32.15	50.50	17.35	5.64	11,666	6,481	12,246	6,803	14,817	8,232	19	200
8.30	36.02	48.48	15.50	4.10	11,211	6,228	12,226	6,792	14,469	8,038	27	201
8.17	35.63	48.45	15.92	4.55	11,190	6,217	12,186	6,770	14,493	8,052	46	202

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
KANSAS—Contd.					
LEAVENWORTH COUNTY.					
Leavenworth.....	Home-Riverside ..	Leavenworth ..	Leavenworth.....	Lump, over 2-inch round-hole screen.	13,731
Do.....	do.....	do.....	do.....	do.....	10,482
Do.....	do.....	do.....	do.....	do.....	10,132
Do.....	do.....	do.....	Home-Riverside ..	Lump.....	7,009
Do.....	Home-Riverside, Nos. 1 and 2.	do.....	do.....	Run of mine.....	9,449
Richardson.....	Carr.....	do.....	Richardson.....	Lump, over 5-inch screen.	9,262
Do.....	do.....	do.....	do.....	Lump, over 2-inch round-hole screen.	7,695
Do.....	do.....	do.....	do.....	Run of mine.....	8,135
Do.....	do.....	do.....	do.....	do.....	8,752
KENTUCKY.					
BELL COUNTY.					
Blanche.....	Blanche.....	Straight Creek	Straight Creek.....	Lump.....	156
Do.....	do.....	do.....	do.....	Run of mine.....	793
Pineville.....	Moss Creek.....	do.....	Straight Creek, Jellico.	Lump.....	137
Rim.....	Black Raven.....	Straight Creek	do.....	Run of mine.....	844
Straight Creek.....	Barker.....	do.....	Straight Creek.....	Through 2½-inch screen.	1,559
HOPKINS COUNTY.					
St. Charles.....	St. Charles.....	No. 9.....	do.....	Run of mine.....	1,416
MUHLENBURG COUNTY.					
Drakesboro.....	Diamond Block ..	No. 9.....	do.....	Run of mine.....	274
UNION COUNTY.					
Sturgis.....	Nos. 1, 2, and 8 ..	No. 9.....	Tradewater.....	Run of mine.....	4,534
Do.....	Nos. 1, 2, 8, and 9.	do.....	do.....	do.....	5,994
WEBSTER COUNTY.					
Clay.....	No. 7.....	No. 12.....	Caney Creek.....	Run of mine.....	401
WHITLEY COUNTY.					
Burk Hollow.....	Burk Hollow.....	Blue Gem.....	Burk Hollow.....	Run of mine.....	552
Mountain Ash.....	Mountain Ash.....	Jellico.....	Mountain Ash.....	Lump.....	877
MARYLAND.					
ALLEGANY COUNTY.					
Eckhart.....	Washington, No. 2.	Upper Sewickley or Tyson.	do.....	Run of mine.....	499
Do.....	do.....	do.....	do.....	do.....	95
Do.....	do.....	do.....	do.....	do.....	18,315
Frostburg (near) ..	Consolidation mines.	Pittsburgh or Big Vein.	Georges Creek.....	do.....	2,090
Do.....	do.....	do.....	do.....	do.....	2,531
Do.....	do.....	do.....	do.....	do.....	475
Do.....	do.....	do.....	do.....	do.....	3,609
Do.....	do.....	do.....	do.....	do.....	2,195

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moi- sture, per cent.	Volat- ile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul- phur, per cent.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.		
7	8	9	10	11	12	13	14	15	16	17	18	19
9.67	40.31	43.40	16.29	5.30	10,869	6,038	12,033	6,685	14,375	7,986	68	203
10.00	39.65	45.61	14.74	4.75	11,107	6,171	12,341	6,856	14,474	8,041	43	204
9.57	38.76	44.30	16.94	5.36	10,840	6,022	11,987	6,659	14,432	8,018	71	205
10.24	41.43	44.89	13.68	4.77	11,208	6,227	12,487	6,938	14,466	8,037	39	206
7.44	41.19	44.20	14.61	5.00	11,415	6,342	12,333	6,852	14,443	8,024	14	207
8.55	39.84	44.31	15.85	5.40	11,149	6,194	12,191	6,773	14,487	8,048	23	208
9.42	40.75	44.21	15.04	5.01	11,121	6,178	12,277	6,821	14,450	8,028	40	209
8.79	39.01	43.25	17.74	5.09	10,888	6,049	11,937	6,632	14,511	8,062	42	210
8.07	39.54	42.96	17.50	5.19	10,966	6,092	11,929	6,627	14,459	8,033	25	211
2.35	37.93	58.09	3.98	1.08	14,198	7,888	14,540	8,078	15,143	8,413	6	212
2.30	36.89	52.88	10.23	.79	13,211	7,339	13,522	7,512	15,063	8,368	4	213
2.40	40.18	56.80	3.02	.87	14,271	7,929	14,622	8,123	15,077	8,376	4	214
5.06	36.11	55.01	8.88	1.01	12,971	7,207	13,662	7,590	14,993	8,329	14	215
3.45	33.83	54.77	11.40	1.57	12,796	7,109	13,253	7,363	14,958	8,310	28	216
7.97	-----	-----	13.82	-----	11,458	6,366	12,450	6,917	14,447	8,026	17	217
9.75	43.28	44.20	12.52	3.79	11,370	6,317	12,598	6,999	14,401	8,001	4	218
3.70	38.36	51.08	10.56	2.80	12,744	7,080	13,234	7,352	14,797	8,221	5	219
3.75	38.42	51.21	10.37	2.81	12,787	7,104	13,285	7,381	14,822	8,234	6	220
4.65	36.50	52.65	10.85	1.58	12,553	6,974	13,165	7,314	14,767	8,204	2	221
3.97	36.70	56.13	7.17	.78	13,348	7,416	13,900	7,722	14,974	8,319	3	222
2.80	39.08	55.72	5.20	.98	13,888	7,716	14,288	7,938	15,072	8,373	4	223
2.18	20.32	72.91	6.77	1.08	14,259	7,922	14,577	8,098	15,636	8,687	5	224
2.08	19.73	72.60	7.67	1.09	14,106	7,837	14,406	8,003	15,603	8,668	12	225
1.99	20.06	71.83	8.11	1.27	14,036	7,798	14,321	7,956	15,585	8,658	81	226
2.21	18.83	72.36	8.81	.97	13,935	7,742	14,250	7,917	15,627	8,682	14	227
3.09	18.65	72.47	8.88	.98	13,766	7,648	14,205	7,892	15,589	8,661	19	228
1.77	19.33	71.89	8.78	.96	13,960	7,756	14,212	7,896	15,580	8,656	6	229
1.45	18.63	72.28	9.09	.96	13,951	7,751	14,156	7,864	15,571	8,651	13	230
3.00	19.68	72.20	8.12	.91	13,902	7,723	14,332	7,962	15,599	8,666	12	231

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
MARYLAND—Con.					
ALLEGANY CO.—continued.					
Frostburg (near) ..	Consolidation mines.	Pittsburgh or Big Vein.	Georges Creek	Run of mine	4,576
Do.....	do.....	do.....	do.....	do.....	216
Do.....	do.....	do.....	do.....	do.....	491
Do.....	do.....	do.....	do.....	do.....	6,840
Do.....	do.....	do.....	do.....	do.....	5,938
Do.....	do.....	do.....	do.....	do.....	4,814
Do.....	do.....	do.....	do.....	do.....	2,112
Do.....	do.....	do.....	do.....	do.....	685
Do.....	do.....	do.....	do.....	do.....	446
Do.....	do.....	do.....	do.....	do.....	446
Lonaconing.....	Nos. 1, 2, 3, and 4.	Upper Sewickley or Tyson.	.....	do.....	12,457
Do.....	do.....	do.....	.....	do.....	1,367
Do.....	do.....	do.....	.....	do.....	20,406
Do.....	do.....	do.....	.....	do.....	11,911
Do.....	do.....	do.....	.....	do.....	1,256
Ocean.....	Ocean.....	Pittsburgh or Big Vein.	Georges Creek.....	do.....	2,317
Do.....	do.....	do.....	do.....	do.....	123
Do.....	do.....	do.....	do.....	do.....	335
Do.....	do.....	do.....	do.....	do.....	332
Do.....	do.....	do.....	do.....	do.....	331
Do.....	do.....	do.....	do.....	do.....	431
Vale Summit.....	Mertens.....	B or Lower Kittanning.	Davis Six-Foot.....	do.....	225
GARRETT COUNTY.					
Dodson.....	Dodson.....	B or Lower Kittanning.	Dodson - Cumberland.	Run of mine.....	216
MICHIGAN.					
SAGINAW COUNTY.					
Saginaw.....	Riverside.....	Saginaw.....	Riverside.....	Lump, over $\frac{1}{2}$ -inch screen.	1,750
MISSOURI.					
MACON COUNTY.					
Bevier.....	Nos. 8 and 9.....	Bevier.....	Bevier.....	Run of mine.....	813
MONTANA.					
CARBON COUNTY.					
Bear Creek.....	Bear Creek.....	Nos. 2 and 3...	Original Bear Creek.	Slack.....	130
Do.....	do.....	do.....	do.....	Lump.....	1,815
Do.....	do.....	do.....	do.....	do.....	1,650
Do.....	do.....	do.....	do.....	do.....	1,041
Do.....	do.....	do.....	do.....	do.....	2,021
Do.....	do.....	do.....	do.....	do.....	1,955
Do.....	do.....	do.....	do.....	Lump, over 2-inch round-hole shaking screen.	1,496
Do.....	do.....	do.....	do.....	do.....	550
Do.....	do.....	do.....	Bear Creek.....	do.....	1,106
Do.....	International	No. 3.....	Peerless Bear Creek.	Slack forklings.....	209
Washoe.....	Nos. 2 and 3.....	No. 2.....	Faultless.....	Lump, over 2-inch screen.	2,940

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
1.47	18.93	72.34	8.73	.97	14,024	7,791	14,233	7,907	15,594	8,663	11	232
1.79	19.75	72.04	8.21	.94	14,099	7,833	14,356	7,976	15,640	8,689	7	233
1.65	19.21	72.04	8.75	.94	14,027	7,793	14,262	7,923	15,630	8,683	8	234
2.63	19.19	72.87	7.94	1.02	13,966	7,759	14,343	7,968	15,580	8,656	36	235
1.78	18.84	72.74	8.42	.94	14,023	7,791	14,277	7,932	15,590	8,661	23	236
1.54	18.29	72.87	8.84	.93	13,984	7,769	14,203	7,891	15,580	8,656	14	237
3.50	18.46	73.61	7.93	.99	13,830	7,683	14,332	7,962	15,566	8,648	11	238
2.08	18.44	72.38	9.18	.90	13,838	7,688	14,132	7,851	15,560	8,644	5	239
2.46	19.20	73.42	7.38	.92	14,110	7,839	14,466	8,037	15,619	8,677	5	240
2.47	19.06	72.85	8.09	.89	13,996	7,776	14,350	7,972	15,613	8,674	21	241
2.21	20.86	70.26	8.88	1.23	13,881	7,712	14,195	7,886	15,578	8,654	51	242
1.49	20.64	70.17	9.19	1.31	13,969	7,760	14,180	7,878	15,615	8,675	5	243
1.99	20.42	70.86	8.72	1.36	13,931	7,739	14,214	7,897	15,572	8,651	89	244
2.61	20.41	70.90	8.69	1.22	13,794	7,663	14,164	7,869	15,512	8,618	50	245
2.30	20.10	70.77	9.13	1.31	13,785	7,658	14,110	7,839	15,528	8,627	21	246
2.39	20.10	70.77	9.34	1.31	13,830	7,683	14,169	7,872	15,629	8,683	28	247
2.26	18.54	72.66	8.80	1.13	13,921	7,734	14,243	7,913	15,617	8,676	25	248
3.20	18.23	72.56	9.21	.87	13,757	7,643	14,212	7,896	15,654	8,697	5	249
2.58	20.40	72.27	7.33	.83	14,099	7,833	14,472	8,040	15,617	8,676	5	250
2.90	20.23	71.89	7.88	.93	13,982	7,768	14,400	8,000	15,632	8,684	5	251
3.29	19.83	71.95	8.22	.85	13,851	7,695	14,322	7,957	15,605	8,669	11	252
1.50	20.38	65.52	14.10	2.31	13,146	7,303	13,346	7,414	15,537	8,632	5	253
1.50	16.60	68.46	14.94	2.23	12,958	7,199	13,155	7,308	15,466	8,592	5	254
10.30	37.08	50.47	12.45	2.06	11,458	6,366	12,774	7,097	14,591	8,106	43	255
13.69	36.11	40.43	23.46	3.67	9,354	5,197	10,838	6,022	14,160	7,867	10	256
9.71	38.49	49.09	12.42	1.49	10,661	5,923	11,807	6,559	13,481	7,489	16	257
9.55	42.97	46.84	10.19	1.60	10,953	6,085	12,109	6,727	13,483	7,491	24	258
9.51	41.68	48.39	9.93	1.54	11,015	6,119	12,173	6,763	13,515	7,508	16	259
9.10	42.14	46.44	11.42	1.72	10,961	6,089	12,058	6,699	13,612	7,562	14	260
9.68	43.03	47.34	9.63	1.43	11,041	6,134	12,224	6,791	13,527	7,515	22	261
9.37	43.64	46.61	9.75	1.47	11,138	6,188	12,289	6,827	13,617	7,565	11	262
9.04	42.53	48.74	8.73	1.54	11,196	6,220	12,309	6,838	13,486	7,492	9	263
9.12	43.66	46.54	9.80	1.59	11,086	6,159	12,198	6,777	13,523	7,513	5	264
9.52	43.90	49.62	6.48	1.51	11,532	6,407	12,745	7,081	13,628	7,571	6	265
9.63	41.30	47.37	11.33	1.70	10,766	5,981	11,913	6,618	13,435	7,464	13	266
9.73	41.53	49.06	9.41	1.54	11,054	6,141	12,246	6,803	13,518	7,510	51	267

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
MONTANA—Contd.					
CASCADE COUNTY.					
Sand Coulee.....	Nelson.....	Nelson.....	Nelson.....	Lump.....	150
Do.....	Sand Coulee.....	.....	Sand Coulee.....	do.....	638
Do.....	Brown.....	.....	.....	Forked lump.....	119
PARK COUNTY.					
Chimney Rock....	Maxey.....	.....	Maxey.....	Lump.....	1,856
NEW MEXICO.					
COLFAX COUNTY.					
Dawson.....	Dawson.....	Raton.....	Dawson.....	Lump, over 4-inch screen.	150
Do.....	do.....	do.....	do.....	Lump, over 2-inch screen.	934
Do.....	do.....	do.....	do.....	do.....	1,547
Do.....	do.....	do.....	do.....	do.....	1,643
Do.....	do.....	do.....	do.....	Lump.....	978
Do.....	do.....	do.....	do.....	do.....	1,402
Do.....	do.....	do.....	do.....	do.....	1,195
Do.....	do.....	do.....	do.....	Run of mine.....	501
Koehler.....	Koehler.....	do.....	Swastika.....	Lump, over 1½-inch screen.	1,984
Do.....	do.....	do.....	do.....	Lump, over 3-inch screen.	2,917
Do.....	do.....	do.....	do.....	Lump.....	3,123
M'KINLEY COUNTY.					
Allison.....	Diamond.....	.....	Diamond.....	Lump, over 3-inch screen.	623
Do.....	do.....	.....	Gallup.....	Lump, over 4½-inch screen.	1,043
Do.....	do.....	.....	do.....	Lump, over 4-inch screen.	958
RIO ARriba COUNTY.					
Monero.....	Monero, No. 1.....	.....	.....	Run of mine.....	296
SANTA FE COUNTY.					
Madrid.....	No. 4.....	.....	Cerillos.....	Anthracite egg.....	1,048
Do.....	do.....	.....	do.....	do.....	601
Do.....	do.....	.....	do.....	Anthracite large furnace.	600
Do.....	do.....	.....	do.....	Anthracite small furnace.	1,365
Do.....	do.....	.....	do.....	do.....	1,032
NORTH DAKOTA.					
WILLIAMS COUNTY.					
Williston.....	U. S. Reclamation Service.	Lignite.....	.....	Crushed.....	314
OHIO.					
ATHENS COUNTY.					
Hocking.....	Eclipse.....	Hocking.....	Eclipse.....	Lump.....	196
Do.....	do.....	do.....	do.....	do.....	200
Do.....	do.....	do.....	do.....	do.....	248

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	13	14	15	16	17	18	19
5.73	30.21	51.81	17.98	2.90	10,541	5,856	11,182	6,212	13,633	7,574	12	268
5.50	29.23	52.56	18.21	2.50	10,667	5,926	11,288	6,271	13,801	7,667	10	269
4.87	29.90	50.05	20.05	2.43	10,505	5,836	11,043	6,135	13,812	7,673	5	270
16.85	41.89	48.42	9.69	.47	9,956	5,531	11,974	6,652	13,259	7,366	12	271
1.78	36.84	47.83	15.33	.62	12,551	6,973	12,778	7,098	15,092	8,384	4	272
1.54	35.61	48.57	15.82	.77	12,441	6,912	12,636	7,020	15,011	8,339	8	273
1.74	36.34	48.15	15.51	.79	12,469	6,927	12,690	7,050	15,020	8,344	15	274
1.72	38.72	48.67	12.61	.62	12,952	7,196	13,179	7,322	15,081	8,378	13	275
1.74	37.59	48.02	14.39	.66	12,667	7,037	12,891	7,162	15,058	8,365	15	276
1.75	37.45	48.75	13.80	.62	12,748	7,082	12,975	7,208	15,052	8,362	11	277
1.86	37.18	48.52	14.30	.62	12,635	7,019	12,874	7,152	15,022	8,346	17	278
1.93	36.58	46.86	16.56	.69	12,256	6,809	12,497	6,943	14,977	8,321	11	279
1.69	38.52	53.96	7.52	.71	13,769	7,649	14,006	7,782	15,145	8,414	12	280
1.83	37.56	50.22	12.22	.70	12,932	7,184	13,173	7,318	15,007	8,337	9	281
1.75	39.26	52.76	7.98	.70	13,559	7,533	13,801	7,667	14,998	8,332	8	282
12.33	42.88	47.70	9.42	.57	11,101	6,167	12,662	7,034	13,979	7,766	6	283
13.11	46.84	47.52	5.64	.57	11,513	6,396	13,250	7,361	14,042	7,801	16	284
11.20	44.34	45.92	9.74	.52	11,199	6,222	12,611	7,006	13,972	7,762	6	285
2.92	40.98	52.65	6.37	.80	13,508	7,504	13,914	7,730	14,861	8,256	14	286
4.87	5.89	82.53	11.58	.74	12,445	6,914	13,082	7,268	14,795	8,219	13	287
5.23	5.22	81.75	13.03	.75	12,056	6,698	12,721	7,068	14,627	8,126	8	288
5.14	5.75	85.75	8.50	.74	12,790	7,106	13,483	7,491	14,736	8,187	11	289
4.57	6.76	83.94	9.30	.66	12,745	7,081	13,355	7,419	14,724	8,180	13	290
4.95	5.34	85.52	9.14	.68	12,654	7,030	13,313	7,396	14,652	8,140	10	291
40.95	47.08	42.03	10.89	1.37	6,367	3,537	10,782	5,990	12,100	6,722	13	292
2.55	36.54	55.90	7.56	1.15	13,619	7,566	13,975	7,764	15,118	8,399	20	293
2.26	36.94	54.07	8.99	1.16	13,451	7,473	13,762	7,646	15,121	8,401	19	294
2.20	39.70	52.20	8.10	1.71	13,577	7,543	13,882	7,712	15,106	8,392	13	295

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
OHIO—Continued.					
HARRISON COUNTY.					
Blairmont.....	Majestic.....	Pittsburg, No. 8	Pittsburg, No. 8...	Lump, over $\frac{3}{4}$ -inch screen.	999
HOCKING COUNTY.					
Longstreth.....	Stalter, No. 1.....	No. 6.....	Hocking Valley...	Lump.....	3,424
Do.....	do.....	do.....	do.....	do.....	3,185
Do.....	do.....	do.....	do.....	do.....	3,305
JACKSON COUNTY.					
.....			Milton Jackson...	Lump.....	395
OKLAHOMA.					
LE FLOBE COUNTY.					
Bokoshe.....	Bokoshe.....	Panama.....	Bokoshe.....	Run of mine.....	350
Howe.....	Howe.....			do.....	305
OKMULGEE COUNTY.					
Dewar.....			Dewar.....	Lump, over 2-inch screen.	403
Do.....			do.....	Lump.....	224
Do.....			do.....	Run of mine.....	274
Henryetta.....	Henryetta.....		Henryetta.....	Lump.....	241
Do.....	do.....		do.....	Run of mine.....	1,682
PITTSBURG COUNTY.					
Adamson.....	Adamson.....	Hartshorne...	Adamson.....	Lump, over 1-inch screen.	981
PITTSBURG AND LATIMER COUNTIES.					
.....			Adamson.....	Lump, over $1\frac{1}{2}$ -inch screen.	1,408
PENNSYLVANIA.					
ALLEGHENY COUNTY.					
Camden.....	Camden.....	Pittsburg.....		Through $1\frac{1}{4}$ -inch bar screen.	1,516
Dravosburg.....	Risher.....	do.....	Youghiogheny.....	Lump, over $\frac{3}{4}$ -inch screen.	1,211
Smithdale.....	Ocean, No. 5.....	do.....	do.....	Screenings.....	452
ARMSTRONG COUNTY.					
New Bethlehem...	Fairmount.....			Run of mine.....	968
Do.....	do.....			do.....	986
CAMBRIA COUNTY.					
Bakerton.....	Lancashire, No. 14.	B or Miller...	Lancashire.....	Run of mine.....	3,249
Do.....	do.....	do.....	do.....	do.....	426
Barnesboro.....	Delta.....	D or Lower Freeport	Delta.....	do.....	2,855
Do.....	do.....	do.....	do.....	do.....	10,578
Do.....	Empire "A".....	do.....	Empire.....	do.....	7,650

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture freed and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
2.6	43.4	49.4	7.2	3.55	13,266	7,370	13,620	7,567	14,677	8,154	1	296
6.27	39.69	52.68	7.63	1.86	12,608	7,004	13,451	7,473	14,562	8,090	30	297
6.60	40.90	51.50	7.60	2.00	12,548	6,971	13,435	7,464	14,540	8,078	21	298
6.30	41.10	48.30	10.60	3.43	12,129	6,738	12,944	7,191	14,479	8,044	21	299
9.28	-----	-----	9.61	-----	11,789	6,549	12,995	7,219	14,377	7,987	8	300
3.33	16.33	63.98	19.69	1.47	11,836	6,576	12,244	6,802	15,246	8,470	8	301
4.98	18.97	68.27	12.76	.98	12,851	7,139	13,525	7,514	15,503	8,613	5	302
6.34	34.74	55.96	9.30	2.45	12,434	6,908	13,276	7,376	14,637	8,132	10	303
6.08	37.15	55.35	7.50	2.21	12,738	7,077	13,563	7,535	14,663	8,146	4	304
6.46	36.00	53.04	10.96	2.12	12,186	6,770	13,028	7,238	14,632	8,129	5	305
6.68	37.85	54.47	7.68	1.79	12,620	7,011	13,523	7,513	14,648	8,138	4	306
6.46	36.59	53.61	9.90	2.00	12,346	6,859	13,199	7,333	14,633	8,129	13	307
2.40	36.28	54.99	8.73	1.30	13,400	7,445	13,730	7,628	15,043	8,357	12	308
2.14	38.80	51.95	9.25	.95	13,137	7,298	13,424	7,458	14,792	8,218	8	309
3.13	31.95	56.56	11.49	1.56	12,930	7,133	13,348	7,416	15,081	8,378	24	310
2.19	37.37	55.97	6.66	1.29	13,764	7,647	14,072	7,818	15,076	8,376	14	311
3.63	34.53	56.57	8.90	1.18	13,128	7,293	13,622	7,568	14,953	8,307	6	312
2.56	35.00	53.30	11.70	1.67	13,025	7,237	13,367	7,426	15,138	8,410	9	313
2.76	34.34	53.71	11.95	1.70	12,908	7,171	13,274	7,374	15,076	8,376	8	314
2.51	22.43	69.31	8.26	1.98	13,944	7,747	14,303	7,946	15,591	8,662	32	315
2.05	21.95	69.51	8.54	2.00	13,942	7,745	14,234	7,908	15,563	8,646	11	316
2.59	21.92	69.66	8.42	2.50	13,926	7,737	14,296	7,942	15,610	8,672	18	317
1.98	21.86	69.12	9.02	2.28	13,904	7,724	14,185	7,881	15,591	8,662	48	318
3.10	27.36	63.14	9.50	1.82	13,628	7,571	14,064	7,813	15,540	8,633	77	319

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
PENNSYLVANIA—Continued.					
CAMBRIA COUNTY—continued.					
Colver	Ebensburg, No. 1	B or Miller	Colver	Run of mine	75, 635
Do	do	do	do	do	74, 658
Do	do	do	do	do	63, 120
Do	do	do	do	do	158, 577
Do	do	do	do	do	44, 790
Dunlo	Logan, No. 7	E or Upper Freeport.	Logan	do	6, 995
Do	do	do	do	do	11, 854
Do	do	do	do	do	1, 456
Do	do	do	do	do	9, 137
Do	do	do	do	do	8, 161
Elmora	Sterling	B or Miller		do	23, 391
Do	do	do		do	6, 951
Do	do	do		do	15, 403
Do	do	do		do	3, 170
Do	do	do		do	30, 358
Fallen Timber	Fallen Timber, No. 1	E or Upper Freeport.	Colonial	do	20, 375
Hastings	Rich Hill, Nos. 1 and 2.	do	Rich Hill	do	27, 680
Johnstown	Bird	C' or Upper Kittanning.	Bird Quemahoning.	do	10, 898
Do	Valley, No. 1	do	Valley smokeless	do	494
Do	Morrelville	B or Miller	Morrelville	do	4, 877
Nanty-Glo	Cardiff	do	Cardiff	do	6, 679
Do	do	do	do	do	219
Do	do	do	do	do	1, 759
Do	do	do	do	do	7, 606
Do	do	do	do	do	3, 215
Do	do	do	do	do	376
Do	do	do	do	do	6, 780
Do	do	do	do	do	1, 762
Do	do	do	do	do	1, 371
Do	do	do	do	do	3, 228
Do	do	do	do	do	490
Do	do	do	do	do	242
Do	do	do	do	do	1, 254
Do	do	do	do	do	523
Do	do	do	do	do	1, 308
Do	do	do	do	do	1, 494
Do	Ivory Hill	do	Liberty	do	3, 049
Do	Springfield, No. 1	do	Borman	do	7, 000
Patton	Fardee	do	Beech Creek	do	1, 585
Do	do	do	Fardee	do	4, 858
Portage	Aetna	E or Upper Freeport.		do	194
Do	do	do		do	190
Do	Miller Shaft, No. 1	B or Miller	South Fork	do	5, 075
Saxman	Greenwich	D or Lower Freeport.	Greenwich	do	4, 057
South Fork	Argyle	B or Miller	Argyle	do	12, 387
Do	do	do	do	do	16
Twin Rocks	Ben Par	do	Ben Par	do	5, 248
Do	Big Bend	do	Davenport	do	3, 158
Do	do	do	do	do	3, 200
Do	Commercial, Nos. 3, 4, and 5.	do	Star	do	15, 705
Do	Commercial	do	do	do	3, 362
Do	do	do	do	do	583
Do	do	do	do	do	1, 061
Do	do	do	do	do	362
Do	do	do	do	do	7, 411
Do	Nonpareil	do	Big Bend	do	468
Do	do	do	do	do	1, 018

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	13	14	15	16	17			18	19
2.53	22.18	70.33	7.49	1.55	14,127	7,848	14,494	8,052	15,667	8,704	335	320
2.21	22.97	69.37	7.66	1.61	14,137	7,854	14,456	8,031	15,655	8,697	332	321
1.97	22.88	69.85	7.27	1.68	14,201	7,889	14,486	8,048	15,622	8,679	278	322
2.09	23.25	70.37	6.38	1.42	14,337	7,965	14,643	8,135	15,641	8,689	78	323
2.23	23.20	70.52	6.28	1.40	14,328	7,960	14,655	8,142	15,637	8,687	63	324
3.23	17.83	71.37	10.80	2.38	13,470	7,483	13,920	7,733	15,605	8,669	48	325
2.50	19.91	72.14	7.95	1.85	14,076	7,820	14,437	8,021	15,684	8,713	90	326
2.28	19.13	71.37	9.50	1.87	13,824	7,680	14,147	7,859	15,632	8,684	13	327
2.64	19.12	71.87	9.01	1.89	13,854	7,697	14,230	7,906	15,639	8,688	45	328
2.56	18.22	72.03	9.75	2.32	13,713	7,618	14,073	7,818	15,593	8,663	31	329
2.43	19.91	72.29	7.80	1.73	14,119	7,844	14,471	8,039	15,695	8,719	161	330
3.11	21.66	70.48	7.86	1.67	13,977	7,765	14,426	8,014	15,657	8,698	45	331
2.69	23.15	68.64	8.21	1.77	13,969	7,761	14,355	7,975	15,639	8,688	90	332
2.64	22.73	68.67	8.60	1.88	13,880	7,711	14,256	7,920	15,597	8,665	12	333
2.03	22.57	68.97	8.46	1.85	14,012	7,784	14,302	7,946	15,624	8,680	26	334
2.29	26.01	65.41	8.58	1.22	13,920	7,733	14,246	7,914	15,583	8,657	36	335
2.48	25.51	67.46	7.03	1.03	14,119	7,844	14,478	8,043	15,573	8,652	47	336
1.99	16.39	72.81	10.80	1.85	13,591	7,551	13,867	7,704	15,546	8,637	33	337
1.30	20.14	71.73	8.13	.94	14,165	7,869	14,352	7,973	15,622	8,679	11	338
3.51	22.10	68.71	9.19	1.96	13,650	7,583	14,147	7,859	15,579	8,655	24	339
2.12	.....	.....	6.72	.....	14,360	7,978	14,671	8,151	15,728	8,738	157	340
2.25	20.22	73.48	6.30	2.05	14,336	7,964	14,666	8,148	15,652	8,696	12	341
2.03	20.28	73.25	6.47	1.91	14,331	7,962	14,635	8,131	15,647	8,693	28	342
2.09	19.56	73.75	6.69	1.99	14,369	7,983	14,676	8,153	15,728	8,738	142	343
2.26	20.05	73.00	6.95	2.11	14,284	7,936	14,614	8,119	15,706	8,726	46	344
2.00	20.30	72.76	6.94	2.16	14,274	7,930	14,565	8,092	15,651	8,695	24	345
2.16	21.08	69.81	9.11	1.79	13,911	7,728	14,218	7,899	15,643	8,691	20	346
2.17	21.42	71.62	6.96	2.13	14,261	7,923	14,577	8,098	15,667	8,704	33	347
2.06	20.72	72.27	7.01	1.97	14,311	7,951	14,612	8,118	15,714	8,731	27	348
2.28	20.96	71.89	7.15	2.07	14,222	7,901	14,554	8,086	15,675	8,708	51	349
1.93	20.14	72.13	7.73	2.07	14,165	7,869	14,444	8,024	15,654	8,697	20	350
1.99	20.67	72.26	7.07	2.09	14,249	7,916	14,538	8,077	15,644	8,691	7	351
2.24	22.42	70.79	6.79	2.05	14,292	7,940	14,619	8,122	15,684	8,713	16	352
1.82	21.56	71.13	7.31	2.09	14,213	7,896	14,476	8,042	15,618	8,677	13	353
2.89	22.14	70.69	7.17	1.88	14,105	7,836	14,525	8,069	15,647	8,693	16	354
2.08	22.71	70.70	6.59	2.10	14,288	7,938	14,592	8,107	15,621	8,678	20	355
2.58	20.72	71.67	6.61	2.12	14,080	7,822	14,453	8,029	15,643	8,691	32	356
2.34	20.18	71.58	8.24	2.41	13,992	7,773	14,327	7,959	15,614	8,674	24	357
2.42	20.81	71.87	7.32	1.13	14,087	7,826	14,436	8,020	15,576	8,653	12	358
3.15	23.26	68.73	8.01	1.35	13,887	7,715	14,339	7,966	15,588	8,660	77	359
1.42	20.03	72.78	7.19	1.72	14,399	7,999	14,606	8,114	15,738	8,743	4	360
2.00	19.04	71.96	9.00	2.13	13,948	7,749	14,233	7,907	15,641	8,689	6	361
2.87	17.23	75.49	7.28	.84	14,060	7,811	14,475	8,042	15,612	8,673	18	362
3.14	26.37	64.99	8.64	1.45	13,788	7,660	14,235	7,908	15,581	8,656	63	363
1.99	17.59	74.63	7.78	1.35	14,170	7,872	14,458	8,032	15,678	8,710	38	364
1.43	.....	.....	6.72	.....	14,323	7,958	14,531	8,073	15,578	8,654	4	365
3.10	19.73	73.40	6.87	1.75	14,161	7,867	14,614	8,119	15,692	8,718	23	366
2.78	21.27	72.13	6.60	1.78	14,147	7,859	14,552	8,084	15,580	8,656	6	367
4.86	21.55	71.80	6.65	1.34	13,754	7,641	14,457	8,032	15,487	8,604	14	368
2.56	21.60	71.18	7.22	2.18	14,140	7,856	14,511	8,062	15,640	8,689	53	369
3.05	20.48	72.45	7.07	1.85	14,121	7,845	14,565	8,092	15,673	8,707	24	370
1.82	.....	.....	7.76	.....	14,259	7,922	14,525	8,069	15,747	8,748	13	371
2.26	19.37	73.16	7.47	1.73	14,222	7,901	14,551	8,084	15,726	8,737	41	372
2.60	19.58	73.33	7.14	1.57	14,216	7,898	14,595	8,108	15,717	8,732	18	373
2.00	19.40	73.57	7.03	1.17	14,338	7,966	14,631	8,128	15,737	8,743	61	374
2.59	22.57	70.80	6.73	2.88	14,240	7,911	14,619	8,122	15,657	8,698	16	375
2.71	22.65	71.23	6.12	1.85	14,254	7,919	14,651	8,139	15,606	8,670	27	376

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
PENNSYLVANIA—Continued.					
CAMBRIA COUNTY—continued.					
Vintondale.....	Vinton.....	B or Miller ...	Vinton.....	Run of mine.....	1, 791
Do.....	do.....	do.....	do.....	do.....	2, 292
Do.....	do.....	do.....	do.....	do.....	10, 423
Do.....	do.....	do.....	do.....	do.....	9, 796
CLEARFIELD COUNTY.					
Hawk Run.....	Acme.....	B or Miller ...	Acme.....	Run of mine.....	483
Do.....	do.....	do.....	do.....	do.....	3, 376
Do.....	do.....	do.....	do.....	do.....	2, 067
Do.....	do.....	do.....	do.....	do.....	1, 520
Do.....	do.....	do.....	do.....	do.....	3, 280
Do.....	do.....	do.....	do.....	do.....	3, 250
Do.....	do.....	do.....	do.....	do.....	3, 301
Do.....	do.....	do.....	do.....	do.....	6, 780
Do.....	do.....	do.....	do.....	do.....	8, 684
Do.....	do.....	do.....	do.....	do.....	3, 114
Do.....	do.....	do.....	do.....	do.....	2, 392
Irvona.....	Irvona.....	do.....	Irvona.....	do.....	748
Do.....	do.....	do.....	do.....	do.....	3, 050
Ramey.....	Whitney.....	do.....	Whitney.....	do.....	391
Do.....	Bulah, No. 4.....	D or Lower Freeport.	Bulah.....	do.....	3, 370
Smith Mills.....	Viola.....	B or Miller ...	Viola.....	do.....	2, 420
ELK AND JEFFERSON COUNTIES.					
.....	Shawmut.....	D or Lower Freeport.	Shawmut.....	Lump, over $\frac{3}{4}$ -inch screen.	996
FAYETTE COUNTY.					
Braznell.....	Braznell.....	do.....	Youghiogheny.....	Screenings.....	8, 018
Brownsville Junction.	Pike.....	Pittsburgh.....	do.....	Slack and nut.....	1, 619
HUNTINGDON COUNTY.					
Robertsdale.....	Robertsdale and Woodvale.	Barnett and Fulton.	Rockhill.....	Run of mine.....	64, 372
Do.....	do.....	do.....	do.....	do.....	14, 365
INDIANA COUNTY.					
Clymer.....	Empire.....	B or Miller ...	Empire.....	Run of mine.....	7, 245
Graceton.....	Graceton.....	E or Upper Freeport.	Graceton.....	do.....	1, 198
JEFFERSON COUNTY.					
Delancey and Eleanora.	Florence and Eleanora.	D or Lower Freeport.	.....	Run of mine.....	894
Do.....	do.....	do.....	.....	Lump, over $\frac{3}{4}$ -inch screen.	901
Do.....	Adrian and Eleanora.	do.....	.....	Run of mine.....	898
Eleanora.....	Eleanora.....	do.....	.....	do.....	1, 172

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17			18	19
2.18	-----	-----	7.84	-----	14,130	7,850	14,445	8,025	15,674	8,708	13	377
2.24	19.25	72.65	8.10	2.57	14,068	7,816	14,390	7,994	15,658	8,699	38	378
2.27	19.58	73.19	7.23	2.26	14,253	7,918	14,584	8,102	15,721	8,734	229	379
2.23	20.89	70.96	8.15	2.37	14,065	7,814	14,386	7,992	15,662	8,701	166	380
2.33	21.01	71.18	7.81	2.16	14,140	7,856	14,477	8,043	15,703	8,724	11	381
2.56	21.55	70.36	8.09	2.25	14,054	7,808	14,423	8,013	15,693	8,718	23	382
2.58	-----	-----	7.93	-----	14,022	7,790	14,393	7,996	15,633	8,685	9	383
1.92	-----	-----	9.63	-----	13,861	7,701	14,132	7,851	15,638	8,688	9	384
2.96	21.38	68.17	10.45	2.42	13,516	7,509	13,928	7,738	15,553	8,641	90	385
3.10	21.70	67.36	10.94	2.51	13,401	7,445	13,830	7,683	15,529	8,627	50	386
3.12	22.71	67.52	9.77	2.48	13,616	7,564	14,054	7,808	15,576	8,653	94	387
2.42	22.59	67.84	9.57	2.42	13,728	7,627	14,068	7,816	15,557	8,643	115	388
2.72	22.18	68.77	9.05	2.27	13,745	7,636	14,129	7,849	15,535	8,631	79	389
3.06	22.48	67.72	9.80	2.32	13,574	7,541	14,002	7,779	15,523	8,624	23	390
3.51	22.04	68.52	9.44	2.60	13,546	7,526	14,039	7,799	15,502	8,612	27	391
2.36	-----	-----	9.34	-----	13,898	7,721	14,234	7,908	15,700	8,722	17	392
2.38	-----	-----	11.63	-----	13,493	7,496	13,822	7,679	15,641	8,689	62	393
2.89	22.57	69.43	8.00	1.35	13,968	7,760	14,384	7,991	15,635	8,686	16	394
3.60	16.44	78.02	5.54	.64	14,273	7,929	14,806	8,226	15,674	8,708	38	395
3.01	-----	-----	8.35	-----	13,944	7,747	14,377	7,987	15,687	8,715	55	396
4.06	34.15	56.25	9.60	1.94	13,210	7,339	13,769	7,649	15,231	8,462	18	397
5.37	30.76	58.39	10.85	1.66	12,675	7,042	13,394	7,441	15,024	8,347	35	398
3.59	32.16	56.61	11.23	1.38	12,937	7,187	13,419	7,455	15,117	8,398	24	399
2.03	15.98	75.20	8.82	1.35	14,024	7,791	14,315	7,953	15,700	8,722	397	400
1.89	15.95	74.01	10.04	1.22	13,814	7,674	14,080	7,822	15,651	8,695	36	401
3.24	28.30	62.81	8.89	2.07	13,669	7,594	14,127	7,848	15,505	8,614	47	402
1.96	25.12	65.50	9.38	1.34	13,775	7,653	14,050	7,806	15,504	8,613	5	403
3.04	30.72	62.76	6.52	1.27	14,040	7,800	14,480	8,044	15,490	8,606	13	404
2.81	30.50	62.43	7.07	1.68	13,977	7,765	14,381	7,989	15,475	8,597	24	405
2.27	31.87	59.02	9.11	1.76	13,737	7,632	14,056	7,809	15,465	8,592	9	406
3.91	32.03	59.54	8.43	1.82	13,582	7,546	14,135	7,853	15,436	8,576	31	407

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
PENNSYLVANIA—Continued.					
SOMERSET COUNTY.					
Boswell.....	Atlantic.....	C' or Upper Kittanning.		Run of mine.....	6,489
Do.....	do.....	do.....		do.....	614
Do.....	Orenda.....	do.....	Orenda.....	do.....	73,027
Do.....	do.....	do.....	do.....	do.....	2,000
Do.....	do.....	do.....	do.....	do.....	5,784
Do.....	do.....	do.....	do.....	do.....	
Do.....	do.....	do.....	do.....	do.....	3,812
Do.....	do.....	do.....	do.....	do.....	5,915
Do.....	do.....	do.....	do.....	do.....	540
Do.....	do.....	do.....	do.....	do.....	540
Do.....	do.....	do.....	do.....	do.....	2,766
Do.....	do.....	do.....	do.....	do.....	3,597
Do.....	do.....	do.....	do.....	do.....	6,644
Do.....	do.....	do.....	do.....	do.....	3,445
Do.....	do.....	do.....	do.....	do.....	6,845
Do.....	do.....	do.....	do.....	do.....	1,316
Boswell and Jerome.....	Orenda and Jerome.....	do.....	Orenda and Jerome.....	do.....	3,959
Do.....	do.....	do.....	do.....	do.....	1,523
Elk Lick.....	Pine Hill and Elk Lick.....	Pittsburgh.....		do.....	2,559
Do.....	do.....	do.....		do.....	10,155
Do.....	Merchants, No. 3.....	do.....		do.....	19,694
Garrett.....	Garrett.....	C' or Upper Kittanning.	Powell.....	do.....	6,378
Hooversville.....	Knickerbocker.....	B or Miller.....	Knickerbocker.....	do.....	3,972
Do.....	do.....	do.....	do.....	do.....	148
Do.....	do.....	do.....	do.....	do.....	623
Do.....	Landstreet.....	do.....	Margaret.....	do.....	6,341
Jenner.....	Consolidation.....	C' or Upper Kittanning.	Jenner.....	do.....	427
Do.....	do.....	do.....	do.....	do.....	5,200
Do.....	do.....	do.....	do.....	do.....	6,200
Do.....	do.....	do.....	do.....	do.....	3,250
Do.....	do.....	do.....	do.....	do.....	6,563
Do.....	do.....	do.....	do.....	do.....	1,310
Do.....	do.....	do.....	do.....	do.....	12,834
Do.....	do.....	do.....	do.....	do.....	5,700
Do.....	do.....	do.....	do.....	do.....	5,900
Do.....	do.....	do.....	do.....	do.....	6,207
Do.....	do.....	do.....	do.....	do.....	358
Do.....	do.....	do.....	do.....	do.....	3,445
Do.....	do.....	do.....	do.....	do.....	3,747
Do.....	do.....	do.....	do.....	do.....	7,300
Do.....	do.....	do.....	do.....	do.....	5,820
Do.....	do.....	do.....	do.....	do.....	6,916
Do.....	do.....	do.....	do.....	do.....	6,300
Do.....	do.....	do.....	do.....	do.....	4,592
Do.....	do.....	do.....	do.....	do.....	3,595
Do.....	do.....	do.....	do.....	do.....	1,336
Jerome.....	Jerome.....	do.....		Lump, over 3-inch bar screen.....	389
Macdonaldton.....	Pen Mar, Nos. 2 and 3.....	B or Miller.....	Pen Mar.....	Run of mine.....	604
Do.....	do.....	do.....	do.....	do.....	1,115
Do.....	do.....	do.....	do.....	do.....	3,169
Do.....	do.....	do.....	do.....	do.....	690
Do.....	do.....	do.....	do.....	do.....	906
Do.....	do.....	do.....	do.....	do.....	677
Do.....	do.....	do.....	do.....	do.....	2,934
Do.....	do.....	do.....	do.....	do.....	2,293
Do.....	do.....	do.....	do.....	do.....	1,027
Zimmerman.....	Quema honing Creek No. 1.....	C' or Upper Kittanning.	Quema honing Creek.....	do.....	11,126

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
2.80	17.29	73.51	9.20	0.91	13,834	7,686	14,233	7,909	15,675	8,708	34	408
3.91	18.16	73.02	8.82	.93	13,688	7,604	14,245	7,914	15,623	8,679	10	409
2.56	16.90	73.46	9.64	.95	13,747	7,637	14,108	7,838	15,613	8,674	644	410
2.68	.....	.....	9.07	.....	13,880	7,711	14,262	7,923	15,685	8,714	51	411
2.60	.....	.....	8.97	.....	13,917	7,732	14,289	7,938	15,697	8,721	67	412
2.75	.....	.....	9.24	.....	13,771	7,651	14,160	7,867	15,602	8,668	26	413
2.45	.....	.....	9.84	.....	13,718	7,621	14,063	7,813	15,598	8,666	106	414
2.26	.....	.....	9.95	.....	13,742	7,634	14,060	7,811	15,614	8,674	88	415
2.58	.....	.....	9.69	.....	13,851	6,695	14,218	7,899	15,744	8,747	11	416
2.33	.....	.....	9.71	.....	13,764	7,647	14,092	7,829	15,607	8,671	17	417
1.86	15.64	74.65	9.71	.86	13,871	7,706	14,134	7,852	15,654	8,697	62	418
2.23	.....	.....	9.60	.....	13,807	7,671	14,122	7,846	15,622	8,679	44	419
2.52	.....	.....	9.82	.....	13,745	7,636	14,100	7,833	15,635	8,686	113	420
2.37	.....	.....	9.67	.....	13,762	7,646	14,096	7,831	15,605	8,669	49	421
2.63	.....	.....	9.78	.....	13,708	7,616	14,078	7,821	15,604	8,669	71	422
1.52	17.04	71.96	11.00	.90	13,637	7,576	13,847	7,693	15,558	8,643	9	423
1.69	16.95	72.32	10.73	.99	13,661	7,589	13,896	7,720	15,566	8,648	20	424
1.33	17.17	73.22	9.61	.89	13,892	7,718	14,079	7,822	15,576	8,653	7	425
2.47	20.36	72.93	6.71	1.31	14,284	7,936	14,646	8,137	15,699	8,722	11	426
2.43	21.41	72.62	5.97	1.22	14,399	7,999	14,758	8,199	15,695	8,719	44	427
2.84	16.65	74.57	8.78	.92	13,869	7,705	14,274	7,930	15,648	8,693	98	428
3.07	19.40	70.05	10.55	2.31	13,468	7,482	13,895	7,719	15,534	8,630	41	429
2.57	17.21	72.49	10.30	1.68	13,651	7,584	14,011	7,784	15,620	8,678	9	430
2.08	18.07	71.26	10.67	1.07	13,695	7,608	13,986	7,770	15,657	8,698	4	431
2.00	20.17	72.39	7.44	1.76	14,191	7,884	14,481	8,045	15,645	8,692	12	432
3.12	17.24	74.48	8.28	1.99	13,811	7,673	14,256	7,920	15,543	8,635	24	433
2.21	.....	.....	9.51	.....	13,884	7,713	14,198	7,888	15,690	8,717	13	434
2.84	.....	.....	9.22	.....	13,816	7,676	14,220	7,900	15,664	8,702	79	435
2.82	.....	.....	9.94	.....	13,662	7,590	14,058	7,810	15,610	8,672	63	436
2.04	17.64	72.28	10.08	1.37	13,740	7,633	14,026	7,792	15,598	8,666	17	437
2.22	17.72	72.19	10.09	1.38	13,716	7,620	14,027	7,793	15,601	8,667	28	438
1.94	17.98	74.15	7.87	.80	14,133	7,852	14,413	8,007	15,644	8,691	8	439
2.26	18.15	71.85	10.00	1.44	13,710	7,617	14,027	7,793	15,586	8,659	46	440
2.51	17.59	72.07	10.34	1.59	13,622	7,567	13,973	7,764	15,584	8,658	24	441
2.12	17.62	71.87	10.51	1.47	13,661	7,589	13,957	7,755	15,596	8,664	28	442
1.82	17.61	72.15	10.24	1.38	13,712	7,618	13,966	7,759	15,559	8,644	20	443
1.57	17.80	71.40	10.80	1.48	13,685	7,603	13,903	7,724	15,586	8,659	3	444
2.11	18.00	71.32	10.68	1.68	13,617	7,565	13,911	7,728	15,574	8,652	14	445
1.52	17.86	71.69	10.45	1.62	13,721	7,623	13,933	7,741	15,559	8,644	14	446
1.99	18.13	71.66	10.21	1.56	13,718	7,621	13,997	7,776	15,589	8,661	24	447
2.39	18.01	71.90	10.09	1.59	13,649	7,583	13,983	7,768	15,552	8,640	18	448
1.89	17.36	72.56	10.08	1.57	13,706	7,614	13,970	7,761	15,536	8,631	23	449
2.42	17.76	72.12	10.12	1.67	13,608	7,560	13,945	7,747	15,515	8,619	24	450
1.60	17.02	72.45	10.53	1.36	13,678	7,599	13,900	7,722	15,536	8,631	14	451
2.11	17.52	72.82	9.66	1.51	13,748	7,638	14,044	7,802	15,546	8,637	14	452
1.55	17.33	72.67	10.00	1.46	13,761	7,645	13,978	7,766	15,531	8,628	8	453
3.52	15.43	75.89	8.68	.92	13,773	7,652	14,275	7,931	15,632	8,684	12	454
3.05	16.17	72.58	11.25	1.93	13,398	7,443	13,820	7,678	15,572	8,651	3	455
2.66	17.78	70.79	11.43	2.02	13,391	7,439	13,757	7,643	15,532	8,629	10	456
2.04	18.52	71.62	9.86	1.74	13,736	7,631	14,022	7,790	15,556	8,642	92	457
2.95	16.62	72.18	11.20	2.01	13,390	7,439	13,797	7,665	15,537	8,632	6	458
2.75	18.53	70.15	11.32	2.18	13,365	7,425	13,743	7,635	15,497	8,609	30	459
3.22	18.08	69.52	12.40	2.34	13,072	7,262	13,507	7,504	15,419	8,566	16	460
3.23	18.46	69.96	11.58	2.13	13,198	7,332	13,639	7,577	15,425	8,569	43	461
3.15	17.89	70.49	11.62	2.26	13,204	7,336	13,633	7,574	15,425	8,569	49	462
2.77	17.99	70.18	11.83	2.24	13,184	7,324	13,560	7,533	15,379	8,544	16	463
2.57	17.49	71.39	11.12	1.61	13,469	7,483	13,824	7,680	15,554	8,641	51	464

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons deliv- ered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
PENNSYLVANIA— Continued.					
WASHINGTON COUNTY.					
Baird and Hazel Kirk. California.....	Schoenberger and Hazel Kirk. Crescent.....	Pittsburgh.... .....do.....	Youghiogheny.... .....do.....	Lump..... Through 1½-inch screen.	450 1,064
Hazel Kirk..... West Brownsville.	Hazel Kirk..... Diamond.....	.....do..... .....do.....	.....do..... Pittsburgh.....	Screenings..... Lump, over 2½- inch screen.	8,597 446
Do.....	.....do.....	.....do.....	.....do.....	.....do.....	376
WASHINGTON AND ALLEGHENY COUNTIES.					
Monongahela and Gallatin.	Black Diamond and Sunnyside.	Pittsburgh....	Youghiogheny....	Lump, over 2- inch screen.	18,382
WESTMORELAND COUNTY.					
Adamsburg.....	Edna.....	Pittsburgh....	Youghiogheny....	Through 1½-inch screen.	1,008
Seward..... Webster.....	Ninevah..... Budd.....	B or Miller.... Pittsburgh.... .....do..... .....do.....	Ninevah..... Youghiogheny.... .....do..... .....do.....	Run of mine..... Lump..... Run of mine..... Lump, over 2-inch screen.	3,154 1,004 790 3,480
.....	.....	.....do..... .....do.....	.....do..... .....do.....	Lump..... Lump, over 1½- inch screen.	262 292
.....	.....	.....do.....	.....do.....	Lump.....	641
.....	.....	.....do.....	.....do.....	.....do.....	636
.....	.....	.....do.....	.....do.....	Screenings.....	707
Wyano.....	Osborne.....	.....do..... .....do..... .....do..... .....do..... .....do..... .....do..... .....do..... .....do.....	.....do..... .....do..... .....do..... .....do..... .....do..... .....do..... .....do..... .....do.....	.....do..... .....do..... .....do..... .....do..... .....do..... .....do..... .....do..... .....do.....	1,173 449 8,101 927 415 1,146 914 1,026
TENNESSEE.					
ANDERSON COUNTY.					
Brieville.....	Crass Mountain...	Coal Creek....	Crass Mountain...	Run of mine.....	1,715
CAMPBELL COUNTY.					
Caryville.....	Bear Wallow.....	Coal Creek....	Bear Wallow.....	Run of mine.....	5,040
CLAIBORNE COUNTY.					
Clairfield.....	King Mountain...	Jellico.....		Run of mine.....	2,623
MORGAN COUNTY.					
Coalfield.....	Baker.....	Coal Creek....	Round Mountain..	Run of mine.....	3,473
SEQUATCHIE COUNTY.					
Dunlap.....	Dunlap.....	Sewanee.....	Dunlap.....	Run of mine.....	4,364

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
1.82	36.18	57.12	6.70	1.26	13,996	7,776	14,255	7,919	15,279	8,488	8	465
4.54	33.40	54.71	11.89	1.47	12,562	6,979	13,159	7,311	14,935	8,297	10	466
7.49	32.87	56.87	10.26	2.51	12,378	6,877	13,380	7,433	14,910	8,283	33	467
3.14	33.93	57.29	8.78	1.05	13,452	7,473	13,888	7,716	15,225	8,458	8	468
2.08	34.95	54.77	10.28	.94	13,369	7,427	13,653	7,585	15,217	8,454	7	469
2.20	35.69	56.35	7.96	1.02	13,657	7,587	13,964	7,758	15,172	8,429	19	470
4.39	34.53	55.68	9.79	1.84	13,016	7,231	13,614	7,563	15,091	8,384	11	471
2.15	23.19	69.17	7.64	1.82	14,100	7,833	14,410	8,006	15,602	8,668	30	472
2.10	35.77	56.02	8.21	1.76	13,665	7,592	13,948	7,749	15,196	8,442	6	473
2.98	35.20	57.35	7.45	1.35	13,539	7,522	13,955	7,753	15,078	8,377	10	474
1.89	34.85	60.01	5.14	.93	14,248	7,916	14,522	8,068	15,309	8,505	17	475
2.15	35.96	56.82	7.22	1.63	13,753	7,611	14,055	7,808	15,149	8,416	9	476
1.83	35.76	55.48	8.76	.76	13,618	7,566	13,872	7,707	15,204	8,447	4	477
2.70	36.20	56.02	7.78	1.55	13,535	7,519	13,911	7,728	15,085	8,381	11	478
1.84	36.51	58.16	5.33	.75	14,179	7,877	14,445	8,025	15,258	8,477	17	479
1.98	36.54	56.88	6.58	.89	13,964	7,758	14,246	7,914	15,249	8,472	10	480
5.58	33.55	55.57	10.88	1.33	12,533	6,963	13,274	7,374	14,895	8,275	22	481
4.33	34.42	55.87	9.71	1.37	12,988	7,216	13,576	7,542	15,036	8,353	6	482
4.55	33.52	54.88	11.60	1.49	12,637	7,021	13,239	7,356	14,976	8,320	29	483
4.54	34.65	55.20	10.15	1.70	12,906	7,170	13,520	7,511	15,047	8,359	10	484
4.33	34.56	57.06	8.38	.92	13,228	7,349	13,827	7,682	15,092	8,384	7	485
4.89	31.43	57.96	10.61	1.46	12,839	7,133	13,499	7,499	15,101	8,389	11	486
4.44	33.50	57.83	8.67	1.44	13,251	7,362	13,867	7,704	15,183	8,435	18	487
5.19	36.20	54.75	9.05	1.04	12,851	7,139	13,554	7,530	14,903	8,279	11	488
2.20	36.33	55.25	8.42	1.19	13,609	7,561	13,915	7,731	15,194	8,441	7	489
2.01	36.37	56.16	7.47	.91	13,671	7,595	13,951	7,751	15,077	8,376	13	490
2.00	35.40	50.86	13.74	1.99	12,674	7,041	12,933	7,185	14,993	8,329	7	491
1.98	37.81	50.80	11.39	3.37	13,179	7,322	13,445	7,469	15,173	8,429	21	492
2.05	30.96	58.91	10.13	1.26	13,472	7,484	13,754	7,641	15,304	8,502	39	493

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
TEXAS.					
MAVERICK COUNTY.					
Eagle Pass.....	International.....	Eagle Pass....	Eagle Pass.....	Lump.....	4,600
WEBB COUNTY.					
Cannel and San Jose.	Cannel, San Jose, and No. 3.	San Pedro.....	Cannel.....	Run of mine.....	462
UTAH.					
CARBON COUNTY.					
Black Hawk.....	Black Hawk.....	Book Cliff.....	Black Hawk.....	Lump.....	1,300
Castle Gate.....	Castle Gate.....	Castle Gate....	Castle Gate.....	Lump, over 4½-inch round-hole screen.	3,750
Hiawatha.....	Hiawatha.....	Book Cliff.....	Hiawatha.....	Lump.....	300
Kenilworth.....	.....	Aberdeen.....	Aberdeen.....	Lump, over 4-inch shaking screen.	939
EMERY COUNTY.					
Mohrland.....	Mohrland.....	Book Cliff.....	King.....	Lump, over 3-inch round-hole screen.	3,510
VIRGINIA.					
RUSSELL COUNTY.					
Dante.....	Nos. 2 and 5.....	Upper Banner.	Clinchfield.....	Run of mine.....	183
RUSSELL AND WISE COUNTIES.					
Dante and Wilder.	Nos. 2, 5, 6, 52, and 55.	Upper and Lower Banner.	Clinchfield.....	Run of mine (steam).	1,220
Dante, Slemph, and Toms Creeks.	.....	.....do.....	.....do.....	Run of mine.....	4,466
.....	.....	.....	.....do.....	.....do.....	1,497
.....	.....	.....	.....do.....	.....do.....	1,289
.....	.....	.....	.....do.....	.....do.....	1,528
.....	.....	.....	.....do.....	.....do.....	11,803
.....	.....	.....	.....do.....	.....do.....	10,011
.....	.....	.....	.....do.....	.....do.....	2,273
.....	.....	.....	.....do.....	Stofer.....	3,418
.....	.....	.....	.....do.....	Sized steam.....	6,239
TAZEWELL COUNTY.					
Pocahontas.....	Big Vein, Nos. 1 and 2.	Pocahontas, No. 3.	Pocahontas.....	Run of mine.....	13,668
Do.....	.....do.....	.....do.....	.....do.....	.....do.....	1,834
Do.....	.....do.....	.....do.....	.....do.....	.....do.....	15,573

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
7.10	37.73	47.02	15.25	1.00	11,323	6,291	12,188	6,771	14,381	7,989	33	494
4.45	42.54	36.88	20.58	2.87	10,889	6,049	11,396	6,331	14,349	7,972	10	495
4.57 3.83	46.76 43.50	46.88 50.68	6.36 5.82	.61 .52	12,985 13,048	7,214 7,249	13,607 13,568	7,559 7,538	14,531 14,406	8,073 8,003	12 28	496 497
5.13 4.94	45.17 42.39	48.96 51.32	5.87 6.29	.65 .58	12,959 12,686	7,199 7,048	13,660 13,345	7,589 7,414	14,512 14,241	8,062 7,912	3 8	498 499
4.65	45.53	48.21	6.26	.64	13,011	7,228	13,646	7,581	14,557	8,087	35	500
2.65	35.50	57.45	7.05	.68	14,073	7,818	14,456	8,031	15,552	8,640	4	501
2.22	36.94	54.41	8.65	.70	13,697	7,609	14,008	7,782	15,334	8,519	14	502
2.04	36.72	55.08	8.20	.56	13,799	7,666	14,086	7,826	15,344	8,524	23	503
2.03	34.51	55.67	9.82	.70	13,579	7,544	13,860	7,700	15,369	8,538	29	504
1.75	34.17	58.22	7.61	.64	13,997	7,776	14,246	7,914	15,419	8,566	23	505
2.38	34.55	55.82	9.63	.72	13,566	7,537	13,897	7,721	15,378	8,543	13	506
2.43	35.22	56.21	8.57	.63	13,692	7,607	14,033	7,796	15,348	8,527	42	507
1.47	36.23	56.53	7.24	.57	14,093	7,829	14,303	7,946	15,419	8,566	16	508
1.57	35.87	56.21	7.92	.57	13,947	7,748	14,169	7,872	15,388	8,549	12	509
1.64	36.29	54.91	8.80	.59	13,813	7,674	14,043	7,802	15,398	8,554	32	510
2.43	36.15	52.11	11.74	.64	13,154	7,308	13,482	7,490	15,275	8,487	32	511
3.03	20.93	73.66	5.41	.68	14,479	8,044	14,931	8,295	15,785	8,769	160	512
1.49	20.19	73.91	5.90	.72	14,581	8,101	14,802	8,223	15,730	8,739	8	513
3.12	20.08	74.94	4.98	.67	14,557	8,087	15,026	8,348	15,814	8,786	207	514

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
WASHINGTON.					
KING COUNTY.					
Black Diamond	Black Diamond	McKay	Black Diamond	Run of mine	1,888
Do	do	do	do	do	1,576
Coal Creek	Newcastle	No. 4	Newcastle	Lump, over 2-inch screen.	2,425
Do	do	do	do	do	2,664
Do	do	do	do	do	1,783
Do	do	do	do	do	1,471
Do	do	do	do	Lump, over 2-inch shaking screen.	995
Do	do	do	do	do	1,000
KITTITAS COUNTY.					
Roslyn	Beekman	Roslyn	Roslyn	Lump, over 1½-inch screen.	3,444
Do	do	do	do	Steam	281
Do	do	do	do	do	3,095
Do	do	do	do	do	2,281
Do	Patrick-MacKay	do	Roslyn-Cascade	Lump	2,369
Do	do	do	do	do	3,255
Do	do	do	do	do	1,055
Do	do	do	do	Steam	729
Do	do	do	do	Run of mine	668
Do	Roslyn-Cascade ^a	do	do	do	796
Do	do	do	do	Lump, over 2-inch bar screen.	895
Do	Roslyn	Roslyn	Roslyn-Cascade	Lump	737
Do	do	do	do	Washed steam	3,029
PIERCE COUNTY.					
Burnett	Burnett	Nos. 1, 2, and 3	South Prairie	Lump	799
Do	do	do	do	do	1,050
Do	do	do	do	Lump, over 2-inch bar screen.	1,757
Do	do	do	do	Washed steam	666
Do	do	do	do	do	933
Do	do	do	do	Run of mine	537
Do	do	do	do	do	147
Do	do	do	do	do	536
Do	do	do	do	do	339
Do	do	do	do	do	8,343
Carbonado	Carbonado	Wingate	Carbonado	Washed steam	639
Do	do	do	do	do	4,568
Do	do	do	do	do	8,880
Do	do	do	do	do	2,479
Do	do	do	do	Lump, over 1½-inch bar screen.	1,230
Do	do	do	do	do	1,091
Wilkeson	Carbon Hill	do	do	Lump	798
Do	Gale Creek	Queen	Gale Creek	Steam	592
Do	do	do	do	do	895
Do	do	do	do	Washed through 24-inch round-hole shaking screen.	895
Do	do	do	do	do	895

^a Formerly known as Patrick-MacKay.

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
6.73	40.57	48.18	11.25	1.10	11,761	6,534	12,610	7,006	14,208	7,893	23	515
5.68	40.73	49.67	9.60	1.09	12,233	6,796	12,970	7,206	14,347	7,971	18	516
12.83	42.81	43.82	13.37	.70	10,285	5,714	11,799	6,555	13,620	7,567	34	517
12.26	42.31	43.11	14.58	.81	10,221	5,678	11,649	6,472	13,637	7,576	26	518
12.31	43.92	45.92	10.16	.72	10,785	5,992	12,289	6,833	13,690	7,606	27	519
11.88	42.26	43.54	14.20	.64	10,317	5,732	11,708	6,504	13,646	7,581	12	520
12.25	43.85	43.75	12.40	.58	10,489	5,827	11,953	6,641	13,645	7,581	4	521
12.15	42.35	44.59	13.06	.66	10,422	5,790	11,863	6,591	13,645	7,581	10	522
3.77	37.50	46.07	16.43	.31	12,040	6,689	12,512	6,951	14,972	8,318	32	523
4.56	36.73	48.26	15.01	.42	12,239	6,799	12,824	7,124	15,089	8,383	8	524
3.95	37.69	46.70	15.61	.39	12,233	6,796	12,736	7,076	15,092	8,384	9	525
3.59	38.36	47.18	14.46	.37	12,447	6,915	12,910	7,172	15,092	8,384	11	526
3.64	38.24	47.15	14.61	.36	12,297	6,832	12,762	7,090	14,946	8,303	20	527
3.63	38.06	47.34	14.60	.39	12,306	6,837	12,770	7,094	14,953	8,307	53	528
3.25	39.03	46.67	14.30	.41	12,421	6,901	12,838	7,132	14,980	8,322	6	529
4.61	38.73	47.00	14.27	.41	12,316	6,842	12,911	7,173	15,060	8,367	6	530
3.13	37.59	46.25	16.16	.38	12,135	6,742	12,527	6,959	14,942	8,301	9	531
4.28	37.55	47.83	14.62	.41	12,257	6,809	12,805	7,114	14,998	8,332	4	532
2.96	38.52	46.60	14.88	.37	12,379	6,877	12,757	7,087	14,987	8,326	9	533
2.59	40.76	45.35	13.89	.38	12,440	6,911	12,771	7,095	14,831	8,239	8	534
4.83	39.35	49.73	10.92	.41	12,878	7,154	13,532	7,518	15,191	8,439	18	535
2.97	41.07	49.18	9.75	.73	12,978	7,210	13,375	7,431	14,820	8,233	11	536
2.44	39.54	46.68	13.78	1.03	12,617	7,009	12,933	7,185	15,000	8,333	10	537
2.66	40.34	46.59	13.07	.93	12,599	6,999	12,943	7,191	14,889	8,272	16	538
5.02	38.84	48.30	12.86	.87	12,427	6,904	13,084	7,269	15,015	8,342	10	539
4.47	38.39	48.00	13.61	1.07	12,392	6,884	12,972	7,207	15,016	8,342	6	540
2.93	38.82	49.92	11.26	.79	12,860	7,144	13,248	7,360	14,929	8,294	12	541
3.67	39.30	48.73	11.97	.88	12,732	7,073	13,217	7,343	15,014	8,341	3	542
3.32	39.49	46.92	13.59	.62	12,497	6,943	12,926	7,181	14,959	8,311	7	543
5.67	40.13	46.40	13.47	.97	12,212	6,784	12,946	7,192	14,961	8,312	3	544
2.29	38.43	46.84	14.73	1.09	12,498	6,943	12,791	7,106	15,001	8,334	10	545
4.26	37.87	52.17	9.96	.69	12,914	7,174	13,489	7,494	14,981	8,323	12	546
4.60	36.85	51.83	11.32	.65	12,642	7,023	13,252	7,362	14,944	8,302	34	547
5.27	36.49	50.43	13.08	.65	12,341	6,856	13,028	7,238	14,989	8,327	43	548
5.12	37.52	49.16	13.32	.58	12,237	6,798	12,897	7,165	14,879	8,266	19	549
2.57	40.62	50.65	8.73	.56	13,298	7,388	13,649	7,583	14,955	8,308	14	550
3.18	40.00	50.33	9.67	.72	13,076	7,264	13,505	7,503	14,951	8,306	12	551
2.60	36.13	52.48	11.39	.85	13,333	7,407	13,689	7,605	15,449	8,583	12	552
5.56	36.15	51.38	12.47	.88	12,689	7,049	13,436	7,464	15,350	8,528	13	553
2.80	35.41	53.26	11.23	.93	13,264	7,369	13,646	7,581	15,372	8,540	13	554
3.85	36.25	52.05	11.70	.85	13,091	7,273	13,615	7,564	15,419	8,566	4	555

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
WEST VIRGINIA.					
FAYETTE COUNTY.					
Cannelton.....	Cannelton.....	.....	.....	Run of mine.....	1,974
Dubree and Sun..	Rothwell and Sun.	Sewell.....	New River.....	do.....	5,150
Do.....	do.....	do.....	do.....	Nut and slack.....	2,178
Do.....	do.....	do.....	do.....	Run of mine.....	2,455
Do.....	do.....	do.....	do.....	do.....	20
Dun Loop, Prudence, and Scarborough.	Dun Loop, Prudence, and Scarborough.	.....	.....	do.....	1,007
Elk Ridge.....	Elk Ridge.....	Powelton.....	Kanawha gas.....	do.....	1,552
Do.....	do.....	do.....	do.....	do.....	197
Elk Ridge, Milburn, and Eagle.	Elk Ridge, Milburn, and St. Clair.	Powelton and No. 5.	Cando gas.....	do.....	25,600
Harewood.....	Harewood.....	No. 2, gas.....	No. 2, gas.....	do.....	178
Do.....	do.....	do.....	do.....	do.....	1,461
Layland and Minden.	Layland and Minden.	Fire Creek and Sewell.	New River.....	do.....	1,077
Do.....	do.....	do.....	do.....	do.....	5,691
Do.....	do.....	do.....	do.....	do.....	105
Do.....	do.....	do.....	do.....	do.....	265
Long Branch.....	Long Branch.....	No. 2, gas.....	Long Branch.....	do.....	2,339
McDonald and Glen Jean.	McDonald and Collins.	Sewell.....	New River smokeless.	do.....	7,017
Milburn.....	Milburn.....	Eagle.....	Milburn gas.....	do.....	13,632
Minden.....	Minden.....	Sewell.....	New River.....	do.....	193
Prudence.....	Prudence.....	do.....	do.....	do.....	2,312
Do.....	do.....	do.....	do.....	do.....	4,850
Do.....	do.....	do.....	do.....	do.....	1,645
Do.....	do.....	do.....	do.....	do.....	369
Do.....	do.....	do.....	do.....	do.....	3,020
Do.....	do.....	do.....	do.....	do.....	7,804
Red Star.....	Star.....	do.....	do.....	do.....	5,700
Do.....	do.....	do.....	do.....	do.....	9,300
Do.....	do.....	do.....	do.....	do.....	3,214
Do.....	do.....	do.....	do.....	do.....	12,198
Do.....	do.....	do.....	do.....	do.....	6,400
Do.....	do.....	do.....	do.....	do.....	3,011
Smithers.....	Oakland.....	Eagle, Nos. 1 and 2.	Richwood.....	do.....	1,189
Do.....	do.....	do.....	do.....	do.....	1,971
Do.....	do.....	do.....	do.....	do.....	216
Do.....	do.....	do.....	do.....	do.....	1,793
Do.....	do.....	do.....	do.....	do.....	1,641
HARRISON COUNTY.					
Mount Clare.....	Hutchinson.....	Pittsburgh.....	.....	Lump.....	171
Do.....	do.....	do.....	.....	Nut, pea, and slack	988
Wilsonburg.....	Miller.....	do.....	Fairmont.....	Lump, over ¾-inch screen.	1,347
KANAWHA COUNTY					
Acme, Decota, and Kayford.	Various mines.....	No. 2, gas and Coalburg.	Acme splint.....	Nut, pea, and slack	9,898
Carbondale.....	No. 112.....	No. 2, gas.....	Smithers Creek gas.	Lump, over ¾-inch screen.	2,451
Decota.....	North Cabin.....	do.....	Kanawha, No. 2, gas.	Run of mine.....	463
Kayford, Lee-wood, and Wewaco.	Kayford, Thistle, Holly, United, and Raccoon.	No. 2, gas and Coalburg.	Cabin Creek gas.....	do.....	19,929
Do.....	do.....	do.....	do.....	do.....	1,227
Do.....	do.....	do.....	do.....	do.....	21,311

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
4.62	34.12	56.28	9.60	1.40	13,028	7,238	13,659	7,588	15,110	8,394	21	556
2.56	-----	-----	6.32	-----	14,240	7,911	14,614	8,119	15,600	8,667	68	557
2.84	-----	-----	6.90	-----	14,146	7,859	14,559	8,088	15,638	8,688	30	558
2.24	21.35	72.19	6.46	.95	14,293	7,941	14,620	8,122	15,630	8,683	19	559
1.50	21.23	72.07	6.70	1.14	14,317	7,954	14,535	8,075	15,579	8,655	3	560
2.04	18.14	75.70	6.16	.72	14,408	8,004	14,708	8,171	15,673	8,707	18	561
3.18	31.57	61.36	7.07	.95	13,849	7,694	14,304	7,947	15,392	8,551	12	562
3.19	31.21	61.91	6.88	1.01	13,848	7,693	14,304	7,947	15,361	8,534	10	563
2.55	32.49	59.33	8.18	.88	13,702	7,612	14,061	7,812	15,314	8,508	146	564
2.96	34.29	58.72	6.99	1.29	13,811	7,673	14,232	7,907	15,302	8,501	12	565
3.01	33.70	59.29	7.01	1.36	13,845	7,692	14,275	7,931	15,351	8,528	19	566
3.96	20.74	72.93	6.33	.79	14,026	7,792	14,604	8,113	15,591	8,662	12	567
1.32	23.73	70.99	5.28	.92	14,577	8,098	14,772	8,207	15,595	8,664	7	568
4.53	21.30	73.03	5.67	.72	14,034	7,797	14,700	8,167	15,584	8,658	3	569
1.35	20.35	72.87	6.78	.84	14,352	7,973	14,548	8,082	15,606	8,670	6	570
2.88	27.43	65.77	6.80	.87	14,067	7,815	14,484	8,047	15,541	8,634	16	571
3.81	19.90	72.92	7.18	.89	13,902	7,723	14,453	8,029	15,571	8,651	22	572
2.39	32.84	60.74	6.42	.96	14,023	7,791	14,366	7,981	15,352	8,529	33	573
2.64	21.86	72.00	6.14	.91	14,162	7,868	14,546	8,081	15,498	8,610	5	574
1.97	22.84	70.85	6.31	.92	14,351	7,973	14,639	8,133	15,625	8,681	11	575
2.63	24.30	69.03	6.67	.99	14,182	7,879	14,565	8,092	15,606	8,670	23	576
2.31	23.66	68.90	7.44	1.11	14,098	7,832	14,431	8,017	15,591	8,662	14	577
2.27	23.38	69.22	7.40	1.10	14,132	7,851	14,460	8,033	15,616	8,676	10	578
1.23	23.96	69.97	6.07	1.09	14,459	8,033	14,646	8,137	15,592	8,662	16	579
2.23	24.02	69.11	6.87	1.02	14,212	7,896	14,536	8,076	15,608	8,671	31	580
2.02	24.53	69.85	5.62	.78	14,431	8,017	14,729	8,183	15,606	8,670	33	581
1.75	24.88	69.18	5.94	.79	14,404	8,002	14,661	8,145	15,587	8,659	34	582
2.09	24.24	69.74	6.02	.85	14,356	7,976	14,662	8,146	15,601	8,667	17	583
2.05	24.35	70.12	5.53	.86	14,401	8,001	14,702	8,168	15,563	8,646	49	584
2.29	24.16	70.38	5.46	.91	14,391	7,985	14,728	8,182	15,579	8,655	26	585
2.12	23.79	70.27	5.94	.92	14,318	7,954	14,628	8,127	15,552	8,640	17	586
3.66	-----	-----	9.07	-----	13,440	7,467	13,951	7,751	15,343	8,524	12	587
2.46	31.50	59.27	9.23	1.24	13,551	7,528	13,893	7,718	15,306	8,503	23	588
2.95	30.32	60.38	9.30	1.14	13,499	7,499	13,909	7,727	15,335	8,519	13	589
3.28	34.81	56.13	9.06	1.35	13,377	7,432	13,831	7,684	15,209	8,449	20	590
2.40	34.41	56.62	8.97	1.34	13,522	7,512	13,854	7,697	15,219	8,455	19	591
1.68	39.53	53.74	6.73	1.81	13,963	7,757	14,202	7,890	15,227	8,459	4	592
3.51	35.17	52.79	12.04	.76	12,739	7,077	13,202	7,334	15,009	8,338	23	593
2.77	42.02	49.90	8.08	3.46	13,447	7,471	13,830	7,683	15,046	8,359	25	594
3.23	33.12	55.89	10.99	.79	13,064	7,258	13,500	7,500	15,167	8,426	24	595
1.63	36.80	57.41	5.79	1.05	14,206	7,892	14,441	8,023	15,329	8,516	27	596
2.92	34.41	56.91	8.68	1.92	13,526	7,515	13,933	7,741	15,257	8,476	13	597
1.95	34.41	56.35	9.24	1.40	13,576	7,542	13,846	7,692	15,256	8,476	61	598
1.67	35.21	55.96	8.83	1.52	13,689	7,605	13,921	7,734	15,269	8,483	10	599
1.88	33.95	57.03	9.02	1.42	13,603	7,557	13,864	7,702	15,239	8,466	25	600

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
WEST VIRGINIA—Continued.					
KANAWHA COUNTY—continued.					
Laing and Giles...	Berlin and Oakley.	No. 2, gas and Lewiston.	Kanawha gas. . . .	Run of mine. . . .	1, 378
Do.	do.	do.	do.	do.	162
Laing.	Berlin.	No. 2, gas. . . .	Kanawha, No. 2, gas.	do.	23, 540
Do.	do.	do.	do.	do.	947
Queen Shoals. . . .	Queen Shoals. . . .	No. 5.	Queen Shoals. . . .	Nut, pea, and slack	4, 014
Sharon.	Horton.	Coalburg.	Kanawha.	do.	7, 384
MCDOWELL COUNTY.					
Davy.	do.	Sewell ("Davy").	Pocahontas.	Run of mine. . . .	1, 807
Do.	do.	do.	do.	do.	1, 330
Do.	do.	do.	do.	do.	901
Do.	do.	do.	do.	do.	4, 260
Do.	do.	do.	do.	do.	3, 230
Do.	do.	do.	do.	do.	2, 875
Do.	do.	do.	do.	do.	1, 683
Do.	do.	do.	do.	do.	1, 444
Elkhorn.	Crozer.	Pocahontas, No. 3.	do.	do.	1, 186
Hemphill.	Oregon.	Welch.	do.	do.	1, 760
Jed.	Jed.	Pocahontas, No. 3.	do.	do.	654
Jed and Leckie. . . .	Jed and Leckie. . . .	do.	do.	do.	2, 540
Landgraf.	Empire.	do.	do.	do.	1, 018
Leckie.	Leckie.	do.	do.	do.	2, 139
Maybeury.	Norfolk and Shamokin.	do.	do.	do.	1, 181
Do.	do.	do.	do.	do.	1, 069
Do.	do.	do.	do.	do.	282
Welch.	Pocahontas smokeless.	Welch.	do.	do.	18, 143
do.	do.	Pocahontas, No. 3.	do.	do.	2, 408
do.	do.	do.	do.	do.	2, 387
do.	do.	do.	do.	do.	619
do.	do.	do.	do.	do.	336
MARION COUNTY.					
do.	Consolidation. . . .	Pittsburgh. . . .	Fairmont, gas. . . .	Run of mine. . . .	8, 907
do.	do.	do.	do.	Lump, over 1½-inch screen.	3, 356
MERCER COUNTY.					
McComas.	Pinnacle and Crane Creek.	Pocahontas, No. 3.	Pocahontas.	Lump, over 1½-inch screen.	2, 137
Springton.	Spring.	do.	do.	do.	545
MINERAL COUNTY.					
Blaine.	Blaine.	B or Lower Kittanning.	Blaine.	Lump, over 1½-inch screen.	1, 421
Do.	do.	do.	do.	do.	1, 980
Do.	do.	do.	do.	do.	1, 260
Keyser.	New Creek.	do.	Peerless.	Slack.	1, 260
MINGO COUNTY.					
Chatтары.	Buffalo.	Winifrede.	Buffalo white ash.	Nut, pea, and slack	6, 036

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
2.84	33.18	59.45	7.37	1.71	13,858	7,699	14,263	7,924	15,398	8,554	16	601
3.14	33.88	57.16	8.96	2.44	13,422	7,457	13,857	7,698	15,221	8,456	4	602
2.71	35.21	56.12	8.67	1.68	13,574	7,541	13,952	7,751	15,276	8,487	96	603
2.39	36.03	55.70	8.27	1.57	13,653	7,585	13,987	7,771	15,248	8,471	15	604
3.53	33.61	55.44	10.95	1.27	13,000	7,222	13,476	7,487	15,133	8,407	31	605
4.27	34.35	53.61	12.04	1.08	12,611	7,006	13,174	7,319	14,977	8,321	30	606
3.64	19.37	73.23	7.40	.73	13,943	7,746	14,470	8,039	15,626	8,681	64	607
3.62	19.52	73.24	7.24	.67	13,948	7,749	14,472	8,040	15,602	8,668	11	608
3.61	19.66	73.36	6.98	.68	14,028	7,793	14,553	8,085	15,645	8,692	35	609
2.10	18.35	74.57	7.08	.62	14,239	7,911	14,544	8,080	15,652	8,696	10	610
1.74	19.07	74.57	6.36	.59	14,459	8,033	14,715	8,175	15,714	8,730	17	611
2.17	19.27	75.56	5.17	.63	14,580	8,100	14,903	8,279	15,715	8,731	47	612
4.01	18.66	74.32	7.02	.59	13,957	7,754	14,540	8,078	15,638	8,688	10	613
2.99	17.65	75.97	6.38	.64	14,192	7,884	14,629	8,127	15,626	8,681	14	614
1.91	19.15	74.67	6.18	.72	14,463	8,035	14,745	8,192	15,716	8,731	9	615
2.36	19.01	73.44	7.55	.83	14,136	7,853*	14,478	8,043	15,660	8,700	23	616
5.12	19.16	74.00	6.84	.91	13,702	7,612	14,441	8,023	15,501	8,612	33	617
3.26	17.89	76.51	5.60	.78	14,348	7,971	14,831	8,239	15,711	8,728	26	618
2.87	17.74	75.48	6.78	.65	14,251	7,917	14,672	8,151	15,739	8,744	17	619
3.28	19.29	74.10	6.61	.68	14,172	7,873	14,653	8,141	15,690	8,717	18	620
4.39	18.83	73.93	7.24	1.03	13,912	7,729	14,551	8,084	15,687	8,715	82	621
2.66	19.81	73.21	6.98	.84	14,176	7,876	14,563	8,091	15,656	8,698	38	622
2.63	19.70	72.63	7.67	1.33	13,976	7,764	14,353	7,974	15,545	8,636	3	623
2.27	18.37	73.24	8.39	.83	13,987	7,771	14,312	7,951	15,623	8,679	176	624
2.86	19.87	74.41	5.72	.68	14,356	7,976	14,779	8,211	15,676	8,709	46	625
2.62	18.23	75.34	6.43	.63	14,278	7,932	14,662	8,146	15,670	8,706	24	626
2.44	17.93	75.89	6.18	.62	14,320	7,956	14,678	8,154	15,645	8,692	16	627
2.06	18.02	74.98	7.00	.66	14,258	7,921	14,558	8,088	15,654	8,697	5	628
2.37	37.06	54.67	8.27	1.35	13,547	7,526	13,876	7,709	15,127	8,404	19	629
1.95	37.31	55.87	6.82	.87	13,816	7,676	14,091	7,828	15,122	8,401	11	630
2.39	18.38	74.80	6.82	.66	14,292	7,940	14,642	8,134	15,714	8,730	22	6 1
3.45	17.71	75.03	7.26	.92	14,048	7,804	14,550	8,083	15,689	8,716	8	632
3.17	15.92	74.63	9.45	1.81	13,748	7,638	14,198	7,888	15,680	8,711	33	633
2.34	14.93	72.26	12.81	1.73	13,256	7,364	13,574	7,541	15,568	8,649	23	634
2.09	15.72	68.18	16.10	1.81	12,676	7,042	12,947	7,193	15,431	8,573	16	635
2.71	16.85	68.89	14.26	2.21	12,918	7,177	13,278	7,377	15,486	8,603	24	636
4.75	34.37	52.31	13.32	.99	12,315	6,842	12,929	7,183	14,916	8,287	39	637

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
WEST VIRGINIA—Continued.					
RALEIGH COUNTY.					
Glen White.....	Glen White.....	Beckley.....	New River.....	Run of mine.....	1,600
Do.....	do.....	do.....	do.....	do.....	4,646
Do.....	do.....	do.....	do.....	do.....	4,025
Do.....	do.....	do.....	do.....	do.....	10,599
Glen White (near).	Glen White and Affinity.	do.....	do.....	do.....	4,450
Do.....	Glen White and Stotesbury.	do.....	do.....	do.....	9,392
Do.....	Glen White, Gulf, Stotesbury, Pemberton, and Big Stick.	do.....	do.....	do.....	20,050
Sprague.....	Cranberry.....	Sewell.....	do.....	Crushed to pass through 2-inch screen.	20,869
Do.....	do.....	do.....	do.....	do.....	26,408
Stanaford.....	Piney.....	Sewell and Beckley.	do.....	Run of mine.....	2,061
Do.....	do.....	do.....	do.....	do.....	7,093
Do.....	do.....	do.....	do.....	do.....	2,001
Do.....	do.....	do.....	do.....	do.....	1,560
Do.....	do.....	do.....	do.....	do.....	2,270
Do.....	do.....	do.....	do.....	do.....	315
Do.....	(Various mines).....	do.....	do.....	do.....	1,375
RANDOLPH COUNTY.					
Weaver.....	Weaver.....	Lower Kittanning.	Beaver Creek.....	Run of mine.....	2,876
TUCKER COUNTY.					
Albert.....	Douglas.....	Lower Kittanning.	Douglas.....	Run of mine.....	904
Coketon.....	Davis.....	Upper Kittanning.	Davis.....	do.....	1,472
Thomas.....	Thomas mines.....	Freeport and Lower Kittanning.	Thomas.....	do.....	79,246
Do.....	No. 34 and Nos. 36 to 41.	Lower Kittanning.	Davis.....	do.....	15,280
Do.....	do.....	do.....	do.....	do.....	924
Do.....	No. 37.....	do.....	do.....	do.....	1,645
Do.....	do.....	do.....	do.....	do.....	2,579
RALEIGH AND FAYETTE COUNTIES.					
.....	(Various mines).....	.....	New River.....	Run of mine.....	10,712
.....	do.....	Sewell.....	do.....	do.....	379
.....	do.....	do.....	do.....	do.....	7,447
.....	do.....	do.....	do.....	do.....	1,577
.....	do.....	do.....	do.....	do.....	1,923
.....	do.....	Sewell and Beckley.	do.....	do.....	1,660
.....	do.....	Sewell.....	do.....	do.....	410
.....	do.....	do.....	do.....	do.....	1,684
.....	do.....	Sewell.....	do.....	do.....	1,426
.....	do.....	Sewell and Beckley.	do.....	do.....	9,887
.....	do.....	Sewell.....	do.....	do.....	1,082
.....	do.....	Sewell and Beckley.	do.....	do.....	9,372

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17			18	19
3.96	19.53	74.08	6.39	0.97	14,050	7,806	14,629	8,127	15,628	8,682	26	638
3.26	18.17	74.08	7.75	.63	13,967	7,759	14,438	8,021	15,651	8,695	36	639
3.00	18.01	74.98	7.01	.69	14,078	7,821	14,513	8,063	15,607	8,671	15	640
3.04	18.08	75.78	6.14	.84	14,241	7,912	14,688	8,160	15,649	8,694	46	641
3.07	17.55	75.34	7.11	.75	14,118	7,843	14,565	8,092	15,680	8,711	41	642
3.04	18.43	75.76	5.81	.69	14,258	7,921	14,705	8,169	15,612	8,673	47	643
2.46	18.46	74.75	6.79	.68	14,160	7,867	14,517	8,065	15,575	8,653	117	644
2.98	21.32	74.38	4.30	.73	14,585	8,103	15,033	8,352	15,708	8,727	51	645
2.55	22.26	72.72	5.02	.82	14,504	8,058	14,884	8,269	15,671	8,706	119	646
2.50	21.11	73.54	5.35	.76	14,532	8,073	14,905	8,281	15,747	8,749	20	647
2.68	20.17	73.52	6.34	.95	14,264	7,924	14,657	8,143	15,649	8,694	70	648
2.69	.....	.....	6.22	.....	14,302	7,946	14,697	8,165	15,672	8,707	44	649
2.50	19.94	73.50	6.53	.96	14,291	7,939	14,657	8,143	15,681	8,712	41	650
2.43	.....	.....	6.67	.....	14,269	7,927	14,624	8,124	15,669	8,705	23	651
2.09	21.61	72.45	5.94	.79	14,416	8,009	14,724	8,180	15,654	8,697	7	652
2.73	20.32	73.53	6.15	.68	14,255	7,919	14,655	8,142	15,615	8,675	21	653
1.81	28.77	58.72	12.51	1.20	13,030	7,239	13,270	7,372	15,167	8,426	13	654
2.87	.....	.....	7.51	.....	14,024	7,791	14,438	8,021	15,610	8,672	17	655
3.86	21.47	70.01	8.52	1.08	13,688	7,604	14,238	7,910	15,564	8,647	20	656
3.37	17.39	72.47	10.14	1.02	13,446	7,470	13,915	7,731	15,485	8,603	673	657
3.57	.....	.....	9.18	.....	13,666	7,592	14,172	7,873	15,604	8,669	90	658
4.09	23.70	67.06	9.24	1.18	13,543	7,524	14,121	7,845	15,559	8,644	27	659
3.18	22.07	70.06	7.87	1.04	13,925	7,736	14,382	7,990	15,611	8,673	60	660
2.77	24.29	66.52	9.19	1.10	13,747	7,637	14,139	7,855	15,570	8,650	67	661
2.92	22.09	72.48	5.43	.70	14,390	7,994	14,823	8,235	15,674	8,708	51	662
2.72	20.96	73.43	5.61	.89	14,381	7,989	14,783	8,213	15,662	8,701	16	663
2.77	21.44	72.68	5.88	.90	14,347	7,971	14,756	8,198	15,678	8,710	106	664
3.10	21.18	72.98	5.84	.84	14,285	7,936	14,742	8,190	15,656	8,698	37	665
2.80	20.55	72.93	6.52	.87	14,197	7,887	14,606	8,114	15,625	8,681	83	666
2.76	21.52	72.47	6.01	.76	14,291	7,939	14,697	8,165	15,637	8,687	32	667
3.19	20.64	73.60	5.76	.90	14,317	7,954	14,789	8,216	15,693	8,718	13	668
2.27	20.81	72.79	6.40	.89	14,301	7,945	14,633	8,129	15,634	8,686	27	669
3.16	21.74	71.69	6.57	.85	14,118	7,843	14,579	8,099	15,604	8,669	56	670
2.35	22.61	71.56	5.83	.82	14,357	7,976	14,703	8,168	15,613	8,674	36	671
2.99	21.13	72.39	6.48	.87	14,157	7,865	14,593	8,107	15,604	8,669	41	672
3.49	21.07	72.49	6.44	.90	14,097	7,832	14,607	8,115	15,612	8,673	40	673

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
WEST VIRGINIA—Continued.					
RALEIGH AND FAYETTE COUNTIES—continued.					
.....	(Various mines) ..	Sewell, Beckley, and Fire Creek.	New River	Run of mine.....	1, 162
.....	do	Sewell.....	do	Nut and slack.....	2, 000
.....	do	do	do	Run of mine.....	1, 439
.....	do	do	do	do	2, 816
.....	do	do	do	do	3, 859
.....	do	do	do	do	1, 767
.....	do	do	do	do	1, 800
.....	do	Sewell and Fire Creek.	do	do	2, 018
.....	do	Sewell.....	do	do	30, 624
.....	do	do	do	do	115, 871
.....	do	do	do	do	115, 439
.....	do	do	do	do	89, 431
.....	do	do	do	do	190, 975
.....	do	do	do	do	50, 113
.....	do	do	do	do	84, 990
.....	do	do	do	do	87, 333
WEST VIRGINIA AND VIRGINIA.					
M'DOWELL, MERCER, AND TAZEWELL COUNTIES.					
.....	(Various mines) ..	Pocahontas, No. 3.	Pocahontas	Run of mine.....	1, 306
.....	do	do	do	do	2, 410
.....	do	do	do	do	2, 107
.....	do	do	do	do	16, 153
.....	do	do	do	do	2, 497
.....	do	do	do	do	1, 585
.....	do	do	do	do	3, 270
.....	do	Pocahontas, No. 3, and Sewell.	do	do	20, 264
.....	do	do	do	do	2, 251
.....	do	do	do	Screenings.....	7, 204
.....	do	Pocahontas, No. 3.	do	Run of mine.....	2, 236
.....	do	do	do	do	1, 078
.....	do	do	do	do	10, 080
.....	do	do	do	do	181, 494
.....	do	do	do	do	407, 376
.....	do	do	do	do	38, 915
.....	do	do	do	do	66, 360
.....	do	do	do	do	223, 966
.....	do	do	do	do	266, 721
.....	do	do	do	do	328, 987
.....	do	do	do	do	322, 756
.....	do	do	do	do	169, 729
.....	do	Pocahontas, Nos. 3 and 4, and Sewell.	do	do	335, 402

Government during the fiscal years 1908-1915—Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
2.09	19.50	74.18	6.32	0.65	14,353	7,974	14,659	8,144	15,648	8,693	13	674
2.78	23.06	70.81	6.13	.93	14,246	7,914	14,653	8,141	15,610	8,672	16	675
2.24	22.10	71.79	6.11	1.00	14,362	7,973	14,691	8,162	15,647	8,693	8	676
1.93	22.75	71.36	5.89	.90	14,433	8,018	14,717	8,176	15,638	8,688	10	677
1.21	22.48	71.74	5.78	.95	14,543	8,079	14,721	8,178	15,624	8,680	16	678
2.43	22.33	71.56	6.11	.92	14,280	7,933	14,636	8,131	15,588	8,660	8	679
3.33	23.56	70.03	6.41	.76	14,049	7,805	14,533	8,074	15,528	8,627	9	680
2.08	22.32	71.36	6.32	.86	14,294	7,941	14,598	8,110	15,583	8,657	40	689
2.46	22.04	73.22	4.74	.84	14,529	8,072	14,895	8,275	15,636	8,687	135	682
2.77	.....	.....	4.84	.....	14,570	8,094	14,985	8,325	15,747	8,748	60	683
3.10	16.63	78.82	4.55	.58	14,532	8,073	14,997	8,332	15,712	8,729	236	684
2.70	16.61	78.32	5.07	.66	14,517	8,065	14,920	8,289	15,717	8,732	205	685
2.73	20.79	73.96	5.25	.84	14,458	8,032	14,864	8,258	15,688	8,716	342	686
2.55	20.95	73.16	5.89	.91	14,377	7,987	14,753	8,196	15,676	8,709	46	687
2.69	19.80	74.66	5.54	.82	14,405	8,003	14,803	8,224	15,671	8,706	72	688
2.25	19.57	74.09	6.34	.84	14,344	7,969	14,674	8,152	15,667	8,704	95	689
2.62	20.53	74.35	5.12	.88	14,478	8,043	14,868	8,260	15,670	8,706	24	690
2.66	19.45	75.06	5.49	.71	14,472	8,040	14,867	8,259	15,731	8,739	49	691
2.86	20.75	73.34	5.91	.67	14,378	7,988	14,801	8,223	15,731	8,739	46	692
1.92	21.36	72.07	6.57	.56	14,401	8,001	14,683	8,157	15,716	8,731	86	693
2.96	20.67	72.73	6.60	.64	14,253	7,918	14,688	8,160	15,726	8,737	18	694
2.99	20.45	73.93	5.62	.64	14,395	7,907	14,839	8,244	15,723	8,735	33	695
2.41	20.53	73.74	5.73	.54	14,444	8,024	14,801	8,223	15,701	8,723	33	696
1.93	18.75	75.18	6.07	.85	14,440	8,022	14,724	8,180	15,676	8,709	81	697
2.48	18.69	75.39	5.92	.82	14,393	7,996	14,759	8,199	15,688	8,716	20	698
4.23	18.24	73.73	8.03	.70	13,728	7,627	14,334	7,963	15,586	8,659	23	699
2.81	19.67	74.35	5.98	.57	14,312	7,951	14,726	8,181	15,663	8,702	21	700
3.79	20.58	73.82	5.60	.68	14,251	7,917	14,812	8,229	15,691	8,717	17	701
1.13	20.09	74.04	5.87	.66	14,599	8,111	14,766	8,203	15,687	8,715	23	702
2.51	.....	.....	5.97	.....	14,524	8,069	14,898	8,277	15,844	8,802	45	703
2.63	18.74	75.87	5.39	.66	14,529	8,072	14,921	8,289	15,771	8,762	986	704
3.10	16.70	76.72	6.58	.74	14,234	7,908	14,689	8,161	15,724	8,736	89	705
2.71	17.01	76.15	6.84	.55	14,275	7,931	14,673	8,152	15,750	8,750	164	706
2.52	16.48	76.70	6.82	.60	14,329	7,961	14,699	8,166	15,775	8,764	546	707
2.75	17.88	75.98	6.14	.65	14,389	7,994	14,796	8,220	15,764	8,758	443	708
2.58	18.57	74.96	6.47	.62	14,345	7,969	14,725	8,181	15,744	8,747	293	709
2.27	19.91	73.66	6.43	.59	14,384	7,991	14,718	8,177	15,729	8,738	297	710
2.59	19.74	73.85	6.41	.57	14,313	7,952	14,694	8,163	15,700	8,722	157	711
1.92	17.95	75.98	6.07	.75	14,456	8,031	14,739	8,188	15,691	8,717	337	712

TABLE 2.—*Coals analyzed for the United States*
 UNITED STATES COALS—Continued.

Where mined.			Commercial name of coal.	Size of coal.	Tons delivered.
State, county, and town.	Mine.	Bed.			
1	2	3	4	5	6
WYOMING.					
HOT SPRINGS COUNTY.					
Gebon.....	Owl Creek.....	Gebon.....	Owl Creek.....	Lump.....	1,727
LINCOLN COUNTY.					
Sublet.....	No. 5.....	Willow Creek.	Kemmerer.....	Run of mine.....	1,002
SHERIDAN COUNTY.					
Acme.....	Acme.....	Monarch.....	Acme.....	do.....	1,803
Carneyville.....	Carney.....	Carney.....	Carney.....	Lump.....	1,175
Do.....	do.....	do.....	do.....	do.....	386
Do.....	do.....	do.....	do.....	do.....	2,043
Do.....	do.....	do.....	do.....	do.....	966
Do.....	do.....	do.....	do.....	Lump, over 2½- inch and through 4-inch screens.	1,055
Do.....	do.....	do.....	do.....	Lump, over 5-inch bar screen.	1,742
Do.....	do.....	do.....	do.....	Lump, over 5-inch shaking screen.	3,166
Do.....	do.....	do.....	do.....	do.....	1,630
Do.....	do.....	do.....	do.....	do.....	3,450
Do.....	do.....	do.....	do.....	do.....	474
Do.....	do.....	do.....	do.....	do.....	2,773
Do.....	do.....	do.....	do.....	Run of mine.....	1,788
Do.....	Model.....	do.....	do.....	Lump, over 1½- inch screen.	201
Dietz.....	Sheridan.....	Sheridan, No. 2.	Sheridan.....	Run of mine.....	867
Do.....	No. 7.....	do.....	do.....	do.....	3,873
Kool.....	Kool.....	Monarch.....	Kool.....	Lump.....	444
Monarch.....	No. 1.....	do.....	Monarch.....	Run of mine.....	1,548
SWEETWATER COUNTY.					
Rock Springs.....	Blairtown.....	No. 1.....	Star lump.....	Lump, over 3-inch screen.	3,260
Do.....	do.....	do.....	do.....	do.....	1,783

Government during the fiscal years 1908-1915--Continued.

UNITED STATES COALS—Continued.

Proximate analysis.					Calorific value, per pound.						Number of analyses averaged.	Index number.
As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19
14.71	44.19	51.14	4.67	0.62	11,157	6,198	13,081	7,267	13,722	7,623	7	713
2.73	38.19	56.29	5.52	.94	13,418	7,454	13,795	7,664	14,601	8,112	9	714
23.15	47.91	46.74	5.35	.68	9,559	5,311	12,438	6,910	13,141	7,301	36	715
21.56	43.10	52.36	4.54	.52	9,710	5,394	12,379	6,877	12,968	7,204	24	716
21.02	44.86	50.67	4.47	.54	9,697	5,387	12,278	6,821	12,853	7,141	13	717
22.50	42.38	52.41	5.21	.65	9,544	5,302	12,315	6,842	12,992	7,218	61	718
21.80	44.73	50.51	4.76	.49	9,678	5,377	12,376	6,876	12,995	7,219	9	719
22.23	48.43	46.30	5.27	.55	9,579	5,322	12,317	6,843	13,002	7,223	3	720
21.93	45.67	49.40	4.93	.43	9,644	5,358	12,353	6,863	12,994	7,219	9	721
22.54	45.92	49.26	4.82	.54	9,669	5,372	12,483	6,935	13,115	7,286	22	722
22.66	44.93	49.89	5.18	.65	9,577	5,321	12,383	6,879	13,059	7,255	17	723
22.45	43.80	52.11	4.09	.47	9,697	5,387	12,504	6,947	13,037	7,243	15	724
19.69	45.10	50.70	4.20	.54	10,066	5,592	12,534	6,963	13,084	7,269	9	725
22.49	45.14	50.30	4.56	.47	9,604	5,336	12,391	6,884	12,983	7,213	14	726
22.59	43.76	45.15	11.09	.63	8,912	4,951	11,513	6,396	12,949	7,194	25	727
22.74	44.14	50.90	4.96	.39	9,542	5,301	12,350	6,861	12,995	7,219	5	728
19.33	40.45	45.36	14.19	1.32	9,095	5,053	11,274	6,263	13,138	7,299	18	729
23.53	44.42	44.33	11.25	.81	8,760	4,867	11,456	6,364	12,908	7,171	33	730
22.20	52.52	41.88	5.60	.53	9,602	5,334	12,342	6,857	13,074	7,263	5	731
22.05	44.20	48.17	7.63	.76	9,506	5,281	12,195	6,775	13,202	7,334	34	732
7.90	43.56	52.55	3.89	.85	12,471	6,928	13,541	7,523	14,089	7,827	17	733
7.35	42.08	52.07	5.85	.93	12,251	6,806	13,223	7,346	14,045	7,803	6	734

ESSENTIAL DATA IN REGARD TO COAL CONTRACTS.

In the following pages are given the essential data in regard to the place, date of delivery, purchaser, price, and contract guaranties for the coals that were sampled and analyzed as shown in Table 2. The numbers refer to the index numbers in Table 2 (column 19). Prices given are per ton of 2,240 pounds, delivered, except where otherwise stated. The year given as date of delivery is the fiscal year—for example, 1910–11 refers to the fiscal year beginning July 1, 1910, and ending June 30, 1911.

AUSTRALIA COALS.

1. Bituminous coal delivered to Fort Rosecrans, Cal., Quartermaster Corps, War Department, 1914–15. Contract guaranties: 2.5 per cent moisture, “as received”; 5 per cent ash, and 14,000 B. t. u., “dry coal.” Price, \$8.85 per ton for delivery at San Diego, Cal.

2. Bituminous coal delivered to Fort Davis, Alaska, Quartermaster Corps, War Department, 1914–15. Contract guaranties: 3 per cent moisture, “as received”; 40 per cent volatile matter, 1 per cent sulphur, 5 per cent ash, and 14,000 B. t. u., “dry coal.” Price, \$20.25 per ton.

3. Bituminous coal delivered to the United States military prison, Alcatraz, Cal., Quartermaster Corps, War Department, 1911–12. Contract guaranties: 5 per cent ash, “dry coal”; 14,800 B. t. u., “as received.” Price, \$9.15 per ton.

4. Bituminous coal delivered to Fort Baker, Cal., Quartermaster Corps, War Department, 1911–12. Contract guaranties: 5 per cent ash, “dry coal”; 14,800 B. t. u., “as received.” Price, \$9.40 per ton.

5. Bituminous coal delivered to Fort McDowell, Cal., Quartermaster Corps, War Department, 1911–12. Contract guaranties: 5 per cent ash, “dry coal”; 14,800 B. t. u., “as received.” Price, \$9.15 per ton.

6. Bituminous coal delivered to Presidio of Monterey, Cal., Quartermaster Corps, War Department, 1911–12. Contract guaranties: 5 per cent ash, “dry coal”; 14,800 B. t. u., “as received.” Price, \$12.60 per ton.

7. Bituminous coal delivered to Fort Miley, Cal., Quartermaster Corps, War Department, 1913–14. Contract guaranties: 2.5 per cent moisture, “as received”; 43.6 per cent volatile matter, 0.8 per cent sulphur, 6 per cent ash, 13,600 B. t. u., “dry coal.” Price, \$10.50 per ton.

8. Bituminous coal delivered to Letterman General Hospital, Presidio of San Francisco, Cal., Quartermaster Corps, War Department, 1913–14. Contract guaranties: 2.5 per cent moisture, “as received”; 40 per cent volatile matter, 1 per cent sulphur, 6 per cent ash, 13,600 B. t. u., “dry coal.” Price, \$10 per ton.

9. Bituminous coal delivered to Presidio of Monterey, Cal., Quartermaster Corps, War Department, 1913–14. Contract guaranties: 2.5 per cent moisture, “as received”; 6 per cent ash, 13,600 B. t. u., “dry coal.” Price, \$13.57 per ton.

10. Bituminous coal delivered to Presidio of San Francisco and Fort Mason, Cal., Quartermaster Corps, War Department, 1913–14. Contract guaranties:

2.5 per cent moisture, "as received"; 40 per cent volatile matter, 3 per cent sulphur and 6 per cent ash, 13,600 B. t. u., "dry coal." Price, \$10 per ton at presidio and \$9.75 per ton at the fort.

11. Bituminous coal delivered to Fort Baker, Cal., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2.5 per cent moisture, "as received"; 6 per cent ash, 13,600 B. t. u., "dry coal." Price, \$10.65 per ton.

12. Bituminous coal delivered to forts of San Francisco Harbor, Cal., Quartermaster Corps, War Department, 1913-14. Contract guaranties same as No. 11. Price, \$10.50 per ton.

13. Bituminous coal delivered to Fort Winfield Scott, Cal. (vessels), Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2.5 per cent moisture, "as received"; 6 per cent ash, 13,600 B. t. u., "dry coal." Price, \$8.50 per ton.

14. Bituminous coal delivered to Presidio of San Francisco, Cal., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 5.04 per cent ash, "dry coal"; 14,020 B. t. u., "as received." Price, \$9.40 per ton.

15. Bituminous coal delivered to Fort Miley, Cal., Quartermaster Corps, War Department, 1911-12. Contract guaranties same as No. 14. Price, \$9.90 per ton.

16. Bituminous coal delivered to Fort Mason, Cal., Quartermaster Corps, War Department, 1911-12. Contract guaranties same as No. 14. Price, \$9.15 per ton.

17. Bituminous coal delivered to Benicia Arsenal, Cal., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 4.12 per cent ash, "dry coal"; 14,474 B. t. u., "as received." Price, \$9.84 per ton.

18. Bituminous coal delivered to Fort Barry, Cal., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 5.04 per cent ash, "dry coal"; 14,020 B. t. u., "as received." Price, \$10.90 per ton.

19. Bituminous coal delivered to Schofield Barracks, Hawaii Territory, Quartermaster Corps, War Department, 1911-12. Contract guaranties: 7.13 per cent ash, "dry coal"; 13,607 B. t. u., "as received." Price, \$9.25 per ton.

20. Bituminous coal delivered to Fort Ruger, Hawaii Territory, Quartermaster Corps, War Department, 1911-12. Contract guaranties same as No. 19. Price, \$10.75 per ton.

CANADA COALS.

21. Bituminous coal delivered to Fort George Wright, Wash., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 6.5 per cent moisture, "as received"; 16 per cent volatile matter, 0.35 per cent sulphur, 10 per cent ash, 14,200 B. t. u., "dry coal." Price, \$6.214 per ton.

22. Bituminous coal delivered to Fort George Wright, Wash., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 1 per cent moisture, "as received"; 20 to 23 per cent volatile matter, 0.4 per cent sulphur, 12 per cent ash, and 13,500 B. t. u., "dry coal." Price, \$3.36 per ton f. o. b. mines.

23. Bituminous coal delivered to San Francisco Harbor, Cal., Quartermaster Corps, War Department, 1911-12.

24. Bituminous coal delivered to the depot quartermaster, United States Army, Seattle, Wash., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 1.38 per cent moisture, "as received"; 29.34 per cent volatile matter, 1.01 per cent sulphur, 14.47 per cent ash, and 12,500 B. t. u., "dry coal." Price, \$3.40 per ton in vessels at West Seattle, Wash.

25. Bituminous coal delivered to Fort Miley, Cal., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6.61 per cent ash, "dry coal"; 13,906 B. t. u., "as received." Price, \$9.50 per ton.

26. Bituminous coal delivered to Fort Barry, Cal., Quartermaster Corps, War Department, 1911-12. Contract guaranties same as No. 25. Price, \$10.50 per ton.

27. Bituminous coal delivered to Presidio of San Francisco, Cal., Quartermaster Corps, War Department, 1911-12. Contract guaranties same as No. 25.

28. Bituminous coal delivered to Fort St. Michael, Alaska, Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2.44 per cent moisture, "as received"; 11.65 per cent ash; 14,000 B. t. u., "dry coal." Price, \$20.50 per ton.

29. Bituminous coal delivered to Fort Davis, Alaska, Quartermaster Corps, War Department, 1912-13. Price, \$20.50 per ton.

30. Bituminous coal delivered to Fort Ward, Wash., Quartermaster Corps, War Department, 1912-13. Price, \$9.75 per ton.

31. Bituminous coal delivered to Fort Worden, Wash., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 1.75 per cent moisture, "as received"; 10 per cent ash; 13,600 B. t. u., "dry coal." Price, \$9.50 per ton.

32. Bituminous coal delivered to Fort Barry, Cal., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 13 per cent ash; 12,510 B. t. u., "dry coal." Price, \$11.50 per ton.

33. Bituminous coal delivered to Letterman General Hospital, San Francisco, Cal., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 13 per cent ash; 12,510 B. t. u., "dry coal." Price, \$9 per ton.

34. Bituminous coal delivered to Fort McDowell, Cal., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 13 per cent ash; 12,510 B. t. u., "dry coal." Price, \$8.90 per ton.

35. Bituminous coal delivered to Fort McDowell, Cal., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 40 per cent volatile matter, 1.75 per cent sulphur, 10 per cent ash, and 12,800 B. t. u., "dry coal." Price, \$9 per ton for delivery at San Francisco, Cal.

36. Bituminous coal delivered to Fort Winfield Scott, Cal., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 40 per cent volatile matter, 1.75 per cent sulphur, 10 per cent ash, and 12,800 B. t. u., "dry coal." Price, \$9 per ton.

37. Bituminous coal delivered to the United States military prison, Alcatraz, Cal., Quartermaster Corps, War Department, 1914-15. Contract guaranties same as No. 36. Price, \$8.85 per ton.

38. Bituminous coal delivered to Fort Baker, Cal., Quartermaster Corps, War Department, 1914-15. Contract guaranties same as No. 36. Price, \$9.65 per ton.

39. Bituminous coal delivered to Fort McDowell, Cal., Quartermaster Corps, War Department, 1914-15. Contract guaranties same as No. 36. Price, \$8.50 per ton for delivery at San Francisco, Cal.

40. Bituminous coal delivered to Fort Davis, Alaska, Quartermaster Corps, War Department, 1911-12. Contract guaranties: 7.6 per cent ash, "dry coal"; 13,360 B. t. u., "as received." Price, \$19.49 per ton.

41. Bituminous coal delivered to Fort Casey, Wash., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 1.75 per cent moisture, "as received"; 9.46 per cent ash, 13,600 B. t. u., "dry coal." Price, \$9.75 per ton.

42. Bituminous coal delivered to Fort Flagler, Wash., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 1.75 per cent moisture, "as received"; 9.46 per cent ash, 13,600 B. t. u., "dry coal." Price, \$9.75 per ton.

43. Bituminous coal delivered to Fort Worden, Wash., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 1.82 per cent moisture, "as received"; 8.49 per cent ash, and 13,000 B. t. u., "dry coal." Price, \$8.05 per ton.

ALABAMA COALS.

44. Bituminous coal delivered to Fort Barrancas, Fla., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 1 per cent moisture, "as received"; 7 per cent ash, "dry coal"; 14,200 B. t. u., "dry coal." Price, \$5.60 per ton.

45. Bituminous coal delivered to Fort Pickens, Fla., Quartermaster Corps, War Department, 1912-13. Contract guaranties same as No. 44. Price, \$6.55 per ton.

46. Bituminous coal delivered to Forts Barrancas and Pickens, Fla., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 8 per cent moisture, "as received"; 8 per cent ash, 14,000 B. t. u., "dry coal." Prices, Fort Barrancas, \$5.85 per ton; Fort Pickens, \$6.80 per ton.

47. Bituminous coal delivered to Fort Morgan, Ala., Quartermaster Corps, War Department, 1914-15. Price, \$5.75 per ton.

48. Bituminous coal delivered to Forts Barrancas and Pickens, Fla., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 8 per cent moisture, "as received"; 37 per cent volatile matter, 1 per cent sulphur, 7 per cent ash, and 14,000 B. t. u., "dry coal." Price, \$5.65 per ton for delivery at Fort Barrancas and \$5.50 per ton for delivery at Fort Pickens.

49. Bituminous coal delivered to Fort Morgan, Ala., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 5 per cent moisture, "as received"; 10 per cent ash, 13,500 B. t. u., "dry coal." Price, \$3.30 per ton delivered at Mobile.

50. Bituminous coal delivered to Fort Morgan, Ala. (for vessels), Quartermaster Corps, War Department, 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 13,500 B. t. u., "as received." Price, \$3.30 per ton delivered at Mobile, Ala.

51. Bituminous coal delivered to eighth lighthouse district, Mobile, Ala., Bureau of Lighthouses, Department of Commerce, 1911-12. Contract guaranties: 11 per cent ash, "dry coal"; 13,050 B. t. u., "as received." Price, \$3.34 per ton.

52. Bituminous coal delivered to the customhouse, New Orleans, La., Treasury Department, 1914-15. Contract guaranties: 37 per cent volatile matter, 2.5 per cent sulphur, 10 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.30 per ton.

53. Bituminous coal delivered to the navy yard at Pensacola, Fla., Navy Department, in June, 1914.

54. Bituminous coal delivered to the navy yard at Pensacola, Fla., Navy Department, in May and June, 1914.

55. Bituminous coal delivered to the United States engineer office, Montgomery, Ala., War Department, 1914-15. Contract guaranties: 2 per cent moisture, "as received"; 29.91 per cent volatile matter, 1.33 per cent sulphur, 5.45 per cent ash, and 14,750 B. t. u., "dry coal." Price, \$1.75 per ton of 2,000 pounds.

56. Bituminous coal delivered to the navy yard at Pensacola, Fla., Navy Department, in June, 1914.

57. Bituminous coal delivered to the customhouse, New Orleans, La., Treasury Department, 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 13,900 B. t. u., "as received." Price, \$3.20 per ton.

58. Bituminous coal delivered to the customhouse, New Orleans, La., Treasury Department, 1908-9. Contract guaranties: 6 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.25 per ton.

59. Bituminous coal delivered to the mint building, New Orleans, La., Treasury Department, 1908-9. Contract guaranties: 6 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.40 per ton.

60. Bituminous coal delivered to the United States engineer office, Mobile, Ala., War Department, 1914-15. Contract guaranties: 1.6 per cent moisture, "as received"; 28 per cent volatile matter, 1 per cent sulphur, 9 per cent ash, and 14,000 B. t. u., "dry coal." Price, \$2.45 per ton (2,000 pounds).

61. Bituminous coal delivered to the United States engineer office, Pascagoula, Miss., War Department, 1914-15. Contract guaranties same as No. 60. Price, \$2.90 per ton (2,000 pounds).

62. Bituminous coal delivered to the United States engineer office, Gulfport, Miss., War Department, 1914-15. Contract guaranties same as No. 60. Price, \$3.05 per ton (2,000 pounds).

63. Bituminous coal delivered to the United States engineer office, Mobile, Ala., and Pascagoula, Miss., War Department, 1914-15. Contract guaranties: 2.97 per cent moisture, "as received"; 31.74 per cent volatile matter, 0.625 per cent sulphur, 7.185 per cent ash, and 14,250 B. t. u., "dry coal." Price, \$1.38 per ton f. o. b. mines (2,000 pounds).

64. Bituminous coal delivered to Fort Barrancas, Fla., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 1 per cent moisture, "as received"; 7 per cent ash, 13,500 B. t. u., "dry coal." Price, \$4.25 per ton in vessels and \$4.35 per ton at pumping plant.

65. Bituminous coal delivered to Forts Barrancas and Pickens, Fla., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2 per cent moisture, "as received"; 7.5 per cent ash, 13,600 B. t. u., "dry coal." Price, \$4.37 per ton at Fort Barrancas pumping plant, \$5.20 per ton at Fort Pickens, and \$7 per ton at mortar battery, Fort Pickens.

66. Bituminous coal delivered to Forts Barrancas, McRee, and Pickens, Fla., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2 per cent moisture "as received"; 31 per cent volatile matter, 1 per cent sulphur, 7.5 per cent ash, and 13,700 B. t. u., "dry coal." Price, \$5.20 per ton at Fort Pickens, \$4.37 per ton at Fort Barrancas, and \$7.25 per ton at Fort McRee.

67. Bituminous coal delivered to the customhouse, New Orleans, La., Treasury Department, 1909-10. Contract guaranties: 6 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$3.25 per ton.

68. Bituminous coal delivered to the mint building, New Orleans, La., Treasury Department, 1909-10. Contract guaranties same as No. 67. Price, \$3.25 per ton.

69. Bituminous coal delivered to the customhouse, New Orleans, La., Treasury Department, 1907-8. Contract guaranties: 8.5 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.75 per ton.

70. Bituminous coal delivered to the United States engineer office, Mobile, Ala., War Department, 1914-15. Price, \$1.36 per ton f. o. b. mines.

71. Bituminous coal delivered to Forts Barrancas and Pickens, Fla., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 8 per cent moisture, "as received"; 30 per cent volatile matter, 1.25 per cent sulphur, 7.5 per cent ash, and 14,000 B. t. u., "dry coal." Price, \$4.35 per ton at Fort Barrancas, Fla., and \$5.15 per ton at Fort Pickens (mortar battery).

72. Bituminous coal delivered to Fort Barrancas, Fla., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 4 per cent ash, "dry coal"; 14,800 B. t. u., "as received." Price, \$4.03 per ton.

73. Bituminous coal delivered to Forts Barrancas and McRee, Fla., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 1.5 per cent moisture, "as received"; 8 per cent ash, 14,000 B. t. u., "dry coal." Price, \$4.40 at Fort Barrancas and \$7.30 at Fort McRee.

74. Bituminous coal delivered to the eighth lighthouse district, New Orleans, La., Bureau of Lighthouses, Department of Commerce, 1912-13. Contract guaranties: 10 per cent ash, "dry coal"; 13,500 B. t. u., "as received." Price, \$3.90 per ton.

75. Bituminous coal delivered to the eighth lighthouse district, New Orleans, La., Bureau of Lighthouses, Department of Commerce, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 29 per cent volatile matter, 1 per cent sulphur, 10 per cent ash, and 13,600 B. t. u., "dry coal." Price, \$3.90 per ton.

76. Bituminous coal delivered to the navy yard at Pensacola, Fla., Navy Department, in June, 1914.

77. Bituminous coal delivered to the customhouse, New Orleans, La., Treasury Department, 1910-11. Contract guaranties: 6 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$3.50 per ton.

78. Bituminous coal delivered to the customhouse, New Orleans, La., Treasury Department, 1912-13. Contract guaranties: 35 per cent volatile matter, 2.5 per cent sulphur, 7 per cent ash, "dry coal"; 14,250 B. t. u., "as received." Price, \$4 per ton.

79. Bituminous coal delivered to the navy yard at Pensacola, Fla., Navy Department, in June, 1914.

80. Bituminous coal delivered to the eighth lighthouse district, New Orleans, La., Bureau of Lighthouses, Department of Commerce, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 35 per cent volatile matter, 2 per cent sulphur, 10 per cent ash, 13,500 B. t. u., "dry coal." Price, \$3.90 per ton.

81. Bituminous coal delivered to Fort Morgan, Ala., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 4 per cent moisture, "as received"; 35 per cent volatile matter, 0.75 per cent sulphur, 7 per cent ash, and 14,000 B. t. u., "dry coal." Price, \$4.80 per ton.

82. Bituminous coal delivered to the United States engineer office, Tuscaloosa, Ala., War Department, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 35 per cent volatile matter, 1.25 per cent sulphur, 13 per cent ash, and 13,000 B. t. u., "dry coal." Price, \$1.50 per ton (2,000 pounds).

83. Bituminous coal delivered to the customhouse, New Orleans, La., Treasury Department, 1913-14. Contract guaranties: 10 per cent ash, "dry coal"; 13,800 B. t. u., "as received." Price, \$3.30 per ton.

84. Bituminous coal delivered to Jackson Barracks, La., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 12 per cent ash, and 13,500 B. t. u., "dry coal." Price, \$4.50 per ton.

85. Bituminous coal delivered to the United States engineer office, Port Eads and Burrwood, La., and to points on the Mississippi River below Plaquemine, La., War Department, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 33.92 per cent volatile matter for 5-inch coal and 32.92 per cent for 3-inch coal, 1 per cent sulphur, 4 per cent ash for 5-inch coal and 6 per cent for 3-inch coal, 14,700 B. t. u. for 5-inch coal and 14,500 for 3-inch coal, "dry coal." Price, \$3.75 per ton (2,000 pounds) for the 5-inch coal and \$3.65 for the 3-inch coal.

86. Bituminous coal delivered to Jackson Barracks, La., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 3 per cent moisture,

"as received"; 9 per cent ash, 13,200 B. t. u., "dry coal." Price, \$5.75 per ton.

ARKANSAS COALS.

87. Semibituminous coal delivered to Fort Sam Houston, Tex., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 10 per cent ash, 14,000 B. t. u., "dry coal." Price, \$6.869 per ton.

88. Semibituminous coal delivered to Fort Sam Houston, Tex., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2 per cent moisture, "as received"; 17 per cent volatile matter, 1 per cent sulphur, 6 per cent ash, 14,000 B. t. u., "dry coal." Price, \$6.10 per ton.

89. Semibituminous coal delivered to Fort Logan H. Roots, Ark., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 13,500 B. t. u., "as received." Price, \$6.28 per ton.

90. Semibituminous coal delivered to Fort Logan H. Roots, Ark., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 10 per cent ash, 13,500 B. t. u., "dry coal." Price, \$5.70 per ton.

91. Semibituminous coal delivered to Fort Logan H. Roots, Ark., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 11 per cent ash, "dry coal"; 13,000 B. t. u., "as received." Price, \$5.43 per ton.

92. Semibituminous coal delivered to Fort Logan H. Roots, Ark., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 10 per cent ash, 13,000 B. t. u., "dry coal." Price, \$4.15 per ton.

93. Semibituminous coal delivered to Fort Logan H. Roots, Ark., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 3.5 per cent moisture, "as received"; 10 per cent ash, 13,500 B. t. u., "dry coal." Price, \$5.88 per ton.

ARKANSAS AND OKLAHOMA COALS.

94. Semibituminous coal delivered to Fort Sam Houston, Tex., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 20 per cent volatile matter, 3 per cent sulphur, 10 per cent ash, and 13,500 B. t. u., "dry coal." Price, \$6.66 per ton.

COLORADO COALS.

95. Anthracite coal delivered to United States courthouse and post-office building, Denver, Colo., Treasury Department, 1910-11. Contract guaranties: 10 per cent ash, "dry coal"; 13,300 B. t. u., "as received." Price, \$4.75 per ton.

96. Anthracite coal delivered to United States courthouse and post-office building, Denver, Colo., Treasury Department, 1911-12. Contract guaranties: 16 per cent ash, "dry coal"; 11,500 B. t. u., "as received." Price, \$5.25 per ton.

97. Anthracite coal delivered to United States courthouse and post-office building, Denver, Colo., Treasury Department, 1912-13.

98 and 99. Anthracite coal delivered to United States courthouse and post-office building, Denver, Colo., Treasury Department. No. 98 was delivered in 1913-14 and No. 99 in 1914-15. Price, \$5.40 per ton.

100. Bituminous coal delivered to Fort Meade, S. Dak., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 14 per cent ash, 12,500 B. t. u., "dry coal." Price, \$7.056 per ton f. o. b. Sturgis, S. Dak.

101. Bituminous coal delivered to Fort Logan, Colo., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 36 per cent volatile matter, 0.75 per cent sulphur, 14 per cent ash, and 12,400 B. t. u., "dry coal." Price, \$4.144 per ton.

102. Bituminous coal delivered to Fort D. A. Russell, Wyo., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 11.5 per cent ash, "dry coal"; 12,500 B. t. u., "as received." Price, \$4.872 per ton.

103. Bituminous coal delivered to Fort Logan, Colo., Quartermaster Corps, War Department, 1911-12. Contract guaranties same as No. 102. Price, \$4.59 per ton.

104. Bituminous coal delivered to Fort Meade, S. Dak., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 3.5 per cent moisture, "as received"; 11.75 per cent ash, 12,875 B. t. u., "dry coal." Price, \$7.28 per ton f. o. b. Sturgis, S. Dak.

105. Bituminous coal delivered to Fort Robinson, Nebr., Quartermaster Corps, War Department, 1912-13. Contract guaranties same as No. 104. Price, \$7.28 per ton.

106. Bituminous coal delivered to the mint building, Denver, Colo., Treasury Department, 1909-10. Contract guaranties: 12 per cent ash, "dry coal"; 13,000 B. t. u., "as received." Price, \$4.40 per ton.

107 and 108. Bituminous coal delivered to the Navy Department in May, 1912. No further information available.

109. Average of Nos. 107 and 108, by weight, according to the respective numbers of analyses made.

110. Bituminous coal delivered to the Navy Department in June and July, 1912. Samples collected when coal was loaded into cars at the mine.

111. Bituminous coal delivered to Fort D. A. Russell, Wyo., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 4 per cent moisture, "as received"; 11.5 per cent ash, 12,550 B. t. u., "dry coal." Price, \$5.32 per ton.

112. Bituminous coal delivered to Fort Logan, Colo., Quartermaster Corps, War Department, 1912-13. Contract guaranties same as No. 111. Price, \$4.368 per ton.

113. Bituminous coal delivered to Fort Logan, Colo., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 3.5 per cent moisture, "as received"; 12 per cent ash, 12,850 B. t. u., "dry coal." Price, \$4.312 per ton.

114. Bituminous coal delivered to the United States Indian school, Grand Junction, Colo., Office of Indian Affairs, Department of the Interior, 1910-11. Contract guaranties: 8.5 per cent ash, "dry coal"; 11,850 B. t. u., "as received." Price, \$2.75 per ton (2,000 pounds).

115. Bituminous coal delivered to the mint building, Denver, Colo., Treasury Department, 1910-11. Contract guaranties: 5 per cent ash, "dry coal"; 12,320 B. t. u., "as received." Price, \$4.35 per ton.

116. Bituminous coal delivered to the mint building, Denver, Colo., Treasury Department, 1911-12. Contract guaranties: 4.9 per cent ash, "dry coal"; 12,200 B. t. u., "as received." Price, \$4.09 per ton.

117. Bituminous coal delivered to the mint building, Denver, Colo., Treasury Department, 1912-13. Contract guaranties: 5 per cent ash, "dry coal"; 12,200 B. t. u., "as received." Price, \$4.15 per ton.

118. Bituminous coal delivered to the mint building, Denver, Colo., Treasury Department, 1913-14. Contract guaranties: 40 per cent volatile matter, 2 per cent sulphur, 5 per cent ash, "dry coal"; 12,200 B. t. u., "as received." Price, \$4.09 per ton.

119. Bituminous coal delivered to the mint building, Denver, Colo., Treasury Department, 1914-15. Contract guaranties: 5 per cent ash and 13,000 B. t. u., "dry coal." Price, \$4.19 per ton.

120. Subbituminous coal delivered to the mint building, Denver, Colo., Treasury Department, 1914-15. Contract guaranties, same as No. 119. Price, \$3.50 per ton.

GEORGIA COALS.

121. Semibituminous coal delivered to Fort Oglethorpe, Ga., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 14,590 B. t. u., "as received." Price, \$3.36 per ton.

122. Semibituminous coal delivered to Fort Oglethorpe, Ga., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 1 per cent moisture, "as received"; 22 per cent volatile matter, 1.50 per cent sulphur, 7 per cent ash, and 14,000 B. t. u., "dry coal." Price, \$3.58 per ton.

ILLINOIS COALS.

123. Bituminous coal delivered to the new post-office building, St. Louis, Mo., Treasury Department, 1911-12. Contract guaranties: 12 per cent ash, "dry coal"; 11,500 B. t. u., "as received." Price, \$2.20 per ton.

124. Bituminous coal delivered to United States appraiser's stores, Chicago, Ill., Treasury Department, 1909-10. Contract guaranties: 8.9 per cent ash, "dry coal"; 12,136 B. t. u., "as received." Price, \$3.04 per ton.

125. Bituminous coal delivered to the United States courthouse and post-office building, Chicago, Ill., Treasury Department, 1909-10. Contract guaranties: 8.9 per cent ash, "dry coal"; 12,136 B. t. u., "as received." Price, \$3.04 per ton.

126. Bituminous coal delivered to the customhouse, St. Louis, Mo., Treasury Department, 1912-13. Contract guaranties: 40 per cent volatile matter, 3 per cent sulphur, 11 per cent ash, "dry coal"; 12,400 B. t. u., "as received." Price, \$2.39 per ton.

127. Bituminous coal delivered to the post-office building, St. Louis, Mo., Treasury Department, 1912-13. Contract guaranties, same as No. 126. Price, \$2.39 per ton.

128. Bituminous coal delivered to the Army Building, St. Paul, Minn., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 11,515 B. t. u., "as received." Price, \$2.07 per ton f. o. b. Christopher, Ill.

129. Bituminous coal delivered to the depot quartermaster, Omaha, Nebr., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9 per cent ash, "dry coal"; 12,500 B. t. u., "as received." Price, \$3.37 per ton f. o. b. cars Christopher, Ill., including storage charges at Omaha.

130. Bituminous coal delivered to the depot quartermaster, Omaha, Nebr., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 8 per cent moisture, "as received"; 9 per cent ash, 13,000 B. t. u., "dry coal." Price, \$6.28 per ton, delivered in residences.

131. Bituminous coal delivered to the depot quartermaster, Omaha, Nebr., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 8 per cent moisture, "as received"; 10 per cent ash, 12,800 B. t. u., "dry coal." Price, \$1.68 per ton f. o. b. Christopher, Ill.

132. Bituminous coal delivered to the post-office building, Omaha, Nebr., Treasury Department, 1913-14. Contract guaranties: 9 per cent ash, "dry coal"; 12,500 B. t. u., "as received." Price, \$4.97 per ton.

133. Bituminous coal delivered to the Army Building, St. Paul, Minn., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 7 per cent moisture, "as received"; 31.5 per cent volatile matter, 4.3 per cent sulphur. 10 per cent ash, 13,172 B. t. u., "dry coal." Price, \$1.80 per ton f. o. b. mines.

134. Bituminous coal delivered to Jefferson Barracks, Mo., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 10 per cent moisture, "as received"; 13 per cent ash, 12,500 B. t. u., "dry coal." Price, \$2.49 per ton.

135. Bituminous coal delivered to the United States appraiser's stores, St. Louis, Mo., Treasury Department, 1910-11. Contract guaranties: 10 per cent ash, "dry coal"; 12,000 B. t. u., "as received." Price, \$2.58 per ton.

136. Bituminous coal delivered to the customhouse, St. Louis, Mo., Treasury Department, 1910-11. Contract guaranties: 10 per cent ash, "dry coal"; 12,000 B. t. u., "as received." Price, \$2.43 per ton.

137. Bituminous coal delivered to the customhouse, St. Louis, Mo., Treasury Department, 1909-10. Contract guaranties: 10 per cent ash, "dry coal"; 12,585 B. t. u., "as received." Price, \$2.20 per ton.

138. Bituminous coal delivered to the customhouse, St. Louis, Mo., Treasury Department, 1908-9. Contract guaranties: 12 per cent ash, "dry coal"; 12,000 B. t. u., "as received." Price, \$2.43 per ton.

139. Bituminous coal delivered to Jefferson Barracks, Mo., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 11 per cent ash, "dry coal"; 11,000 B. t. u., "as received." Price, \$2.31 per ton.

140. Bituminous coal delivered to Jefferson Barracks, Mo., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 10 per cent moisture, "as received"; 40 per cent volatile matter, 4.5 per cent sulphur, 15 per cent ash, 12,500 B. t. u., "dry coal." Price, \$2.71 per ton.

141. Bituminous coal delivered to Fort Crook, Nebr., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 11,000 B. t. u., "as received." Price, \$1.51 per ton f. o. b. mines.

142. Bituminous coal delivered to the depot quartermaster, St. Louis, Mo., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 12 per cent ash, "dry coal"; 11,500 B. t. u., "as received." Price, \$3.584 per ton.

143. Bituminous coal delivered to the Sac and Fox Indian School, Toledo, Iowa, Office of Indian Affairs, Department of the Interior, 1910-11. Contract guaranties: 12 per cent ash, "dry coal"; 12,000 B. t. u., "as received." Price, \$1.75 per ton (2,000 pounds) f. o. b. mines.

144. Bituminous coal delivered to the post-office building, Minneapolis, Minn., Treasury Department, 1908-9. Contract guaranties: 14.78 per cent ash, "dry coal"; 12,257 B. t. u., "as received." Price, \$3.95 per ton.

145. Bituminous coal delivered to the Rock Island Arsenal, Ill., War Department, 1910-11. Contract guaranties: 14 per cent ash, "dry coal"; 11,000 B. t. u., "as received." Price, \$2.23 per ton.

146. Bituminous coal delivered to Fort Sheridan, Ill., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 8 per cent moisture, "as received"; 10 per cent ash, 12,800 B. t. u., "dry coal." Price, \$1.68 per ton f. o. b. mines.

147. Bituminous coal delivered to Fort Snelling, Minn., Quartermaster Corps, War Department, 1912-13. Contract guaranties and price same as No. 146.

148. Bituminous coal delivered to the United States military prison, Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 8 per cent moisture, "as received"; 38.5 per cent volatile matter, 0.85 per cent sulphur, 8 per cent ash, 13,200 B. t. u., "dry coal." Price, \$1.56 per ton f. o. b. Clinch, Ill.

149. Bituminous coal delivered to Jefferson Barracks, Mo., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 9 per cent moisture, "as received"; 38.5 per cent volatile matter, 1 per cent sulphur, 8 per cent ash, and 13,200 B. t. u., "dry coal." Price, \$2.67 per ton.

150. Bituminous coal delivered to the naval training station at Great Lakes, Ill., Navy Department, 1914-15. Contract guaranties: 10 per cent moisture, "as received"; 38.5 per cent volatile matter, 1 per cent sulphur, 10 per cent ash, and 12,800 B. t. u., "dry coal." Price, \$1.23 per ton f. o. b. mines.

151. Bituminous coal delivered to the naval training station at Great Lakes, Ill., Navy Department, 1912-13. Contract guaranties: 10 per cent moisture, "as received"; 1.75 per cent sulphur, 12 per cent ash, 12,500 B. t. u., "dry coal." Price, \$1.45 per ton f. o. b. mines.

152. Bituminous coal delivered to the naval training station at Great Lakes, Ill., Navy Department, 1912-13. Contract guaranties and price same as No. 151.

153. Bituminous coal delivered to the naval training station at Great Lakes, Ill., Navy Department, 1913-14. Contract guaranties: 9 per cent moisture, "as received"; 38.5 per cent volatile matter, 0.85 per cent sulphur, 10 per cent ash, 12,800 B. t. u., "dry coal." Price, \$1.28 per ton f. o. b. mines.

154. Bituminous coal delivered to the naval training station at Great Lakes, Ill., Navy Department, 1912-13. Contract guaranties: 10 per cent moisture, "as received"; 1.75 per cent sulphur, 12 per cent ash, 12,500 B. t. u., "dry coal." Price, \$1.45 per ton f. o. b. mines.

155. Bituminous coal delivered to the United States appraiser's stores, St. Louis, Mo., Treasury Department, 1911-12. Contract guaranties: 14 per cent ash, "dry coal"; 11,000 B. t. u., "as received." Price, \$2.08 per ton.

156. Bituminous coal delivered to the customhouse, St. Louis, Mo., Treasury Department, 1911-12. Contract guaranties same as No. 155. Price, \$2.08 per ton.

157. Bituminous coal delivered to the post office, St. Louis, Mo., Treasury Department, 1913-14. Contract guaranties: 13 per cent ash, "dry coal"; 11,370 B. t. u., "as received." Price, \$2.19 per ton.

158. Bituminous coal delivered to the customhouse, St. Louis, Mo., Treasury Department, 1913-14. Contract guaranties: 13 per cent ash, "dry coal"; 11,370 B. t. u., "as received." Price, \$2.19 per ton.

159. Bituminous coal delivered to the customhouse, St. Louis, Mo., Treasury Department, 1914-15. Contract guaranties: 40 per cent volatile matter, 3 per cent sulphur, and 12 per cent ash, "dry coal"; 11,370 B. t. u., "as received." Price, \$2.12 per ton.

160. Bituminous coal delivered to the post office, St. Louis, Mo., Treasury Department, 1914-15. Contract guaranties same as No. 159. Price, \$2.12 per ton.

161. Bituminous coal delivered to the Rock Island Arsenal, Rock Island, Ill., War Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 12,000 B. t. u., "as received." Price, \$3.63 per ton.

162. Bituminous coal delivered to Fort Benjamin Harrison, Ind., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 6 per cent moisture, "as received"; 9 per cent ash, 13,000 B. t. u., "dry coal." Price, \$1.65 per ton f. o. b. Eldorado, Ill.

163. Bituminous coal delivered to Fort Benjamin Harrison, Ind., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 8 per cent moisture, "as received"; 40 per cent volatile matter, 3 per cent sulphur, 9 per cent ash, 13,000 B. t. u., "dry coal." Price, \$1.65 per ton f. o. b. Eldorado, Ill.

164. Bituminous coal delivered to the United States courthouse and post office, Chicago, Ill., Treasury Department, 1910-11. Contract guaranties: 9.89 per cent ash, "dry coal"; 12,400 B. t. u., "as received." Price, \$3.33 per ton.

165. Bituminous coal delivered to the United States appraiser's stores, Chicago, Ill., Treasury Department, 1910-11. Contract guaranties: 9.89 per cent ash, "dry coal"; 12,400 B. t. u., "as received." Price, \$3.33 per ton.

166. Bituminous coal delivered to Fort Sheridan, Ill., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 12,250 B. t. u., "as received." Price, \$3.70 per ton.

167. Bituminous coal delivered to the United States courthouse and post office, Chicago, Ill., Treasury Department, 1911-12. Contract guaranties: 8.5 per cent ash, "dry coal"; 12,600 B. t. u., "as received." Price, \$3.18 per ton.

168. Bituminous coal delivered to the United States appraiser's stores, Chicago, Ill., Treasury Department, 1911-12. Contract guaranties, same as No. 167. Price, \$3.18 per ton.

169. Bituminous coal delivered to the post office, Chicago, Ill., Treasury Department, 1912-13. Contract guaranties: 35 per cent volatile matter, "dry coal"; 2.5 per cent sulphur, 9 per cent ash, 12,200 B. t. u., "as received." Price, \$3.10 per ton.

170. Bituminous coal delivered to the Rock Island Arsenal, Rock Island, Ill., War Department, 1914-15. Contract guaranties: 8 per cent moisture, "as received"; 38.10 per cent volatile matter, 2.93 per cent sulphur, 9.10 per cent ash, and 12,275 B. t. u., "dry coal." Price, \$2.68 per ton.

171. Bituminous coal delivered to the Rock Island Arsenal, Rock Island, Ill., War Department, 1912-13. Contract guaranties: 8 per cent moisture, "as received"; 9 per cent ash, 13,000 B. t. u., "dry coal." Price, \$3.80 per ton.

172. Bituminous coal delivered to the Rock Island Arsenal, Rock Island, Ill., War Department, 1913-14. Contract guaranties: 4 per cent moisture, "as received"; 37.89 per cent volatile matter, 2 per cent sulphur, 9 per cent ash, 13,000 B. t. u., "dry coal." Price, \$3.85 per ton.

173. Bituminous coal delivered to the Rock Island Arsenal, Rock Island, Ill., War Department, 1909-10. Contract guaranties: 12 per cent ash, "dry coal"; 10,900 B. t. u., "as received." Price, \$2.12 per ton.

174 and 175. Bituminous coal delivered to the Danville Branch of the National Home for Disabled Volunteer Soldiers, Danville, Ill. No. 174 was delivered in 1910-11 and No. 175 in 1911-12. Contract guaranties: 18 per cent ash, "dry coal"; 10,500 B. t. u., "as received." Price, \$1.50 per ton (2,000 pounds).

176. Bituminous coal delivered to the Danville Branch of the National Home for Disabled Volunteer Soldiers, Danville, Ill., 1912-13. Contract guaranties: 13 per cent moisture, "as received"; 17 per cent ash, 11,900 B. t. u., "dry coal." Price, \$1.60 per ton (2,000 pounds).

177. Bituminous coal delivered to the Danville Branch of the National Home for Disabled Volunteer Soldiers, Danville, Ill., 1913-14. Contract guaranties: 13 per cent moisture, "as received"; 40 per cent volatile matter, 3.5 per cent sulphur, 17 per cent ash, 12,000 B. t. u., "dry coal." Price, \$1.60 per ton (2,000 pounds).

178. Bituminous coal delivered to the Danville Branch of the National Home for Disabled Volunteer Soldiers, Danville, Ill., 1910-11. Contract guaranties: 10 per cent ash, "dry coal"; 12,000 B. t. u., "as received." Price, \$1.95 per ton (2,000 pounds).

179. Bituminous coal delivered to the Danville Branch of the National Home for Disabled Volunteer Soldiers, Danville, Ill., 1914-15. Contract guaranties: 13 per cent moisture, "as received"; 40 per cent volatile matter, 3.5 per cent sulphur, 17 per cent ash, and 12,000 B. t. u., "dry coal." Price \$1.60 per ton (2,000 pounds).

180. Bituminous coal delivered to Fort Des Moines, Iowa, Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9 per cent ash, "dry coal"; 12,771 B. t. u., "as received." Price, \$1.80 per ton f. o. b. Carterville, Ill.

181. Bituminous coal delivered to Fort Riley, Kans., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 5.6 per cent moisture, "as received"; 29.39 per cent volatile matter, 0.7 per cent sulphur, 8.51 per cent ash, and 13,500 B. t. u., "dry coal." Price, \$1.56 per ton f. o. b. Carterville, Ill.

182. Bituminous coal delivered to Fort Riley, Kans., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 5.6 per cent moisture, "as received"; 29.39 per cent volatile matter, 0.7 per cent sulphur, 8.51 per cent ash, and 13,500 B. t. u., "dry coal." Price, \$0.98 per ton f. o. b. Carterville, Ill.

183. Bituminous coal delivered to Fort Des Moines, Iowa, Quartermaster Corps, War Department, 1912-13. Contract guaranties: 5.5 per cent moisture, "as received"; 9.5 per cent ash, 13,600 B. t. u., "dry coal." Price, \$1.79 per ton f. o. b. Johnson City, Ill.

184. Bituminous coal delivered to United States military prison, Leavenworth, Kans., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 6 per cent moisture, "as received"; 9 per cent ash, 13,600 B. t. u., "dry coal." Price, \$1.76 per ton f. o. b. Johnson City, Ill.

185. Bituminous coal delivered to Fort Omaha, Nebr., Quartermaster Corps, War Department, 1912-13. Contract guaranties and price same as No. 183.

186. Bituminous coal delivered to Fort Crook, Nebr., Quartermaster Corps, War Department, 1912-13. Contract guaranties and price same as No. 183.

187. Bituminous coal delivered to Fort Snelling, Minn., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 7.5 per cent moisture, "as received"; 8.5 per cent ash, 13,310 B. t. u., "dry coal." Price, \$1.70 per ton f. o. b. Johnson City, Ill.

188. Bituminous coal delivered to Fort Sheridan, Ill., Quartermaster Corps, War Department, 1913-14. Contract guaranties same as No. 187. Price, \$1.56 per ton f. o. b. Johnson City, Ill.

189. Bituminous coal delivered to Fort Crook, Nebr., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 8.5 per cent moisture, "as received"; 35 per cent volatile matter, 1 per cent sulphur, 10.5 per cent ash, and 12,800 B. t. u., "dry coal." Price, \$1.23 per ton f. o. b. Johnson City, Ill.

190. Bituminous coal delivered to the depot quartermaster, St. Louis, Mo., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 10 per cent moisture, "as received"; 15 per cent ash, 12,500 B. t. u., "dry coal." Price, \$3.32 per ton.

INDIANA COALS.

191. Bituminous coal delivered to Fort Benjamin Harrison, Ind., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9.3 per cent ash, "dry coal"; 11,700 B. t. u., "as received." Price, \$2.47 per ton.

192. Bituminous coal delivered to the post office, Chicago, Ill., Treasury Department, 1913-14. Contract guaranties: 8 per cent ash, "dry coal"; 12,500 B. t. u., "as received." Price, \$3.21 per ton.

193. Bituminous coal delivered to the quartermaster depot, Jeffersonville, Ind., Quartermaster Corps, War Department, 1913-14.

IOWA COALS.

194. Bituminous coal delivered to Fort Crook, Nebr., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 8 per cent moisture, "as received"; 15 per cent ash, 12,500 B. t. u., "dry coal." Price, \$2.958 per ton.

KANSAS COALS.

195. Bituminous coal delivered to Fort Riley, Kans., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 5 per cent moisture, "as received"; 12 per cent ash, 13,000 B. t. u., "dry coal." Price, \$4.37 per ton (\$2.94 per ton at Mineral, Kans.).

196. Bituminous coal delivered to Fort Riley, Kans., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 5 per cent moisture, "as received"; 35 per cent volatile matter, 5 per cent sulphur, 15 per cent ash, 12,500 B. t. u., "dry coal." Price, \$2.98 per ton f. o. b. Mineral, Kans.

197. Bituminous coal delivered to Fort Riley, Kans., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 13,000 B. t. u., "as received." Price, \$3.08 per ton f. o. b. Mineral, Kans.

198. Bituminous coal delivered to Fort Riley, Kans., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 18 per cent ash, "dry coal"; 11,500 B. t. u., "as received." Price, \$2.41 per ton f. o. b. Mineral, Kans.

199. Bituminous coal delivered to the post office, Omaha, Nebr., Treasury Department, 1914-15. Contract guaranties: 40 per cent volatile matter, 3 per cent sulphur, and 12 per cent ash, "dry coal"; 12,000 B. t. u., "as received." Price, \$4.74 per ton.

200. Bituminous coal delivered to the United States courthouse and post office, Omaha, Nebr., Treasury Department, 1908-9. Contract guaranties: 11 per cent ash, "dry coal"; 12,000 B. t. u., "as received." Price, \$4.41 per ton.

201. Bituminous coal delivered to the United States courthouse and post office, Omaha, Nebr., Treasury Department, 1909-10. Contract guaranties: 11 per cent ash, "dry coal"; 12,000 B. t. u., "as received." Price, \$4.64 per ton.

202. Bituminous coal delivered to the United States courthouse and post office, Omaha, Nebr., Treasury Department, 1910-11. Contract guaranties same as No. 201. Price, \$5.19 per ton.

203. Bituminous coal delivered to Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 10 per cent moisture, "as received"; 15 per cent ash, 12,500 B. t. u., "dry coal." Price, \$3.08 per ton.

204. Bituminous coal delivered to Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 15 per cent ash, "dry coal"; 10,700 B. t. u., "as received." Price, \$3.70 per ton.

205. Bituminous coal delivered to the United States military prison, Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 11 per cent ash, "dry coal"; 11,100 B. t. u., "as received." Price, \$2.74 per ton.

206. Bituminous coal delivered to Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 10 per cent moisture, "as received"; 35 per cent volatile matter, 5 per cent sulphur, 15 per cent ash, 12,500 B. t. u., "dry coal." Price, \$2.90 per ton.

207. Bituminous coal delivered to the United States penitentiary, Leavenworth, Kans., Department of Justice, 1914-15. Contract guaranties same as No. 206. Price, \$2.79 per ton.

208. Bituminous coal delivered to the United States military prison, Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1914-15. Contract

guaranties: 9 per cent moisture, "as received"; 40 per cent volatile matter, 5 per cent sulphur, 15 per cent ash, 12,500 B. t. u., "dry coal." Price, \$2.90 per ton.

209. Bituminous coal delivered to Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 10 per cent moisture, "as received"; 40 per cent volatile matter, 5 per cent sulphur, 15 per cent ash, 12,500 B. t. u., "dry coal." Price, \$3 per ton.

210. Bituminous coal delivered to the United States penitentiary, Leavenworth, Kans., Department of Justice, 1912-13. Contract guaranties: 9.5 per cent moisture, "as received"; 35 per cent volatile matter, 5 per cent sulphur, 16 per cent ash, 12,000 B. t. u., "dry coal." Price, \$2.86 per ton.

211. Bituminous coal delivered to the United States penitentiary, Leavenworth, Kans., Department of Justice, 1913-14. Contract guaranties: 10 per cent moisture, "as received"; 40 per cent volatile matter, 5 per cent sulphur, 16 per cent ash, 12,000 B. t. u., "dry coal." Price, \$2.86 per ton.

KENTUCKY COALS.

212. Bituminous coal delivered to the United States courthouse and post office, Memphis, Tenn., Treasury Department, 1910-11. Contract guaranties: 4.45 per cent ash, "dry coal"; 14,115 B. t. u., "as received." Price, \$4.60 per ton.

213. Bituminous coal delivered to Fort McPherson, Ga., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 4 per cent moisture, "as received"; 4 per cent ash, 14,400 B. t. u., "dry coal." Price, \$3.02 per ton.

214. Bituminous coal delivered to the post office, Memphis, Tenn., Treasury Department, 1913-14. Price, \$4.50 per ton.

215. Bituminous coal delivered to the United States courthouse and post office, Louisville, Ky., Treasury Department, 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$2.30 per ton.

216. Bituminous coal delivered to the United States courthouse and post office, Louisville, Ky., Treasury Department, 1910-11. Contract guaranties: 10 per cent ash, "dry coal"; 13,400 B. t. u., "as received." Price, \$2.35 per ton.

217. Bituminous coal delivered to the United States courthouse and post office, Louisville, Ky., Treasury Department, 1907-8. Contract guaranties: 11.5 per cent ash, "dry coal"; 12,200 B. t. u., "as received." Price, \$1.95 per ton.

218. Bituminous coal delivered to the Jeffersonville depot, Indiana, Quartermaster Corps, War Department, 1913-14. Price, \$2.33 per ton.

219. Bituminous coal delivered to the United States engineer office at Greenville and Vicksburg, Miss., and the mouth of the White River, Ark., War Department, 1913-14. Contract guaranties: 3.04 per cent moisture, "as received"; 39.5 per cent volatile matter, 3.11 per cent sulphur, 8.5 per cent ash, 13,000 B. t. u., "dry coal." Price, \$2.50 per ton (2,000 pounds).

220. Bituminous coal delivered to the United States engineer office, White River, Ark., and Greenville and Vicksburg, Miss., War Department, 1914-15. Contract guaranties: 3.6 per cent moisture, "as received"; 39.5 per cent volatile matter, 3.1 per cent sulphur, 9 per cent ash, 13,200 B. t. u., "dry coal." Price, \$2.75 per ton (2,000 pounds).

221. Bituminous coal delivered to the quartermaster depot, Jeffersonville, Ind., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 4.09 per cent moisture, "as received"; 35.54 per cent volatile matter, 1.1 per cent sulphur, 7.79 per cent ash, and 13,737 B. t. u., "dry coal." Price, \$2.33 per ton.

222. Bituminous coal delivered to Fort McPherson, Ga., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2.5 per cent moisture, "as received"; 5 per cent ash, 14,300 B. t. u., "dry coal." Price, \$3.30 per ton.

223. Bituminous coal delivered to Fort McPherson, Ga., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2.5 per cent moisture, "as received"; 4 per cent ash, 14,400 B. t. u., "dry coal." Price, \$3.57 per ton.

MARYLAND COALS.

224. Semibituminous coal delivered to Fort Howard, Md., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2.5 per cent moisture, "as received"; 7.5 per cent ash, 14,500 B. t. u., "dry coal." Price, \$4.35 per ton.

225. Semibituminous coal delivered to the third lighthouse district, Tompkinsville, N. Y., Bureau of Lighthouses, Department of Commerce, 1913-14. Contract guaranties: 22 per cent volatile matter, 2 per cent sulphur, 7 per cent ash, 14,000 B. t. u., "dry coal." Price, \$4.45 per ton.

226. Semibituminous coal delivered to the Government Hospital for the Insane, Washington, D. C., Department of the Interior, 1913-14. Contract guaranties: 1.25 per cent moisture, "as received"; 8 per cent ash, 14,000 B. t. u., "dry coal." Price \$3.35 per ton.

227. Semibituminous coal delivered to Fort Washington, Md., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 7 per cent ash, "dry coal"; 14,250 B. t. u., "as received." Price, \$4.09 per ton.

228. Semibituminous coal delivered to the naval hospital, Washington, D. C., Navy Department, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 19.5 per cent volatile matter, 1.1 per cent sulphur, 7.5 per cent ash, 14,300 B. t. u., "dry coal." Price, \$3.55 per ton.

229. Semibituminous coal delivered to the Columbia Institution for the Deaf, Kendall Green, D. C., 1912-13. Contract guaranties and price same as No. 228.

230. Semibituminous coal delivered to the sewage pumping station, Washington, D. C., 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 7.5 per cent ash, 14,400 B. t. u., "dry coal." Price, \$3.17 per ton.

231. Semibituminous coal delivered to the naval hospital, Washington, D. C., Navy Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 19.5 per cent volatile matter, 1.1 per cent sulphur, 8 per cent ash, 14,250 B. t. u., "dry coal." Price, \$3.70 per ton.

232. Semibituminous coal delivered to the sewage pumping station, Washington, D. C., 1913-14. Contract guaranties same as No. 231. Price, \$3.32 per ton.

233. Semibituminous coal delivered to the Weather Bureau, Bluemont, Va., Department of Agriculture, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 19.5 per cent volatile matter, 1.1 per cent sulphur, 7 per cent ash, 14,350 B. t. u., "dry coal." Price, \$4 per ton.

234. Semibituminous coal delivered to the Columbia Institution for the Deaf, Washington, D. C., 1913-14. Contract guaranties same as No. 231. Price, \$3.70 per ton.

235. Semibituminous coal delivered to the navy yard at Philadelphia, Pa., Navy Department, 1914-15. Contract guaranties: 1.50 per cent moisture, "as received"; 19.29 per cent volatile matter, 1 per cent sulphur, 7.61 per cent ash, 14,533 B. t. u., "dry coal." Price, \$2.92 per ton f. o. b. vessels at coal piers, \$3.09 per ton f. o. b. barges alongside navy yard, and \$3.25 per ton f. o. b. cars at navy yard.

236. Semibituminous coal delivered to the United States Naval Academy, Annapolis, Md., Navy Department, 1914-15. Contract guaranties same as No. 235. Price, \$3.15 per ton at wharf, Naval Academy, and \$3.65 per ton stored aboard or ashore.

237. Semibituminous coal delivered to the sewage pumping station, Washington, D. C., 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 19.50 per cent volatile matter, 1.10 per cent sulphur, 8 per cent ash, 14,280 B. t. u., "dry coal." Price, \$3.40 per ton.

238. Semibituminous coal delivered to the naval hospital, Washington, D. C., Navy Department, 1914-15. Price, \$3.87 per ton.

239. Semibituminous coal delivered to the District of Columbia Workhouse, Occoquan, Va., 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 19.50 per cent volatile matter, 1.10 per cent sulphur, 8 per cent ash, 14,250 B. t. u., "dry coal." Price, \$3.49 per ton.

240. Semibituminous coal delivered to the Columbia Institute for the Deaf, Washington, D. C., 1914-15. Contract guaranties same as No. 239. Price, \$3.70 per ton.

241. Semibituminous coal delivered to the United States Navy, Curtis Bay, Md., Navy Department, 1914-15. Contract guaranties: 1.50 per cent moisture, "as received"; 19.29 per cent volatile matter, 1 per cent sulphur, 7.61 per cent ash, 14,533 B. t. u., "dry coal." Price, \$2.85 per ton.

242. Semibituminous coal delivered to the Naval Academy, Annapolis, Md., Navy Department, 1913-14. Contract guaranties: 2 per cent moisture, "as received"; 19 per cent volatile matter, 1.25 per cent sulphur, 8 per cent ash, 14,400 B. t. u., "dry coal." Price, \$3.01 per ton.

243. Semibituminous coal delivered to the naval engineering experiment station, Annapolis, Md., Navy Department, 1913-14. Contract guaranties same as No. 242. Price, \$3.03 per ton.

244. Semibituminous coal delivered to the Government Hospital for the Insane, Washington, D. C., Department of the Interior, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 19 per cent volatile matter, 1.25 per cent sulphur, 7 per cent ash, 14,500 B. t. u., "dry coal." Price, \$3.06 per ton.

245. Semibituminous coal delivered to the United States Naval Academy, Annapolis, Md., Navy Department, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 19 per cent volatile matter, 1.25 per cent sulphur, 8 per cent ash, 14,400 B. t. u., "dry coal." Price, \$3.04 per ton by water, \$3.05 per ton by rail.

246. Semibituminous coal delivered to the fifth lighthouse district, Baltimore, Md., Bureau of Lighthouses, Department of Commerce, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 19 per cent volatile matter, 1 per cent sulphur, 7 per cent ash, 14,400 B. t. u., "dry coal." Price, \$2.94 per ton.

247. Semibituminous coal delivered to the naval hospital, Washington, D. C., Navy Department, 1910-11. Contract guaranties: 7 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$3.37 per ton.

248. Semibituminous coal delivered to Fort Constitution, N. H., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$4.35 per ton.

249. Semibituminous coal delivered to Fort Strong, Mass., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$5.05 per ton.

250. Semibituminous coal delivered to Fort Warren, Mass., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2 per cent moisture,

"as received"; 22 per cent volatile matter, 2 per cent sulphur, 8 per cent ash, 14,200 B. t. u., "dry coal." Price, \$5.29 per ton.

251. Semibituminous coal delivered to Fort Strong, Mass., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2 per cent moisture, "as received"; 8 per cent ash, 14,200 B. t. u., "dry coal." Price, \$5.29 per ton.

252. Semibituminous coal delivered to Fort Constitution, N. H. (for vessels), Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2 per cent moisture, "as received"; 8.5 per cent ash, 14,100 B. t. u., "dry coal." Price, \$4.70 per ton delivered at Portsmouth, N. H.

253. Semibituminous coal delivered to the Government Hospital for the Insane, Washington, D. C., Department of the Interior, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 10 per cent ash, 14,000 B. t. u., "dry coal." Price, \$2.75 per ton.

254. Semibituminous coal delivered to the Government Hospital for the Insane, Washington, D. C., Department of the Interior, 1913-14. Contract guaranties: 2 per cent moisture, "as received"; 7 per cent ash, 14,000 B. t. u., "dry coal." Price, \$2.90 per ton.

MICHIGAN COALS.

255. Bituminous coal delivered to the United States Indian school, Mount Pleasant, Mich., Office of Indian Affairs, Department of the Interior, 1910-11. Contract guaranties: 8.5 per cent ash "dry coal"; 11,675 B. t. u., "as received." Price \$3.29 per ton (2,000 pounds).

MISSOURI COALS.

256. Bituminous coal delivered to Fort Crook, Nebr., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 14 per cent ash, "dry coal"; 10,600 B. t. u., "as received." Price, \$4.25 per ton.

MONTANA COALS.

257. Subbituminous coal delivered to the post office, Helena, Mont., Treasury Department, 1910-11. Contract guaranties: 10 per cent ash, "dry coal"; 10,940 B. t. u., "as received." Price, \$3.36 per ton.

258. Subbituminous coal delivered to Fort Missoula, Mont., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10.49 per cent ash, "dry coal"; 10,922 B. t. u., "as received." Price, \$2.80 and \$3.08 per ton f. o. b. mines (according to months of delivery).

259. Subbituminous coal delivered to Fort William Henry Harrison, Mont., Quartermaster Corps, War Department, 1911-12. Contract guaranties same as No. 258. Price, \$2.80 and \$3.08 f. o. b. mines (according to months of delivery).

260. Subbituminous coal delivered to Fort Missoula, Mont., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 8.62 per cent moisture, "as received"; 8.25 per cent ash, 12,980 B. t. u., "dry coal." Price, \$3.696 and \$3.976 per ton (according to months of delivery).

261. Subbituminous coal delivered to Fort Yellowstone, Wyo., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 8.62 per cent moisture, "as received"; 8.25 per cent ash, 12,980 B. t. u., "dry coal." Price, \$2.856 per ton for July, August, and March to June inclusive, and \$3.136 per ton for September to February, inclusive, f. o. b. mines.

262. Subbituminous coal delivered to Fort Yellowstone, Wyo., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 9.68 per cent moisture, "as received"; 9.55 per cent ash, 12,980 B. t. u., "dry coal." Price, \$3.22 per ton for July, August, and March to June, inclusive, and \$3.52 per ton for September to February, inclusive, f. o. b. mines.

263. Subbituminous coal delivered to Fort William Henry Harrison, Mont., Quartermaster Corps, War Department, 1912-13. Contract guaranties and prices same as No. 261.

264. Subbituminous coal delivered to Fort Missoula, Mont., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 9.68 per cent moisture, "as received"; 9.55 per cent ash, 12,980 B. t. u., "dry coal." Price, \$4.06 per ton in July, August, and March to June inclusive, and \$4.36 per ton for September to February, inclusive.

265. Subbituminous coal delivered to Fort Missoula, Mont., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 9.68 per cent moisture, "as received"; 43.70 per cent volatile matter, 1.53 per cent sulphur, 10.10 per cent ash, 12,500 B. t. u., "dry coal." Price, \$3.36 per ton in July and August, 1914, and June, 1915, and \$3.64 per ton in September, 1914, and February, 1915.

266. Subbituminous coal delivered to the post office, Helena, Mont., Treasury Department, 1911-12. Contract guaranties: 9.9 per cent ash, "dry coal"; 10,960 B. t. u., "as received." Price, \$3.10 per ton.

267. Subbituminous coal delivered to Fort George Wright, Wash., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 7.5 per cent ash, "dry coal"; 11,500 B. t. u., "as received." Price, \$3.50 per ton f. o. b. Washoe, Mont.

268. Bituminous coal delivered to the post office, Helena, Mont., Treasury Department, 1910-11. Contract guaranties: 14.7 per cent ash, "dry coal"; 11,190 B. t. u., "as received." Price, \$5.90 per ton.

269. Bituminous coal delivered to the Fort Peck Indian School, Poplar, Mont., Office of Indian Affairs, Department of the Interior, 1910-11. Contract guaranties: 13.47 per cent ash, "dry coal"; 11,675 B. t. u., "as received." Price, \$6.25 per ton (2,000 pounds).

270. Bituminous coal delivered to the post office, Helena, Mont., Treasury Department, 1911-12. Contract guaranties: 15 per cent ash, "dry coal," and 10,600 B. t. u., "as received." Price, \$5.75 per ton.

271. Bituminous coal delivered to Fort Yellowstone, Wyo., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 12 per cent ash, "dry coal"; 10,500 B. t. u., "as received." Price, \$6.60 per ton.

NEW MEXICO COALS.

272. Bituminous coal delivered to the Mescalero Indian Agency, Mescalero, N. Mex., Office of Indian Affairs, Department of the Interior, 1910-11. Contract guaranties: 12 per cent ash, "dry coal"; 13,000 B. t. u., "as received." Price, \$5.30 per ton (2,000 pounds).

273. Bituminous coal delivered to Fort Huachuca, Ariz., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 13 per cent ash, "dry coal"; 12,750 B. t. u., "as received." Price, \$12.95 per ton.

274. Bituminous coal delivered to Fort Bayard, N. Mex., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 13 per cent ash, "dry coal"; 12,500 B. t. u., "as received." Price, \$10 per ton.

275. Bituminous coal delivered to Fort Bayard, N. Mex., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2 per cent moisture,

"as received"; 13 per cent ash, 12,750 B. t. u., "dry coal." Price, \$8.30 per ton.

276. Bituminous coal delivered to Fort Huachuca, Ariz., Quartermaster Corps, War Department, 1912-13. Price, \$12 per ton.

277. Bituminous coal delivered to Fort Bayard, N. Mex., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2 per cent moisture, "as received"; 37.95 per cent volatile matter, 0.75 per cent sulphur, 13 per cent ash, 13,000 B. t. u., "dry coal." Price, \$7.35 and \$7.64 per ton (\$7.35 per 1,000 tons in storage; rest at \$7.64).

278. Bituminous coal delivered to Fort Huachuca, Ariz., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2 per cent moisture, "as received"; 34 per cent volatile matter, 0.70 per cent sulphur, 13 per cent ash, 12,750 B. t. u., "dry coal." Price, \$10.18 per ton.

279. Bituminous coal delivered to Fort Huachuca, Ariz., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2 per cent moisture, "as received"; 34 per cent volatile matter, 0.70 per cent sulphur, 15 per cent ash, 12,250 B. t. u., "dry coal." Price, \$9.46 per ton.

280. Bituminous coal delivered to Fort Bliss, Tex., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 13,800 B. t. u., "as received." Price, \$6.496 per ton.

281. Bituminous coal delivered to Fort Bliss, Tex., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2 per cent moisture, "as received"; 8 per cent ash, 13,800 B. t. u., "dry coal." Price, \$6.72 per ton.

282. Bituminous coal delivered to Fort Bliss, Tex., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 1.5 per cent moisture, "as received"; 35 per cent volatile matter, 0.5 per cent sulphur, 12 per cent ash, 12,750 B. t. u., "dry coal." Price, \$6.104 per ton.

283. Subbituminous coal delivered to Fort Rosecrans, Cal., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 12,750 B. t. u., "as received." Price, \$14.25 per ton.

284. Subbituminous coal delivered to Whipple Barracks, Ariz., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9.26 per cent ash, "dry coal"; 12,254 B. t. u., "as received." Price, \$8.75 per ton.

285. Subbituminous coal delivered to Whipple Barracks, Ariz., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 10 per cent moisture, "as received"; 9 per cent ash, 11,125 B. t. u., "dry coal." Price, \$3.82 per ton f. o. b. Gallup, N. Mex.

286. Bituminous coal delivered to the Jicarilla Indian school, Dulce, N. Mex., Office of Indian Affairs, Department of the Interior, 1910-11. Contract guaranties: 6 per cent ash, "dry coal"; 13,500 B. t. u., "as received." Price, \$4.65 per ton (2,000 pounds).

287. Anthracite coal delivered to Fort Bayard, N. Mex., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 8.75 per cent ash, "dry coal"; 12,900 B. t. u., "as received." Price, \$16.32 per ton.

288. Anthracite coal delivered to Fort Bayard, N. Mex., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 10 per cent ash, "dry coal." Price, \$14 per ton.

289. Anthracite coal delivered to Fort Bayard, N. Mex., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 11 per cent ash, "dry coal." Price, \$13 per ton.

290. Anthracite coal delivered to Fort Bayard, N. Mex., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 10 per cent ash, 13,000 B. t. u., "dry coal." Price, \$12.40 per ton.

291. Anthracite coal delivered to Fort Bayard, N. Mex., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 6.1 per cent volatile matter, 0.7 per cent sulphur, 10 per cent ash, 13,250 B. t. u., "dry coal." Price, \$12.50 per ton.

NORTH DAKOTA COAL.

292. Lignite delivered to the United States Reclamation Service, Williston, N. Dak., Department of the Interior, 1914-15.

OHIO COALS.

293. Bituminous coal delivered to the Northwestern Branch of the National Home for Disabled Volunteer Soldiers, National Home, Wis., 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 13,095 B. t. u., "as received." Price, \$3.95 per ton (2,000 pounds).

294. Bituminous coal delivered to the Northwestern Branch of the National Home for Disabled Volunteer Soldiers, National Home, Wis., 1912-13. Contract guaranties: 3.5 per cent moisture, "as received"; 8 per cent ash, 13,400 B. t. u., "dry coal." Price, \$3.95 per ton (2,000 pounds).

295. Bituminous coal delivered to the Northwestern Branch of the National Home for Disabled Volunteer Soldiers, National Home, Wis., 1913-14. Contract guaranties: 3.5 per cent moisture, "as received"; 32 per cent volatile matter, 1.75 per cent sulphur, 8 per cent ash, 13,400 B. t. u., "dry coal." Price, \$3.95 per ton (2,000 pounds).

296. Bituminous coal delivered to the post-office building, Toledo, Ohio, Treasury Department, 1913-14. Contract guaranties: 3.5 per cent moisture, "as received"; 44.1 per cent volatile matter, 3.35 per cent sulphur, 9.4 per cent ash, "dry coal"; 13,260 B. t. u., "as received." Price, \$3.10 per ton.

297. Bituminous coal delivered to Columbus Barracks, Ohio, Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9.35 per cent ash, "dry coal"; 11,300 B. t. u., "as received." Price, \$2.45 per ton.

298. Bituminous coal delivered to Columbus Barracks, Ohio, Quartermaster Corps, War Department, 1912-13. Contract guaranties: 6.21 per cent moisture, "as received"; 7.64 per cent ash, 12,500 B. t. u., "dry coal." Price, \$3.15 per ton.

299. Bituminous coal delivered to Columbus Barracks, Ohio, Quartermaster Corps, War Department, 1913-14. Contract guaranties: 6.95 per cent moisture, "as received"; 40 per cent volatile matter, 3.25 per cent sulphur, 8.5 per cent ash, 12,500 B. t. u., "dry coal." Price, \$3.30 per ton.

300. Bituminous coal delivered to the customhouse and post office, Toledo, Ohio, Treasury Department, 1907-8. Contract guaranties: 6.91 per cent ash, "dry coal"; 11,475 B. t. u., "as received." Price, \$4.12 per ton.

OKLAHOMA COALS.

301. Bituminous coal delivered to the remount depot, Fort Reno, Okla., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 7 per cent ash, "dry coal"; 13,600 B. t. u., "as received." Price, \$4.35 per ton.

302. Bituminous coal delivered to Fort Reno, Okla., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 10 per cent ash, 13,000 B. t. u., "dry coal." Price, \$4.20 per ton.

303. Bituminous coal delivered to the remount depot, Fort Reno, Okla., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 12,500 B. t. u., "as received." Price, \$5.30 per ton.

304. Bituminous coal delivered to the remount depot, Fort Reno, Okla.: Quartermaster Corps, War Department, 1914-15. Contract guaranties: 7 per cent moisture, "as received"; 35 per cent volatile matter, 5 per cent sulphur, 8 per cent ash, 12,500 B. t. u., "dry coal." Price, \$5.20 per ton.

305. Bituminous coal delivered to the remount depot, Fort Reno, Okla.: Quartermaster Corps, War Department, 1914-15. Contract guaranties: 7 per cent moisture, "as received"; 35 per cent volatile matter, 5 per cent sulphur, 9 per cent ash, and 12,500 B. t. u., "dry coal." Price, \$3.85 per ton.

306. Bituminous coal delivered to the remount depot, Fort Reno, Okla., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 6 per cent moisture, "as received"; 13 per cent ash, 12,500 B. t. u., "dry coal." Price, \$5.48 per ton.

307. Bituminous coal delivered to Fort Sill, Okla., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 6 per cent moisture, "as received"; 35 per cent volatile matter, 2.5 per cent sulphur, 13 per cent ash, 12,500 B. t. u., "dry coal." Price, \$4.59 per ton.

308. Bituminous coal delivered to Fort Sill, Okla., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9.1 per cent ash, "dry coal"; 12,610 B. t. u., "as received." Price, \$5.90 per ton.

309. Bituminous coal delivered to Fort Sill, Okla., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 35 per cent volatile matter, 2 per cent sulphur, 10 per cent ash, 13,500 B. t. u., "dry coal." Price, \$5.95 per ton.

PENNSYLVANIA COALS.

310. Bituminous coal delivered to the United States courthouse and post office building, Louisville, Ky., Treasury Department, 1908-9. Contract guaranties: 6 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$2.65 per ton.

311. Bituminous coal delivered to the United States engineer office, Grand Rapids, Mich., War Department, 1914-15. Contract guaranties: 1.15 per cent moisture, "as received"; 35 per cent volatile matter, 0.98 per cent sulphur, 5.7 per cent ash, 14,100 B. t. u., "dry coal." Price, per ton (2,000 pounds), \$3.40 for delivery at St. Joseph, South Haven, Holland, Grand Haven, and Muskegon, Mich.; \$3.60 at Ludington, Manistee, and Frankfort; and \$3.75 at Charlevoix.

312. Bituminous coal delivered to the post office, Minneapolis, Minn., Treasury Department, 1914-15. Contract guaranties: 35 per cent volatile matter, 2 per cent sulphur, 8 per cent ash, "dry coal"; 13,000 B. t. u., "as received." Price, \$4.35 per ton.

313. Bituminous coal delivered to the post office, Buffalo, N. Y., Treasury Department, 1913-14. Price, \$3.05 per ton.

314. Bituminous coal delivered to the post office, Buffalo, N. Y., Treasury Department, 1914-15. Price, \$3.05 per ton.

315. Semibituminous coal delivered to the mint building, Philadelphia, Pa., Treasury Department, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 20 per cent volatile matter, 1.5 per cent sulphur, 5 per cent ash, 14,250 B. t. u., "dry coal." Price, \$3.24 per ton.

316. Semibituminous coal delivered to the post office, Philadelphia, Pa., Treasury Department, 1914-15. Contract guaranties: 22 per cent volatile matter, 1.5 per cent sulphur, 6 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$3.44 per ton.

317. Semibituminous coal delivered to the United States appraiser's warehouse, New York, N. Y., Treasury Department, 1909-10. Contract guaranties: 6 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.35 per ton.

318. Semibituminous coal delivered to the United States courthouse and post office, New York, N. Y., Treasury Department, 1909-10. Contract guaranties: 6 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.37 per ton.

319. Bituminous coal delivered to the third lighthouse district, Tompkinsville, N. Y., Bureau of Lighthouses, Department of Commerce, 1913-14. Contract guaranties: 22 per cent volatile matter, 2 per cent sulphur, 9 per cent ash, 14,000 B. t. u., "dry coal." Price, \$2.85 per ton.

320. Semibituminous coal delivered to the Panama Railroad Co., New York, N. Y., 1912-13. Contract guaranty: 14,200 B. t. u., "as received." Price, \$2.89 per ton.

321 and 322. Semibituminous coal delivered to the Panama Railroad Co., New York, N. Y. Contract guaranty: 14,400 B. t. u., "dry coal." Price, \$3.02 per ton. No. 321 was delivered in 1913-14, and No. 322 in 1914-15.

323. Semibituminous coal delivered to the navy yard at Philadelphia, Pa., Navy Department, 1914-15. Contract guaranties: 2.26 per cent moisture, "as received"; 21.82 per cent volatile matter, 1.22 per cent sulphur, 6.37 per cent ash, 14,567 B. t. u., "dry coal." Price, \$2.85 per ton f. o. b. vessels at coal piers, and \$2.95 per ton f. o. b. barges alongside navy yard.

324. Semibituminous coal delivered to the navy yard at New York, N. Y., Navy Department, 1914-15. Contract guaranties same as No. 323. Price, \$3.25 per ton f. o. b. barges alongside navy yard.

325. Semibituminous coal delivered to the Naval Academy, Annapolis, Md., Navy Department, 1911-12. Contract guaranties: 6 per cent ash, 14,500 B. t. u., "as received." Price, \$2.66 per ton.

326. Semibituminous coal delivered to the navy yard at Philadelphia, Pa., Navy Department, 1911-12. Contract guaranties same as No. 325. Price, \$2.45 per ton.

327, 328, 329. Semibituminous coal delivered to the Frankford Arsenal, Philadelphia, Pa., War Department. Contract guaranties: 8 per cent ash, 14,200 B. t. u., "dry coal." No. 327 delivered in 1912-13; price, \$2.80 per ton; No. 328 in 1913-14, price, \$2.85; and No. 329 in 1914-15, price, \$2.85.

330. Semibituminous coal delivered to the United States engineer office, Philadelphia, Pa., War Department, 1910-11. Contract guaranties: 20 per cent volatile matter, 1.5 per cent sulphur, 8.5 per cent ash, "dry coal"; 14,100 B. t. u., "as received." Price, \$3.30 per ton in vessels and \$2.90 per ton at piers.

331. Semibituminous coal delivered to the United States engineer office, Philadelphia, Pa., War Department, 1911-12. Contract guaranties: 14,300 B. t. u., "as received." Price, \$2.90 per ton in vessels and \$2.75 per ton in scows.

332. Semibituminous coal delivered to the United States engineer office, Philadelphia, Pa., War Department, 1912-13. Contract guaranties: 13,880 B. t. u., "dry coal." Price, \$2.75, \$2.90, and \$3.19 per ton (according to method of delivery).

333. Semibituminous coal delivered to the Eastern Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Me., 1913-14. Contract guaranties: 2 per cent moisture, "as received"; 20 to 21 per cent volatile matter, 1.5 per cent sulphur, 7 per cent ash, 14,750 B. t. u., "dry coal." Price, \$4.03 per ton.

334. Semibituminous coal delivered to the United States engineer office, Philadelphia, Pa., War Department, 1913-14. Contract guaranties: 1.5 per cent moisture, "as received"; 6 per cent ash, 14,600 B. t. u., "dry coal." Price, \$3.27, \$2.83, and \$2.98 per ton (according to method of delivery).

335. Bituminous coal delivered to the navy yard at Philadelphia, Pa., Navy Department, 1914-15. Contract guaranties: 1.5 per cent moisture, "as received"; 25 per cent volatile matter, 1 per cent sulphur, 7 per cent ash, 14,545 B. t. u., "dry coal." Price, \$2.79 per ton.

336. Bituminous coal delivered to the navy yard at Brooklyn, N. Y., Navy Department, 1914-15. Contract guaranties: 1 per cent moisture, "as received"; 24 per cent volatile matter, 1 per cent sulphur, 6.5 per cent ash, 14,500 B. t. u., "dry coal." Price, \$3.05 per ton.

337. Semibituminous coal delivered to the United States engineer office, New York, N. Y., War Department, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 18 per cent volatile matter, 1.5 per cent sulphur, 8 per cent ash, 14,400 B. t. u., "dry coal." Price, \$3.43 per ton.

338. Semibituminous coal delivered to the post office, Philadelphia, Pa., Treasury Department, 1913-14. Contract guaranties: 7 per cent ash, "dry coal"; 14,600 B. t. u., "as received." Price, \$3.35 per ton.

339. Semibituminous coal delivered to the Springfield Armory, Springfield, Mass., War Department, 1913-14. Contract guaranties: 8 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$4.60 per ton at hill shops and \$4.25 per ton at water shops.

340. Semibituminous coal delivered to the Frankford Arsenal, Philadelphia, Pa., War Department, 1909-10. Contract guaranties: 5 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$2.60 per ton.

341. Semibituminous coal delivered to the customhouse, Baltimore, Md., Treasury Department, 1910-11. Contract guaranties: 5 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$3.13 per ton.

342. Semibituminous coal delivered to the United States courthouse and post office, Baltimore, Md., Treasury Department, 1910-11. Contract guaranties and price same as No. 341.

343. Semibituminous coal delivered to the Frankford Arsenal, Philadelphia, Pa., War Department, 1910-11. Contract guaranties same as No. 341. Price, \$2.69 per ton.

344. Semibituminous coal delivered to the mint building, Philadelphia, Pa., Treasury Department, 1910-11. Contract guaranties same as No. 341. Price, \$3.09 per ton.

345. Semibituminous coal delivered to the United States courthouse and post office, Philadelphia, Pa., Treasury Department, 1910-11. Contract guaranties same as No. 341. Price, \$3.22 per ton.

346. Semibituminous coal delivered to the Naval Academy, Annapolis, Md., Navy Department, 1910-11. Contract guaranties same as No. 341. Price, \$2.75 per ton.

347. Semibituminous coal delivered to the United States courthouse and post office, Baltimore, Md., Treasury Department, 1911-12. Contract guaranties same as No. 341. Price, \$3.10 per ton.

348. Semibituminous coal delivered to Frankford Arsenal, Philadelphia, Pa., War Department, 1911-12. Contract guaranties same as No. 341. Price, \$2.67 per ton.

349. Semibituminous coal delivered to the mint building, Philadelphia, Pa., Treasury Department, 1911-12. Contract guaranties same as No. 341. Price, \$3.09 per ton.

350. Semibituminous coal delivered to the United States courthouse and post office, Philadelphia, Pa., Treasury Department, 1911-12. Contract guaranties same as No. 341. Price, \$3.19 per ton.

351. Semibituminous coal delivered to the customhouse, Baltimore, Md., Treasury Department, 1911-12. Contract guaranties same as No. 341. Price, \$3.10 per ton.

352. Semibituminous coal delivered to the post office, Baltimore, Md., Treasury Department, 1912-13. Contract guaranties: 22 per cent volatile matter, 1.5 per cent sulphur, 5 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$3.13 per ton.

353. Semibituminous coal delivered to the post office, Philadelphia, Pa., Treasury Department, 1912-13. Contract guaranties same as No. 352. Price, \$3.28 per ton.

354. Semibituminous coal delivered to the post office, Baltimore, Md., Treasury Department, 1913-14. Contract guaranties: 5 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$3.25 per ton.

355. Semibituminous coal delivered to the United States courthouse and post office, Baltimore, Md., Treasury Department, 1914-15. Contract guaranties: 22 per cent volatile matter, 1.50 per cent sulphur, 6 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$3.35 per ton.

356. Semibituminous coal delivered to the mint building, Philadelphia, Pa., Treasury Department, 1912-13. Contract guaranties: 5 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$3.10 per ton.

357. Semibituminous coal delivered to the General Land Office, Washington, D. C., Department of the Interior, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 18 per cent volatile matter. 1.6 per cent sulphur, 6.5 per cent ash, 14,350 B. t. u., "dry coal." Price, \$3.53 per ton.

358. Semibituminous coal delivered to the post office and subtreasury, Boston, Mass., Treasury Department, 1908-9. Contract guaranties: 7.12 per cent ash, "dry coal"; 14,257 B. t. u., "as received." Price, \$4.43 per ton.

359. Semibituminous coal delivered to the third lighthouse district, Tompkinsville, N. Y., Bureau of Lighthouses, Department of Commerce, 1911-12. Contract guaranties: 7 per cent ash, "dry coal"; 14,150 B. t. u., "as received." Price, \$2.63 per ton.

360. Semibituminous coal delivered to the customhouse, Albany, N. Y., Treasury Department, 1909-10. Contract guaranties: 8 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.44 per ton.

361. Semibituminous coal delivered to the United States courthouse and post office, Albany, N. Y., Treasury Department, 1910-11. Contract guaranties same as No. 360. Price, \$3.55 per ton.

362. Semibituminous coal delivered to the Springfield Armory, Springfield, Mass., War Department, 1914-15. Contract guaranties: 3.5 per cent moisture, "as received"; 18.5 per cent volatile matter, 1.1 per cent sulphur, 7.45 per cent ash, 14,522 B. t. u., "dry coal." Price, \$4.40 per ton for delivery in cars at water shops, and \$4.75 per ton for delivery at hill shops by teams.

363. Bituminous coal delivered to the Frankford Arsenal, Philadelphia, Pa., War Department, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$2.63 per ton.

364. Semibituminous coal delivered to the Naval Academy, Annapolis, Md., Navy Department, 1910-11. Contract guaranties: 5 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$2.75 per ton.

365. Semibituminous coal delivered to Fort Myer, Va., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.80 per ton.

366. Semibituminous coal delivered to the Springfield Armory, Springfield, Mass., War Department, 1910-11. Contract guaranties: 7 per cent ash, "dry coal"; 14,600 B. t. u., "as received." Price, \$4.55 per ton.

367. Semibituminous coal delivered to the Eastern Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Me., 1914-15. Contract guaranties: 3.75 per cent moisture, "as received"; 19.50 per cent volatile matter, 1.5 per cent sulphur, 6.25 per cent ash, 14,700 B. t. u., "dry coal." Price, \$3.92 per ton.

368. Semibituminous coal delivered to the Eastern Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Me., 1912-13. Contract guaranties: 2.25 per cent moisture, "as received"; 5.5 per cent ash, 14,700 B. t. u., "dry coal." Price, \$3.87 per ton.

369. Semibituminous coal delivered to the Capitol power plant, Washington, D. C., 1914-15. Price, \$2.95 per ton.

370. Semibituminous coal delivered to the mint building, Philadelphia, Pa., Treasury Department, 1909-10. Contract guaranties: 5 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$3.04 per ton.

371. Semibituminous coal delivered to the United States jail, Washington, D. C., Department of Justice, 1909-10. Contract guaranties: 5 per cent ash, "dry coal"; 14,250 B. t. u., "as received." Price, \$3.19 per ton.

372. Semibituminous coal delivered to the Treasury Building, Washington, D. C., Treasury Department, 1909-10. Contract guaranties, same as No. 371, Price, \$3.14 per ton.

373. Semibituminous coal delivered to the Winder Building, Washington, D. C., Treasury Department, 1909-10. Contract guaranties, same as No. 371. Price, \$3.14 per ton.

374. Semibituminous coal delivered to the Panama Railroad Co., New York, N. Y., 1910-11. Contract guaranties: 14,200 B. t. u., "as received." Price, \$2.87 per ton.

375. Semibituminous coal delivered to Fort Du Pont, Del., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2 per cent moisture, "as received"; 6.5 per cent ash, 14,500 B. t. u., "dry coal." Price, \$3.70 per ton.

376. Semibituminous coal delivered to Delaware City Wharf and Fort Du Pont, Del., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 3.5 per cent moisture, "as received"; 23.5 per cent volatile matter, 1.75 per cent sulphur, 7.5 per cent ash, 14,200 B. t. u., "dry coal." Price, \$3.70 per ton.

377. Semibituminous coal delivered to the United States courthouse and post office, Baltimore, Md., Treasury Department, 1907-8. Contract guaranties: 8 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$3.31 per ton.

378. Semibituminous coal delivered to the United States appraiser's warehouse, New York, N. Y., Treasury Department, 1910-11. Contract guaranties: 6 per cent ash, "dry coal"; 14,100 B. t. u., "as received." Price, \$3.31 per ton.

379. Semibituminous coal delivered to the United States courthouse and post office, New York, N. Y., Treasury Department, 1910-11. Contract guaranties and price same as No. 378.

380. Semibituminous coal delivered to the United States courthouse and post office, New York, N. Y., Treasury Department, 1911-12. Contract guaranties and price same as No. 378.

381. Semibituminous coal delivered to the United States courthouse and post office, Philadelphia, Pa., Treasury Department, 1908-9. Contract guaranties: 7.8 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.30 and \$3.35 per ton.

382. Semibituminous coal delivered to the mint building, Philadelphia, Pa., Treasury Department, 1908-9. Contract guaranties same as No. 381. Price, \$3.14 per ton.

383. Semibituminous coal delivered to the United States appraiser's warehouse, New York, N. Y., Treasury Department, 1907-8. Contract guaranties: 7.8 per cent ash, "dry coal"; 14,474 B. t. u., "as received." Price, \$3.46 per ton.

384. Semibituminous coal delivered to the United States courthouse and post office, Philadelphia, Pa., Treasury Department, 1907-8. Contract guaranties same as No. 383. Price, \$3.58 per ton.

385. Semibituminous coal delivered to the depot quartermaster, New York City, N. Y., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6.9 per cent ash, "dry coal"; 14,100 B. t. u., "as received." Price in Quartermaster's vessels, \$2.795 per ton; in transports, \$3.09.

386. Semibituminous coal delivered to the United States appraiser's warehouse, New York, N. Y., Treasury Department, 1911-12. Contract guaranties same as No. 385. Price, \$3.27 per ton.

387. Semibituminous coal delivered to the Quartermaster Corps, New York Harbor, War Department, 1912-13. Contract guaranties: 2 per cent moisture, "as received"; 6.9 per cent ash, 14,050 B. t. u., "dry coal." Price, \$2.88 per ton.

388. Semibituminous coal delivered to the New York depot and Port Liberty, N. J., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2 per cent moisture, "as received"; 7 per cent ash, 14,050 B. t. u., "dry coal." Price, \$2.94 per ton (price varies according to method of delivery).

389. Semibituminous coal delivered to the depot quartermaster, New York, N. Y., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 20 per cent volatile matter, 1.25 per cent sulphur, 7 per cent ash, 14,050 B. t. u., "dry coal." Price, \$2.98 per ton for delivery at Port Liberty, N. J., and \$3.38 per ton aboard vessels in New York Harbor.

390. Semibituminous coal delivered to the United States courthouse, New York, N. Y., Treasury Department, 1914-15. Contract guaranties: 22 per cent volatile matter, 1.5 per cent sulphur, 6 per cent ash, "dry coal"; 14,150 B. t. u., "as received." Price, \$3.65 per ton.

391. Semibituminous coal delivered to the United States appraiser's warehouse, New York, N. Y., Treasury Department, 1914-15. Contract guaranties same as No. 390. Price, \$3.55 per ton.

392. Semibituminous coal delivered to the Frankford Arsenal, Philadelphia, Pa., War Department, 1907-8. Contract guaranties: 8 per cent ash, "dry coal"; 14,100 B. t. u., "as received." Price, \$2.89 per ton.

393. Semibituminous coal delivered to the Government Hospital for the Insane, Washington, D. C., Department of the Interior, 1907-8. Contract guaranties: 8 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$2.89 per ton.

394. Semibituminous coal delivered to the United States courthouse and post office, Philadelphia, Pa., Treasury Department, 1909-10. Contract guaranties: 6 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$3.20 per ton.

395. Semibituminous coal delivered to the Watertown Arsenal, Watertown, Mass., War Department, 1910-11. Contract guaranties: 6 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$4.19 per ton.

396. Semibituminous coal delivered to the Frankford Arsenal, Philadelphia, Pa., War Department, 1909-10. Contract guaranties: 6 per cent ash, "dry coal"; 14,250 B. t. u., "as received." Price, \$2.75 per ton.

397. Bituminous coal delivered to the post office, Buffalo, N. Y., Treasury Department, 1909-10. Contract guaranties: 5 per cent ash, "dry coal"; 14,100 B. t. u., "as received." Price, \$2.84 per ton.

398. Bituminous coal delivered to the Northwestern Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Wis., 1912-13. Contract guaranties: 4 per cent moisture, "as received"; 11 per cent ash, 13,100 B. t. u., "dry coal." Price, \$3 per ton (2,000 pounds).

399. Bituminous coal delivered to the United States courthouse and post office, Louisville, Ky., Treasury Department, 1909-10. Contract guaranties: 11 per cent ash, "dry coal"; 13,000 B. t. u., "as received." Price, \$2.12 per ton.

400. Semibituminous coal delivered to the Panama Railroad Co., New York, N. Y., 1911-12. Contract guaranty: 14,200 B. t. u., "as received." Price, \$2.87 per ton.

401. Semibituminous coal delivered to the Capitol power plant, Washington, D. C., 1911-12. Price, \$3.01 per ton.

402. Bituminous coal delivered to the third lighthouse district, New York Harbor, Bureau of Lighthouses, Department of Commerce, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 22 per cent volatile matter, 2 per cent sulphur, 10 per cent ash, "dry coal"; 13,800 B. t. u., "as received." Price, \$2.92 per ton.

403. Bituminous coal delivered to the engineering experiment station, United States Naval Academy, Annapolis, Md., Navy Department, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 26 per cent volatile matter, 1.5 per cent sulphur, 8.5 per cent ash, 14,500 B. t. u., "dry coal." Price, \$3.32 per ton.

404. Bituminous coal delivered to the post office, Buffalo, N. Y., Treasury Department, 1908-9. Contract guaranties: 6.5 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3 per ton.

405. Bituminous coal delivered to the post office, Buffalo, N. Y., Treasury Department, 1910-11. Contract guaranties same as No. 404. Price, \$3.14 per ton.

406. Bituminous coal delivered to the post office, Buffalo, N. Y., Treasury Department, 1912-13. Price, \$3.15 per ton.

407. Bituminous coal delivered to the fourth lighthouse district, Philadelphia, Pa., Bureau of Lighthouses, Department of Commerce, 1912-13. Contract guaranties: 7 per cent ash, 14,435 B. t. u., "dry coal." Price, \$3.15 per ton.

408. Semibituminous coal delivered to the naval training school, Newport, R. I., Navy Department, 1909-10. Contract guaranties: 7 per cent ash, 0.65 per cent sulphur, "dry coal"; 14,500 B. t. u., "as received." Price, \$3.55 per ton.

409. Semibituminous coal delivered to Fort Greble, R. I., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9 per cent ash, "dry coal"; 13,900 B. t. u., "as received." Price, \$5.20 per ton.

410. Semibituminous coal delivered to the Panama Railroad Co., New York, N. Y., 1909-10. Contract guaranty: 14,000 B. t. u., "as received." Price, \$2.64 per ton.

411. Semibituminous coal delivered to the Freedmen's Hospital and Howard University, Washington, D. C., Department of the Interior, 1908-9. Contract guaranties: 10 per cent ash, "dry coal"; 13,900 B. t. u., "as received." Price, \$3.55 per ton.

412. Semibituminous coal delivered to the United States Soldiers' Home, Washington, D. C., War Department, 1908-9. Contract guaranties: 6 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, July 1 to December 31, 1908, \$3.58 per ton; January 1 to June 30, 1909, \$3.29 per ton.

413. Semibituminous coal delivered to the Watertown Arsenal, Watertown, Mass., War Department, 1908-9. Contract guaranties: 8 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$4.21 per ton.

414. Semibituminous coal delivered to the filtration plant, Washington, D. C., War Department, 1909-10. Contract guaranties: 6 per cent ash, "dry coal" 14,300 B. t. u., "as received." Price, \$3.15 per ton.

415. Semibituminous coal delivered to the United States Soldiers' Home, Washington, D. C., War Department, 1909-10. Contract guaranties same as No. 414. Price, \$3.17 per ton.

416. Semibituminous coal delivered to Freedmen's Hospital, Washington, D. C., Department of the Interior, 1907-8. Contract guaranties: 10 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.75 per ton.

417. Semibituminous coal delivered to the United States jail, Washington, D. C., Department of Justice, 1910-11. Contract guaranties: 7 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.44 per ton.

418. Semibituminous coal delivered to the United States Indian industrial school, Carlisle, Pa., Office of Indian Affairs, Department of the Interior, 1910-11. Contract guaranties same as No. 417. Price, \$2.49 per ton (2,000 pounds).

419. Semibituminous coal delivered to the filtration plant, Washington, D. C., War Department, 1910-11. Contract guaranties: 7 per cent ash, "dry coal"; 14,100 B. t. u., "as received." Price, \$3.29 per ton.

420. Semibituminous coal delivered to the United States Soldiers' Home, Washington, D. C., War Department, 1910-11. Contract guaranties: 7 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.31 per ton.

421. Semibituminous coal delivered to the filtration plant, Washington, D. C., War Department, 1911-12. Contract guaranties: 7 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.17 per ton.

422. Semibituminous coal delivered to the United States Soldiers' Home, Washington, D. C., War Department, 1911-12. Contract guaranties and price same as No. 421. Price, \$3.37 per ton.

423. Semibituminous coal delivered to the National Training School for Boys, Washington, D. C., 1912-13. Contract guaranties: 2 per cent moisture, "as received"; 7 per cent ash, 14,200 B. t. u., "dry coal." Price, \$3.57 per ton in vaults at school and \$3.27 per ton at brickyard.

424. Semibituminous coal delivered to the filtration plant, Washington, D. C., War Department, 1912-13. Contract guaranties: 7 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.37 per ton.

425. Semibituminous coal delivered to the National Training School for Boys, Washington, D. C., 1913-14. Contract guaranties: 1.75 per cent moisture, "as received"; 7 per cent ash, 14,200 B. t. u., "dry coal." Price, \$3.67 per ton at power house and \$3.82 per ton at brickyard.

426. Semibituminous coal delivered to the United States appraisers' warehouse, New York, N. Y., Treasury Department, 1908-9. Contract guaranties: 8 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.28 per ton.

427. Semibituminous coal delivered to the United States courthouse and post office, New York, N. Y., Treasury Department, 1908-9. Contract guaranties same as No. 426. Price, \$3.43 per ton.

428. Semibituminous coal delivered to the navy yard at Philadelphia, Pa., Navy Department, 1910-11. Contract guaranties: 7 per cent ash, "dry coal"; 14,100 B. t. u., "as received." Price, \$2.54 per ton.

429. Semibituminous coal delivered to the power plant at Ellis Island Immigration Station, New York, N. Y., Department of Labor, 1913-14. Contract guaranties: 1 per cent moisture, "as received"; 17.5 per cent volatile matter,

1.29 per cent sulphur, 7.5 per cent ash, 14,200 B. t. u., "dry coal." Price, \$3.15 per ton.

430. Semibituminous coal delivered to the United States engineer office, New York, N. Y., War Department, 1910-11. Price, \$3.04 per ton.

431. Semibituminous coal delivered to the Rock Island Arsenal, Rock Island, Ill., War Department, 1910-11. Contract guaranties: 5 per cent ash, "dry coal"; 13,600 B. t. u., "as received." Price, \$4.79 per ton.

432. Semibituminous coal delivered to Fort Hancock, N. J., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 8.23 per cent ash, "dry coal"; 14,240 B. t. u., "as received." Price, \$3.70 per ton.

433. Semibituminous coal delivered to the United States engineer office, New York, N. Y., War Department, 1914-15. Contract guaranties: 1.75 per cent moisture, "as received"; 18 per cent volatile matter, 1 per cent sulphur, 7 per cent ash, 14,400 B. t. u., "dry coal." Price, \$3.90 per ton.

434. Semibituminous coal delivered to the National Zoological Park, Washington, D. C., Smithsonian Institution, 1910-11. Contract guaranties: 7 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$3.85 per ton.

435. Semibituminous coal delivered to the General Land Office, Washington, D. C., Department of the Interior, 1910-11. Contract guaranties: 7 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$3.23 per ton.

436. Semibituminous coal delivered to the General Land Office, Washington, D. C., Department of the Interior, 1911-12. Contract guaranties: 7 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.27 per ton.

437. Semibituminous coal delivered to the Freedmen's Hospital, Washington, D. C., Department of the Interior, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 7.5 per cent ash, 14,275 B. t. u., "dry coal." Price, \$3.40 per ton.

438. Semibituminous coal delivered to the United States Soldiers' Home, Washington, D. C., War Department, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 7 per cent ash, 14,250 B. t. u., "dry coal." Price, \$3.50 per ton.

439. Semibituminous coal delivered to the United States naval powder depot, Lake Denmark, N. J., Navy Department, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 17.25 per cent volatile matter, 1.60 per cent sulphur, 8 per cent ash, 14,275 B. t. u., "dry coal." Price, \$3.60 per ton.

440. Semibituminous coal delivered to the United States Naval Academy, Annapolis, Md., Navy Department, 1912-13. Contract guaranties same as No. 439. Price \$2.90 at sea wall, Naval Academy, and \$3.40 per ton at engineering experiment station.

441. Semibituminous coal delivered to the District of Columbia pumping station, Washington, D. C., 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 7.5 per cent ash, 14,275 B. t. u., "dry coal." Price, \$3.27 per ton.

442. Semibituminous coal delivered to the General Land Office, Washington, D. C., Department of the Interior, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 7.5 per cent ash, 14,275 B. t. u., "dry coal." Price, \$3.32 per ton.

443. Semibituminous coal delivered to the United States Soldiers' Home, Washington, D. C., War Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 17.25 per cent volatile matter, 1.6 per cent sulphur, 8.5 per cent ash, 14,100 B. t. u., "dry coal." Price, \$3.60 per ton.

444. Semibituminous coal delivered to the National Zoological Park, Washington, D. C., Smithsonian Institution, 1913-14. Contract guaranties same as No. 443. Price, \$4.10 per ton.

445. Semibituminous coal delivered to the Freedmen's Hospital, Washington, D. C., Department of the Interior, 1913-14. Contract guaranties same as No. 443. Price, \$3.55 per ton.

446. Semibituminous coal delivered to the filtration plant, Washington, D. C., War Department, 1913-14. Contract guaranties: 3.5 per cent moisture, "as received"; 17.25 per cent volatile matter, 1.6 per cent sulphur, 8.5 per cent ash, 14,000 B. t. u., "dry coal." Price, \$3.14 per ton (2,000 pounds).

447. Semibituminous coal delivered to the General Land Office, Washington, D. C., Department of the Interior, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 17.25 per cent volatile matter, 1.6 per cent sulphur, 8.5 per cent ash, 14,100 B. t. u., "dry coal." Price, \$3.50 per ton.

448. Semibituminous coal delivered to the District of Columbia pumping station, Washington, D. C., 1913-14. Contract guaranties same as No. 447. Price, \$3.35 per ton.

449. Semibituminous coal delivered to the United States Soldiers' Home, Washington, D. C., War Department, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 19.5 per cent volatile matter, 1.6 per cent sulphur, 9 per cent ash, 14,100 B. t. u., "dry coal." Price, \$3.65 per ton.

450. Semibituminous coal delivered to the District of Columbia pumping station, Washington, D. C., 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 17.25 per cent volatile matter, 1.6 per cent sulphur, 9 per cent ash, 14,100 B. t. u., "dry coal." Price, \$3.52 per ton.

451. Semibituminous coal delivered to the filtration plant, Washington, D. C., War Department, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 17.25 per cent volatile matter, 1.5 per cent sulphur, 8.5 per cent ash, 14,100 B. t. u., "dry coal." Price \$3.21 per ton.

452. Semibituminous coal delivered to Freedmen's Hospital, Washington, D. C., Department of the Interior, 1914-15. Contract guaranties same as No. 450. Price, \$3.58 per ton.

453. Semibituminous coal delivered to the National Training School for Boys, Washington, D. C., 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 17.25 per cent volatile matter, 1.6 per cent sulphur, 10.3 per cent ash, 13,950 B. t. u., "dry coal." Price, \$3.65 per ton for delivery at power plant, and \$3.80 per ton at brickyard.

454. Semibituminous coal delivered to the customhouse, Toledo, Ohio, Treasury Department, 1910-11. Contract guaranties: 6 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$3.62 per ton.

455. Semibituminous coal delivered to Fort Totten, N. Y., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 13,750 B. t. u., "as received." Price, \$2.90 per ton.

456. Semibituminous coal delivered to the fifth lighthouse district, Baltimore, Md., Bureau of Lighthouses, Department of Commerce, 1911-12. Price, \$3.47 per ton at Washington, N. C., \$3.52 per ton at Long Point, N. C., and \$3.44 per ton at Point Lookout, Md.

457. Semibituminous coal delivered to Fort H. G. Wright, N. Y., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9.5 per cent ash, "dry coal"; 13,650 B. t. u., "as received." Price, \$3.75 per ton for delivery at New London, Conn.

458. Semibituminous coal delivered to Fort Du Pont, Del., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 13,750 B. t. u., "as received." Price, \$2.95 per ton.

459. Semibituminous coal delivered to the third lighthouse district, Tompkinsville, N. Y., Bureau of Lighthouses, Department of Commerce, 1912-13.

Contract guaranties: 22 per cent volatile matter, 2 per cent sulphur, 9.5 per cent ash, 13,400 B. t. u., "dry coal." Price, \$3.20 per ton for delivery at New London, Conn.

460. Semibituminous coal delivered to the third lighthouse district, Tompkinsville, N. Y., Bureau of Lighthouses, Department of Commerce, 1913-14. Contract guaranties same as No. 459. Price, \$3.60 per ton for delivery at New London, Conn.

461. Semibituminous coal delivered to Fort H. G. Wright, N. Y., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 4 per cent moisture, "as received"; 12 per cent ash, 13,800 B. t. u., "dry coal." Price \$3.95 per ton.

462. Semibituminous coal delivered to Fort H. G. Wright, N. Y., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 4 per cent moisture, "as received"; 12 per cent ash, and 13,600 B. t. u., "dry coal." Price, \$4.05 per ton for delivery at New London, Conn.

463. Semibituminous coal delivered to the third lighthouse district, Tompkinsville, N. Y., Bureau of Lighthouses, Department of Commerce, 1914-15. Contract guaranties: 4 per cent moisture, "as received"; 22 per cent volatile matter, 2 per cent sulphur, 9.5 per cent ash, "dry coal"; 13,400 B. t. u., "as received." Price \$3.70 per ton for delivery at New London, Conn.

464. Semibituminous coal delivered to the Government Hospital for the Insane, Washington, D. C., Department of the Interior, 1912-13. Contract guaranties: 1.25 per cent moisture, "as received"; 8 per cent ash, 14,000 B. t. u., "dry coal." Price, \$2.65 per ton.

465. Bituminous coal delivered to the post office, Minneapolis, Minn., Treasury Department, 1909-10. Contract guaranties: 6 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$5 per ton.

466. Bituminous coal delivered to the United States courthouse and post office, Milwaukee, Wis., Treasury Department, 1910-11. Contract guaranties: 10.5 per cent ash, "dry coal"; 13,700 B. t. u., "as received." Price, \$3.50 ton.

467. Bituminous coal delivered to the Northwestern Branch of the National Home for Disabled Volunteer Soldiers, National Home, Wis., 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 12,800 B. t. u., "as received." Price, \$2.75 per ton (2,000 pounds).

468. Bituminous coal delivered to the depot quartermaster, Jeffersonville, Ind., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 11,500 B. t. u., "as received." Price, \$3.98 per ton.

469. Bituminous coal delivered to the depot quartermaster, Jeffersonville, Ind., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2.65 per cent moisture, "as received"; 9.8 per cent ash, 13,000 B. t. u., "dry coal." Price, \$4.13 per ton.

470. Bituminous coal delivered to the United States engineer office, New Orleans, La., War Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 34 per cent volatile matter, 1.25 per cent sulphur, 6.5 per cent ash, 14,100 B. t. u., "dry coal." Price, \$3.60 per ton (2,000 pounds) for delivery to Burrwood, Southwest Pass, and Port Eads, South Pass, Mississippi River, and New Orleans, La.

471. Bituminous coal delivered to the post office, Milwaukee, Wis., Treasury Department, 1912-13. Contract guaranties: 35 per cent volatile matter, 2 per cent sulphur, 9 per cent ash, "dry coal"; 12,825 B. t. u., "as received." Price, \$3 per ton.

472. Semibituminous coal delivered to the mint building, Philadelphia, Pa., Treasury Department, 1913-14. Contract guaranties: 6 per cent ash, "dry coal"; 14,100 B. t. u., "as received." Price, \$3.14 per ton.

473. Bituminous coal delivered to the United States courthouse and post office, St. Paul, Minn., Treasury Department, 1908-9. Contract guaranties: 8 per cent ash, "dry coal"; 13,300 B. t. u., "as received." Price, \$5.38 per ton.

474. Bituminous coal delivered to Fort Keogh, Mont., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 5.2 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.58 per ton f. o. b. Superior, Wis.

475. Bituminous coal delivered to Fort Snelling, Minn., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 5.2 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.92 per ton f. o. b. at Duluth, Minn., or Superior, Wis.

476. Bituminous coal delivered to Fort Lincoln, N. Dak., Quartermaster Corps, War Department, 1911-12. Contract guaranties same as No. 475. Price, \$3.92 per ton f. o. b. at Duluth, Minn., or Superior, Wis.

477. Bituminous coal delivered to Fort Lincoln, N. Dak., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 1 per cent moisture, "as received"; 4.8 per cent ash, 14,800 B. t. u., "dry coal." Price, \$3.81 per ton, f. o. b. Superior, Wis.

478. Bituminous coal delivered to the eleventh lighthouse district, Detroit, Mich., Bureau of Lighthouses, Department of Commerce, 1912-13.

479. Bituminous coal delivered to Fort Keogh, Mont., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 1 per cent moisture, "as received"; 4.8 per cent ash, 14,800 B. t. u., "dry coal." Price, \$3.81 per ton f. o. b. Duluth, Minn.

480. Bituminous coal delivered to Fort Keogh, Mont., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 1.62 per cent moisture, "as received"; 35.94 per cent volatile matter, 1.02 per cent sulphur, 5.93 per cent ash, 14,452 B. t. u., "dry coal." Price, \$3.98 per ton f. o. b. Duluth, Minn.

481. Bituminous coal delivered to the United States courthouse and post office, Milwaukee, Wis., Treasury Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 12,800 B. t. u., "as received." Price, \$3.05 per ton.

482. Bituminous coal delivered to the post office, Minneapolis, Minn., Treasury Department, 1912-13. Contract guaranties: 35 per cent volatile matter, sulphur not over 2 per cent, 9 per cent ash, "dry coal"; 13,480 B. t. u., "as received." Price, \$4.09 per ton.

483. Bituminous coal delivered to the Northwestern Branch of the National Home for Disabled Volunteer Soldiers, National Home, Wis., 1913-14. Contract guaranties: 4 per cent moisture, "as received"; 32 per cent volatile matter, 1.25 per cent sulphur, 9 per cent ash, 13,250 B. t. u., "dry coal." Price, \$3.10 per ton (2,000 pounds).

484. Bituminous coal delivered to the post office, Milwaukee, Wis., Treasury Department, 1913-14. Contract guaranties: 9 per cent ash, "dry coal"; 13,056 B. t. u., "as received" Price, \$3.28 per ton.

485. Bituminous coal delivered to the post office, Minneapolis, Minn., Treasury Department, 1913-14. Contract guaranties: 7.5 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$4.70 per ton.

486. Bituminous coal delivered to the United States courthouse and post office, Milwaukee, Wis., Treasury Department, 1908-9. Contract guaranties: 9.67 per cent ash, "dry coal"; 13,466 B. t. u., "as received." Price, \$3.50 per ton.

487. Bituminous coal delivered to the United States courthouse and post office, Milwaukee, Wis., Treasury Department, 1909-10. Contract guaranties: 5.21 per cent ash, "dry coal"; 14,170 B. t. u., "as received." Price, \$3.05 per ton.

488. Bituminous coal delivered to the United States post office, courthouse, and customhouse, Milwaukee, Wis., Treasury Department, 1914-15. Contract guaranties: 35 per cent volatile matter, 2 per cent sulphur, 8 per cent ash, "dry coal"; and 13,000 B. t. u., "as received." Price, \$2.90 per ton.

TENNESSEE COALS.

489. Bituminous coal delivered to the United States penitentiary, Atlanta, Ga., Department of Justice, 1913-14. Price, \$2.90 per ton.

490. Bituminous coal delivered to the United States penitentiary, Atlanta, Ga., Department of Justice, 1914-15. Contract guaranties: 1.5 per cent moisture, "as received"; 38 per cent volatile matter, 0.75 per cent sulphur, 7 per cent ash, 14,500 B. t. u., "dry coal." Price, \$2.85 per ton.

491. Bituminous coal delivered to Fort Oglethorpe, Ga., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2 per cent moisture, "as received"; 8 per cent ash, 14,000 B. t. u., "dry coal." Price, \$3 per ton.

492. Bituminous coal delivered to the United States penitentiary, Atlanta, Ga., Department of Justice, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 43.5 per cent volatile matter, 2.81 per cent sulphur, 5 per cent ash, 14,000 B. t. u., "dry coal." Price, \$2.90 per ton.

493. Bituminous coal delivered to the United States penitentiary, Atlanta, Ga., Department of Justice, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 29 per cent volatile matter, 1 per cent sulphur, 8 per cent ash, 14,000 B. t. u., "dry coal." Price, \$2.91 per ton.

TEXAS COALS.

494. Bituminous coal delivered to Fort Sam Houston, Tex., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 17 per cent ash, "dry coal"; 11,400 B. t. u., "as received." Price, \$5.45 per ton.

495. Bituminous coal delivered to Fort McIntosh, Tex., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 16.53 per cent ash, "dry coal"; 11,588 B. t. u., "as received." Price, \$5.60 per ton.

UTAH COALS.

496. Bituminous coal delivered to Fort Douglas, Utah, Quartermaster Corps, War Department, 1913-14. Contract guaranties: 4.7 per cent moisture, "as received"; 6.8 per cent ash, 13,480 B. t. u., "dry coal." Price, \$5.26 per ton.

497. Bituminous coal delivered to Fort Douglas, Utah, Quartermaster Corps, War Department, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 5 per cent ash, 13,000 B. t. u., "dry coal." Price, \$6.22 per ton.

498. Bituminous coal delivered to Fort Douglas, Utah, Quartermaster Corps, War Department, 1913-14. Contract guaranties: 4.7 per cent moisture, "as received"; 6.3 per cent ash, 13,610 B. t. u., "dry coal." Price, \$5.26 per ton.

499. Bituminous coal delivered to the Presidio of Monterey, Cal., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 3.5 per cent ash, and 13,810 B. t. u., "dry coal." Price, \$2.44 per ton for delivery in July to September, 1914, inclusive; \$2.72 per ton for delivery in October to December, 1914, inclusive, and \$3.28 per ton for delivery in January to June, 1915, inclusive.

500. Bituminous coal delivered to Fort Douglas, Utah, Quartermaster Corps, War Department, 1911-12. Contract guaranties: 7 per cent ash, "dry coal"; 00 B. t. u., "as received." Price, \$6.38 per ton.

VIRGINIA COALS.

501. Bituminous coal delivered to the Panama Railroad Co., at Lamberts Point, Va., in August; 1910.

502. Bituminous coal delivered to the United States engineer office, Charleston, S. C., War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, 1 per cent sulphur, 6 per cent ash, 14,500 B. t. u., "as received." Price, \$2.86 per ton.

503. Bituminous coal delivered to the Mountain Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Tenn., 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 36 per cent volatile matter, 0.75 per cent sulphur, 8 per cent ash, 13,500 B. t. u., "dry coal." Price, \$1.80 per ton (2,000 pounds).

504. Bituminous coal delivered to the Mountain Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Tenn., 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 13,500 B. t. u., "as received." Price, \$1.60 per ton (2,000 pounds).

505. Bituminous coal delivered to the Mountain Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Tenn., 1910-11. Contract guaranties same as No. 504. Price, \$1.50 per ton (2,000 pounds).

506. Bituminous coal delivered to the United States engineer office, Georgetown, S. C., War Department, 1913-14. Contract guaranties: 2.5 per cent moisture, "as received"; 36 per cent volatile matter, 1 per cent sulphur, 6 per cent ash, 14,000 B. t. u., "dry coal." Price, \$3.60 per ton (2,000 pounds).

507. Bituminous coal delivered to quartermaster vessels at Galveston, Tex., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2 per cent moisture, "as received"; 38 per cent volatile matter, 0.75 per cent sulphur, 9 per cent ash, 14,000 B. t. u., "dry coal." Price, \$5.90 per ton.

508. Bituminous coal delivered to the Mountain Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Tenn., 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 34 per cent volatile matter, 0.75 per cent sulphur, 8 per cent ash, 13,500 B. t. u., "dry coal." Price, \$1.80 per ton (2,000 pounds).

509. Bituminous coal delivered to the sixth lighthouse district, Charleston, S. C., Bureau of Lighthouses, Department of Commerce, 1914-15. Contract guaranties: 2 per cent moisture, "as received"; 35 per cent volatile matter, 0.75 per cent sulphur, 8 per cent ash, 14,000 B. t. u., "dry coal." Price, \$4.05 per ton.

510. Bituminous coal delivered to the Mountain Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Tenn., 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 8 per cent ash, 13,500 B. t. u., "dry coal." Price, \$1.70 per ton (2,000 pounds).

511. Bituminous coal delivered to the United States engineer office, Charleston, S. C., War Department, 1913-14. Contract guaranties: 2.5 per cent moisture, "as received"; 36 per cent volatile matter, 1 per cent sulphur, 6 per cent ash, 14,000 B. t. u., "dry coal." Price, \$3.30 per ton (2,000 pounds).

512. Semibituminous coal delivered to the navy yard at Norfolk, Va., Navy Department, 1909-10. Contract guaranties: 4 per cent ash, "dry coal"; 14,800 B. t. u., "as received." Price, \$2.57 per ton.

513. Semibituminous coal delivered to the navy yard at Charleston, S. C., Navy Department, 1910-11. Contract guaranties: 5 per cent ash, "dry coal"; 15,000 B. t. u., "as received." Price, \$3.60 per ton.

514. Semibituminous coal delivered to the navy yard at Norfolk, Va., Navy Department, 1910-11. Contract guaranties: 5 per cent ash, "dry coal"; 15,000 B. t. u., "as received." Price, \$2.78 per ton.

WASHINGTON COALS.

515. Bituminous coal delivered to Fort McDowell, Cal., recruit depot, Quartermaster Corps, War Department, 1911-12. Contract guaranties: 7 per cent ash, "dry coal"; 12,790 B. t. u., "as received." Price, \$6.15 per ton.

516. Bituminous coal delivered to Alcatraz, Cal., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 7 per cent ash, "dry coal"; 12,790 B. t. u., "as received." Price, \$6.15 per ton.

517. Subbituminous coal delivered to Fort Worden, Wash., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10.8 per cent ash, "dry coal"; 11,890 B. t. u., "as received." Price, \$5.75 per ton.

518. Subbituminous coal delivered to Fort W. H. Seward, Alaska, Quartermaster Corps, War Department, 1911-12. Contract guaranties same as No. 517. Price, \$8.20 per ton.

519. Subbituminous coal delivered to Fort Lawton, Wash., Quartermaster Corps, War Department, 1911-12. Contract guaranties same as No. 517. Price, \$5 per ton.

520. Subbituminous coal delivered to Fort Casey, Wash., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10.8 per cent ash, "dry coal"; 11,890 B. t. u., "as received." Price, \$5.75 per ton.

521. Subbituminous coal delivered to Fort Casey, Wash., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 12 per cent moisture, "as received"; 14 per cent ash, 11,500 B. t. u., "dry coal." Price, \$6.50 per ton.

522. Subbituminous coal delivered to Fort Lawton, Wash., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 12 per cent moisture, "as received"; 40 per cent volatile matter, 1 per cent sulphur, 14 per cent ash, 11,500 B. t. u., "dry coal." Price, \$5.60 per ton.

523. Bituminous coal delivered to Vancouver Barracks, Wash., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 13 per cent ash, 12,900 B. t. u., "dry coal." Price, \$3.65 per ton f. o. b. Roslyn, Wash.

524. Bituminous coal delivered to the post office, Spokane, Wash., Treasury Department, 1910-11. Price, \$5.90 per ton.

525. Bituminous coal delivered to the United States engineer office, Portland, Oreg., War Department, 1912-13.

526. Bituminous coal delivered to the United States engineer office, Fort Stevens, Oreg., War Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 34.2 per cent volatile matter, 0.3 per cent sulphur, 13 per cent ash, 12,900 B. t. u., "dry coal." Price, \$2.75 per ton f. o. b. Beekman, Oreg.

527. Bituminous coal delivered to Fort George Wright, Wash., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 4 per cent moisture, "as received"; 12 per cent ash, 13,000 B. t. u., "dry coal." Price, \$3.85 per ton.

528. Bituminous coal delivered to Vancouver Barracks, Wash., Quartermaster Corps, War Department, 1912-13. Contract guaranties and price same as No. 527.

529. Bituminous coal delivered to Fort Stevens, Oreg., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 4 per cent moisture, "as received"; 13 per cent ash, 12,600 B. t. u., "dry coal." Price, \$4.08 per ton f. o. b. Ronald, Wash.

530. Bituminous coal delivered to Fort Stevens, Oreg., Quartermaster Corps, War Department, 1913-14. Contract guaranties same as No. 529. Price, \$2.43 per ton f. o. b. Ronald, Wash.

531. Bituminous coal delivered to Vancouver Barracks, Wash., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 4 per cent moisture, "as received"; 12 per cent ash, 13,000 B. t. u., "dry coal." Price, \$3.33 per ton.

532. Bituminous coal delivered to Fort Stevens, Oreg., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 4 per cent moisture, "as received"; 13 per cent ash, 12,800 B. t. u., "dry coal." Price, \$3.25 per ton for delivery at Astoria, Oreg.

533. Bituminous coal delivered to the quartermaster depot, Seattle, Wash., Quartermaster Corps, War Department, 1914-15. Contract guaranties same as No. 532. Price, \$12.95 per ton at Fort Liscum, \$15.45 per ton at Cordova, \$15.95 per ton at Seward, and \$16.45 per ton at Valdez, Alaska.

534. Bituminous coal delivered to Fort Liscum, Alaska, Quartermaster Corps, War Department, 1913-14. Contract guaranties: 4 per cent moisture, "as received"; 12 per cent ash, 12,900 B. t. u., "dry coal." Price, \$15.30 per ton.

535. Bituminous coal delivered to the United States engineer office, Fort Stevens, Oreg., War Department, 1914-15. Contract guaranties: 4 per cent moisture, "as received"; 37 per cent volatile matter, 0.3 per cent sulphur, 7 per cent ash, and 14,000 B. t. u., "dry coal." Price, \$2.90 per ton.

536. Bituminous coal delivered to Fort Liscum, Alaska, Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9.98 per cent ash, "dry coal"; 13,000 B. t. u., "as received." Price, \$7.50 per ton delivered at Seattle, Wash.

537. Bituminous coal delivered to Fort Lawton, Wash., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 10 per cent ash, 13,000 B. t. u., "dry coal." Price, \$9.25 per ton.

538. Bituminous coal delivered to Fort William H. Seward, Alaska, Quartermaster Corps, War Department, 1912-13. Contract guaranties: 4 per cent moisture, "as received"; 9.75 per cent ash, 13,000 B. t. u., "dry coal." Price, \$9.50 per ton.

539. Bituminous coal delivered to Fort Stevens, Oreg., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 11 per cent ash, 12,800 B. t. u., "dry coal." Price, \$6.30 per ton.

540. Bituminous coal delivered to Fort Stevens, Oreg. (for vessels), Quartermaster Corps, War Department, 1913-14. Contract guaranties: 4 per cent moisture, "as received"; 11 per cent ash, 13,200 B. t. u., "dry coal." Price, \$3.60 per ton f. o. b. Burnett, Wash.

541. Bituminous coal delivered to Fort Stevens, Oreg., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9.98 per cent ash, "dry coal"; 12,500 B. t. u., "as received." Price, \$6.15 per ton.

542. Bituminous coal delivered to Fort Liscum, Alaska, Quartermaster Corps, War Department, 1912-13. Contract guaranties: 4 per cent moisture, "as received"; 10.3 per cent ash, 12,600 B. t. u., "dry coal." Price, \$13 per ton (sacked).

543. Bituminous coal delivered to Fort Liscum, Alaska, Quartermaster Corps, War Department, 1913-14. Contract guaranties: 6 per cent moisture, "as received"; 40.1 per cent volatile matter, 10 per cent ash, 12,800 B. t. u., "dry coal." Price, \$13.25 per ton.

544. Bituminous coal delivered to Fort Flagler, Wash., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 6 per cent moisture, "as received"; 10 per cent ash, 12,800 B. t. u., "dry coal." Price \$7 per ton (\$3.50 per ton at the mine).

545. Bituminous coal delivered to the United States engineer office, Dalles or Celilo, Oreg., War Department, 1913-14. Contract guaranties: 4 per cent moisture, "as received"; 37 per cent volatile matter, 0.4 per cent sulphur, 11 per cent ash, 13,200 B. t. u., "dry coal." Price, \$3.10 per ton f. o. b. Burnett, Wash.

546. Bituminous coal delivered to Fort Stevens, Oreg., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 8.5 per cent ash, "dry coal"; 13,000 B. t. u., "as received." Price, \$6.40 per ton.

547. Bituminous coal delivered to the depot quartermaster, Seattle, Wash., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 12,300 B. t. u., "as received." Price, \$5.50 per ton.

548. Bituminous coal delivered to Seattle or Tacoma, Wash., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 4 per cent moisture, "as received"; 10 per cent ash, 13,000 B. t. u., "dry coal." Price, \$5.45 per ton at Seattle and \$5.30 per ton at Tacoma.

549. Bituminous coal delivered to the depot quartermaster, Seattle, Wash., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 4.8 per cent moisture, "as received"; 12 per cent ash, 12,750 B. t. u., "dry coal." Price, \$5.30 and \$7.85 per ton, according to method of delivery.

550. Bituminous coal delivered to Fort Lawton, Wash., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 10 per cent ash, 13,000 B. t. u., "dry coal." Price, \$9.25 per ton.

551. Bituminous coal delivered to Fort Liscum, Alaska, Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 10 per cent ash, 12,750 B. t. u., "dry coal." Price, \$14.30 per ton (sacked).

552. Bituminous coal delivered to Fort Stevens, Oreg., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 5.6 per cent moisture, "as received"; 12 per cent ash, 13,600 B. t. u., "dry coal." Price, \$7.98 per ton.

553. Bituminous coal delivered to Fort Stevens, Oreg. (steamers at Astoria, Oreg.), Quartermaster Corps, War Department, 1912-13. Contract guaranties same as No. 552. Price, \$6.25 per ton.

554. Bituminous coal delivered to the Navy Department, Tacoma, Wash., in July, 1912. Samples collected when coal was loaded into cars at the mine.

555. Bituminous coal samples collected from the shipment represented by No. 554 when the coal was delivered at Tacoma, Wash.

WEST VIRGINIA COALS.

556. Bituminous coal delivered to the post office, Detroit, Mich., Treasury Department, 1912-13. Contract guaranties: 32 per cent volatile matter, 1 per cent sulphur, 7 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$3.02 per ton.

557. Semibituminous coal delivered to the main building of the Department of Agriculture, Washington, D. C., 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 14,600 B. t. u., "as received." Price, \$3.20 per ton.

558. Semibituminous coal delivered to the Municipal Building, Washington, D. C., 1911-12. Contract guaranties: 4.9 per cent ash, "dry coal"; 14,600 B. t. u., "as received." Price, \$3.10 per ton.

559. Semibituminous coal delivered to the State, War, and Navy Building, Washington, D. C., 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 4.8 per cent ash, 14,900 B. t. u., "dry coal." Price, \$3.39 per ton.

560. Semibituminous coal delivered to the shops at the propagating gardens, Washington, D. C., War Department, 1912-13. Contract guaranties same as No. 559. Price, \$3.50 per ton.

561. Semibituminous coal delivered to the United States engineer office, Georgetown, S. C., War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, 1 per cent sulphur, 6 per cent ash, 14,500 B. t. u., "as received." Price, \$3.48 per ton.

562. Bituminous coal delivered to the United States courthouse and post office, Detroit, Mich., Treasury Department, 1909-10. Contract guaranties: 5 per cent ash, "dry coal"; 14,360 B. t. u., "as received." Price, \$2.90 per ton.

563. Bituminous coal delivered to the customhouse, Detroit, Mich., Treasury Department, 1909-10. Contract guaranties and price same as No. 562.

564. Bituminous coal delivered to the Central Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ohio, 1911-12. Contract guaranties: 5 per cent ash, "dry coal"; 14,410 B. t. u., "as received." Price, \$2.55 per ton (2,000 pounds).

565. Bituminous coal delivered to the customhouse, Detroit, Mich., Treasury Department, 1910-11. Contract guaranties: 8 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$2.99 per ton.

566. Bituminous coal delivered to the United States courthouse and post office, Detroit, Mich., Treasury Department, 1910-11. Contract guaranties: 8 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$2.99 per ton.

567. Semibituminous coal delivered to the post office and subtreasury, Boston, Mass., Treasury Department, 1912-13. Contract guaranties: 22 per cent volatile matter, 1.5 per cent sulphur, 5 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$4.15 per ton.

568. Semibituminous coal delivered to the United States engineer office, Jacksonville, Fla., War Department, 1913-14. Contract guaranties: 1.7 per cent moisture, "as received"; 20.52 per cent volatile matter, 0.7 per cent sulphur, 6 per cent ash, 14,900 B. t. u., "dry coal." Price, \$4.74 per ton.

569. Semibituminous coal delivered to Fort Banks, Mass., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2 per cent moisture, "as received"; 7 per cent ash, 14,500 B. t. u., "dry coal." Price, \$4.45 per ton.

570. Semibituminous coal delivered to Forts Crockett, Travis, and San Jacinto, Tex., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 0.8 per cent moisture, "as received"; 19.9 per cent volatile matter, 0.7 per cent sulphur, 9.7 per cent ash, 13,960 B. t. u., "dry coal." Price, \$7.50 per ton.

571. Bituminous coal delivered to the United States engineer office, Georgetown, S. C., War Department, 1914-15. Contract guaranties: 1.72 per cent moisture, "as received"; 27.24 per cent volatile matter, 0.86 per cent sulphur, 4.03 per cent ash, 14,800 B. t. u., "dry coal." Price, \$3.64 per ton (2,000 pounds).

572. Semibituminous coal delivered to the Northwestern Branch of the National Home for Disabled Volunteer Soldiers, National Home, Wis., 1910-11. Contract guaranties: 6 per cent ash, "dry coal"; 14,750 B. t. u., "as received." Price, \$3.67 per ton (2,000 pounds).

573. Bituminous coal delivered to the Central Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ohio, 1910-11. Contract guaranties: 6 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$2.50 per ton (2,000 pounds).

574. Semibituminous coal delivered to the third lighthouse district, Newport, R. I., Bureau of Lighthouses, Department of Commerce, 1914-15. Contract guaranties: 4 per cent moisture, "as received"; 22 per cent volatile matter, 2 per cent sulphur, 10 per cent ash, "dry coal"; 13,900 B. t. u., "as received." Price, \$5.60 per ton.

575. Semibituminous coal delivered to the New National Museum, Washington, D. C., Smithsonian Institution, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 4 per cent ash, 14,850 B. t. u., "dry coal." Price, \$3.10 per ton.

576. Semibituminous coal delivered to the main building of the Department of Agriculture, Washington, D. C., 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 3.5 per cent ash, 14,900 B. t. u., "dry coal." Price, \$3.19 per ton.

577. Semibituminous coal delivered to the Treasury Building, Washington, D. C., Treasury Department, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 3.5 per cent ash, 14,900 B. t. u., "dry coal." Price, \$3.40 per ton.

578. Semibituminous coal delivered to the Winder Building, Washington, D. C., Treasury Department, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 3.5 per cent ash, 14,850 B. t. u., "dry coal." Price, \$3.45 per ton.

579. Semibituminous coal delivered to the Government Printing Office, Washington, D. C., 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 3.5 per cent ash, 14,900 B. t. u., "dry coal." Price, \$3.35 per ton.

580. Semibituminous coal delivered to the Bureau of Engraving and Printing, Washington, D. C., Treasury Department, 1912-13. Contract guaranties same as No. 579. Price, \$3.09 per ton.

581. Semibituminous coal delivered to the main building of the Department of Agriculture, Washington, D. C., 1913-14. Contract guaranties: 2.5 per cent moisture, "as received"; 22.64 per cent volatile matter, 1 per cent sulphur, 4.8 per cent ash, 14,900 B. t. u., "dry coal." Price, \$3.42 per ton.

582. Semibituminous coal delivered to the Bureau of Engraving and Printing, Washington, D. C., Treasury Department, 1913-14. Contract guaranties same as No. 581. Price, \$3.38 per ton.

583. Semibituminous coal delivered to the State, War, and Navy Building, Washington, D. C., 1913-14. Contract guaranties same as No. 581. Price, \$3.59 per ton.

584. Semibituminous coal delivered to the Bureau of Engraving and Printing, Washington, D. C., Treasury Department, 1914-15. Contract guaranties same as No. 581. Price, \$3.36 per ton.

585. Semibituminous coal delivered to the Department of Agriculture, Washington, D. C., 1914-15. Contract guaranties same as No. 581. Price, \$3.41 per ton.

586. Semibituminous coal delivered to the State, War, and Navy Building, Washington, D. C., 1914-15. Contract guaranties same as No. 581. Price, \$3.59 per ton.

587. Bituminous coal delivered to the United States courthouse and post office, Detroit, Mich., Treasury Department, 1907-8. Contract guaranties: 4.36 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.30 per ton.

588. Bituminous coal delivered to the United States courthouse and post office, Detroit, Mich., Treasury Department, 1911-12. Contract guaranties: 7.63 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$2.97 per ton.

589. Bituminous coal delivered to the customhouse, Detroit, Mich., Treasury Department, 1911-12. Contract guaranties and price same as No. 588.

590. Bituminous coal delivered to the post office, Detroit, Mich., Treasury Department, 1913-14. Contract guaranties: 7.63 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.15 per ton.

591. Bituminous coal delivered to the United States courthouse and post office, Detroit, Mich., Treasury Department, 1914-15. Contract guaranties: 32 per cent volatile matter, 1.5 per cent sulphur, 8 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3.05 per ton.

592. Bituminous coal delivered to Fort Crockett, Tex., Quartermaster Corps, War Department, 1912-13. Price, \$7 per ton.

593. Bituminous coal delivered to the Marion Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ind., 1913-14. Contract guaranties: 4 per cent moisture, "as received"; 34 per cent volatile matter, 0.85 per cent sulphur, 12 per cent ash; 12,700 B. t. u., "dry coal." Price, \$2.60 per ton (2,000 pounds).

594. Bituminous coal delivered to the United States Indian school, Mount Pleasant, Mich., Office of Indian Affairs, Department of the Interior, 1914-15. Price, \$3.297 per ton.

595. Bituminous coal delivered to the Marion Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ind., 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 34 per cent volatile matter, 1 per cent sulphur, 9 per cent ash; and 13,500 B. t. u., "dry coal." Price, \$2.50 per ton (2,000 pounds).

596. Bituminous coal delivered to the United States engineer office, Grand Rapids, Mich., War Department, 1914-15. Contract guaranties: 2 per cent moisture, "as received"; 35 per cent volatile matter, 0.8 per cent sulphur, 5.91 per cent ash, 14,300 B. t. u., "dry coal." Price per ton (2,000 pounds), \$3.05 for delivery at St. Joseph, South Haven, Holland, Grand Haven, and Muskegon, Mich.; \$3.25 at Ludington, Manistee, and Frankfort, Mich.; and \$3.40 at Charlevoix, Mich.

597. Bituminous coal delivered to the United States courthouse and post office, Grand Rapids, Mich., Treasury Department, 1911-12. Contract guaranties: 5.05 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$3.58 per ton.

598. Bituminous coal delivered to the Central Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ohio, 1913-14. Contract guaranties: 2.5 per cent moisture, "as received"; 33 per cent volatile matter, 1.25 per cent sulphur, 8 per cent ash, 14,200 B. t. u., "dry coal." Price, \$2.68 per ton (2,000 pounds).

599. Bituminous coal delivered to the Wagner Wells Pumping Station of the Central Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ohio, 1913-14. Contract guaranties same as No. 598. Price, \$2.33 per ton (2,000 pounds).

600. Bituminous coal delivered to the Central Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ohio, 1914-15. Contract guaranties: 2 per cent moisture, "as received"; 33 per cent volatile matter, 1.25 per cent sulphur, 7.5 per cent ash, 14,200 B. t. u., "dry coal." Price, \$2.60 per ton (2,000 pounds).

601. Bituminous coal delivered to the United States courthouse and post office, Detroit, Mich., Treasury Department, 1908-9. Contract guaranties: 6.1 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$3 per ton.

602. Bituminous coal delivered to the customhouse, Detroit, Mich., Treasury Department, 1908-9. Contract guaranties and price same as No. 601.

603. Bituminous coal delivered to the Central Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ohio, 1912-13. Contract guaranties: 1.2 per cent moisture, "as received"; 6 per cent ash, 14,210 B. t. u., "dry coal." Price, \$2.50 per ton (2,000 pounds).

604. Bituminous coal delivered to the Wagner Wells Pumping Station of the Central Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ohio, 1912-13. Contract guaranties same as No. 603. Price, \$2.15 per ton (2,000 pounds).

605. Bituminous coal delivered to the Marion Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ind., 1911-12. Contract guaranties: 8 per cent ash, "dry coal"; 13,600 B. t. u., "as received." Price, \$2.20 per ton (2,000 pounds).

606. Bituminous coal delivered to the Marion Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ind., 1912-13. Contract guaranties: 1.25 per cent moisture, "as received"; 10 per cent ash, 13,700 B. t. u., "dry coal." Price, \$2.25 per ton (2,000 pounds).

607. Semibituminous coal delivered to Fort Dade, Fla., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 14,600 B. t. u., "as received." Price, \$5.65 per ton.

608. Semibituminous coal delivered to Fort Dade, Fla., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 5 per cent moisture, "as received"; 0.75 per cent sulphur, 7.5 per cent ash, 14,250 B. t. u., "dry coal." Price, \$8.25 per ton.

609. Semibituminous coal delivered to Fort Dade, Fla. (vessels at Tampa, Fla.), Quartermaster Corps, War Department, 1913-14. Contract guaranties same as No. 608. Price, \$5.50 per ton.

610. Semibituminous coal delivered to the United States engineer office, Tampa, Fla., for use on vessels, War Department, 1914-15. Contract guaranties: 4.5 per cent moisture, "as received"; 20 per cent volatile matter, 1 per cent sulphur, 7.5 per cent ash, 14,500 B. t. u., "dry coal." Price, \$5.50 per ton.

611. Semibituminous coal delivered to the United States engineer office, Norfolk, Va., War Department, 1914-15. Contract guaranties: 1.5 per cent moisture, "as received"; 18 per cent volatile matter, 0.65 per cent sulphur, 5 per cent ash, 14,800 B. t. u., "dry coal." Price, \$2.53 per ton (2,000 pounds).

612. Semibituminous coal delivered to the fifth lighthouse district, Norfolk, Va., Bureau of Lighthouses, Department of Commerce, 1914-15. Contract guaranties: 2 per cent moisture, "as received"; 19 per cent volatile matter, 1 per cent sulphur, 6 per cent ash, 14,850 B. t. u., "dry coal." Price, \$2.83 per ton.

613. Semibituminous coal delivered to Fort Dade, Fla., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 5 per cent moisture, "as received"; 20 per cent volatile matter, 0.75 per cent sulphur, 7.5 per cent ash, 14,250 B. t. u., "dry coal." Price \$5.50 per ton on boats at Tampa, Fla., and \$8 per ton in bins at the fort.

614. Semibituminous coal delivered to Fort Screven, Ga., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2 per cent moisture, "as received"; 6.5 per cent ash, 14,700 B. t. u., "dry coal." Price, \$4.82 per ton in vessels at Savannah, Ga., and \$5.76 per ton at the fort.

615. Semibituminous coal delivered to Fort McKinley, Me., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$6.67 per ton.

616. Semibituminous coal delivered to the naval hospital, Norfolk, Va., Navy Department, 1909-10. Contract guaranties; 6 per cent ash, 0.75 per cent sulphur, "dry coal"; 14,600 B. t. u., "as received." Price, \$2.85 per ton.

617. Semibituminous coal delivered to the Northwestern Branch of the National Home for Disabled Volunteer Soldiers, National Home, Wis., 1911-12. Contract guaranties: 7 per cent ash, "dry coal"; 14,089 B. t. u., "as received." Price, \$3.45 per ton (2,000 pounds).

618. Semibituminous coal delivered to the naval hospital, Norfolk, Va., Navy Department, 1911-12. Contract guaranties: 6 per cent ash, 14,600 B. t. u., "as received." Price, \$2.95 per ton.

619. Semibituminous coal delivered to the United States engineer office, Charleston, S. C., War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, 1 per cent sulphur, 6 per cent ash, 14,500 B. t. u., "as received." Price, \$3.65 per ton (2,000 pounds).

620. Semibituminous coal delivered to the naval hospital, Norfolk, Va., Navy Department, 1912-13. Contract guaranties: 1.57 per cent moisture, "as received"; 18.3 per cent volatile matter, 0.7 per cent sulphur, 5.5 per cent ash, 14,850 B. t. u., "dry coal." Price, \$2.89 per ton.

621. Semibituminous coal delivered to Fort Adams, R. I., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 9 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$5.25 per ton.

622. Semibituminous coal delivered to Fort Adams, R. I., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 4 per cent moisture, "as received"; 10 per cent ash, 13,850 B. t. u., "dry coal." Price, \$5.25 per ton.

623. Semibituminous coal delivered to Fort Greble, R. I., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 4 per cent moisture, "as received"; 9 per cent ash, 13,800 B. t. u., "dry coal." Price, \$5.20 per ton.

624. Semibituminous coal delivered to the navy yard at Norfolk, Va., Navy Department, 1911-12. Contract guaranties: 7 per cent ash, 14,700 B. t. u., "as received." Price, \$2.50 per ton.

625. Semibituminous coal delivered to harbor boats, depot quartermaster, Boston, Mass., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 1 per cent moisture, "as received"; 6.5 per cent ash, 14,600 B. t. u., "dry coal." Price, \$4.09 per ton.

626. Semibituminous coal delivered to Fort Warren, Mass., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 1.5 per cent moisture, "as received"; 6.5 per cent ash, 14,500 B. t. u., "dry coal." Price, \$5.12 per ton.

627. Semibituminous coal delivered to the quartermaster depot, Boston, Mass., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 1.5 per cent moisture, "as received"; 17.5 per cent volatile matter, 0.75 per cent sulphur, 6.5 per cent ash, 14,500 B. t. u., "dry coal." Price, \$3.98 per ton.

628. Semibituminous coal delivered to Fort Andrews, Mass., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 1.5 per cent moisture, "as received"; 6.5 per cent ash, 14,500 B. t. u., "dry coal." Price, \$5.27 per ton.

629. Bituminous coal delivered to the District of Columbia workhouse, Occoquan, Va., 1912-13. Contract guaranties: 3.5 per cent moisture, "as received"; 7.5 per cent ash, 14,000 B. t. u., "dry coal." Price, \$3.19 per ton.

630. Bituminous coal delivered to the District of Columbia workhouse, Occoquan, Va., 1914-15. Contract guaranties: 3.5 per cent moisture, "as received"; 36 per cent volatile matter, 1.5 per cent sulphur, 7.5 per cent ash, 14,000 B. t. u., "dry coal." Price, \$3.52 per ton.

631. Semibituminous coal delivered to the naval hospital, Norfolk, Va., Navy Department, 1910-11. Contract guaranties: 6 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$2.93 per ton.

632. Semibituminous coal delivered to Fort Screven, Ga., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 14,850 B. t. u., "as received." Price, \$5.28 per ton.

633. Semibituminous coal delivered to the League Island Navy Yard, Philadelphia, Pa., Navy Department, 1908-9. Contract guaranties: 7 per cent ash, "dry coal"; 14,250 B. t. u., "as received." Price, \$2.92 per ton.

634. Semibituminous coal delivered to Picatinny Arsenal, Dover, N. J., War Department, 1910-11. Contract guaranties: 8 per cent ash, "dry coal"; 14,100 B. t. u., "as received." Price, \$3.42 per ton.

635. Semibituminous coal delivered to the Government Hospital for the Insane, Washington, D. C., Department of the Interior, 1912-13. Contract guaranties: 1.25 per cent moisture, "as received"; 8 per cent ash, 14,000 B. t. u., "dry coal." Price, \$2.65 per ton.

636. Semibituminous coal delivered to the Picatinny Arsenal, Dover, N. J., War Department, 1911-12. Contract guaranties: 8.5 per cent ash, "dry coal"; 14,145 B. t. u., "as received." Price, \$3.25 per ton.

637. Bituminous coal delivered to the Marion Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ind., 1910-11. Contract guaranties: 9 per cent ash, "dry coal"; 12,500 B. t. u., "as received." Price, \$2.25 per ton (2,000 pounds).

638. Semibituminous coal delivered to the post office and subtreasury, Boston, Mass., Treasury Department, 1911-12. Contract guaranties: 5.25 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$4.05 per ton.

639. Semibituminous coal delivered to Watertown Arsenal, Mass., War Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 18 per cent volatile matter, 0.65 per cent sulphur, 5.5 per cent ash, 14,850 B. t. u., "dry coal." Price, \$4.60 per ton.

640. Semibituminous coal delivered to Watertown Arsenal, Watertown, Mass., War Department, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 18 per cent volatile matter, 0.7 per cent sulphur, 5.5 per cent ash, 14,850 B. t. u., "dry coal." Price, \$4.35 per ton.

641. Semibituminous coal delivered to the Southern Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Va., 1911-12. Contract guaranties: 4 per cent ash, "dry coal"; and 14,750 B. t. u., "as received." Price, \$2.77 per ton.

642. Semibituminous coal delivered to the Watertown Arsenal, Watertown, Mass., War Department, 1911-12. Contract guaranties: 5.9 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$4.08 per ton.

643. Semibituminous coal delivered to the Southern Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Va., 1914-15. Contract guaranties: 2.75 per cent moisture, "as received"; 18 per cent volatile matter, 0.6 per cent sulphur, 5.5 per cent ash, 14,800 B. t. u., "dry coal." Price, \$2.94 per ton.

644. Semibituminous coal delivered to the navy yard at Norfolk, Va., Navy Department, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 17 per cent volatile matter, 0.6 per cent sulphur, 5 per cent ash, 15,000 B. t. u., "dry coal." Price, \$2.63 per ton.

645. Semibituminous coal delivered to the navy yard at Washington, D. C., Navy Department, 1912-13. Contract guaranties: 2 per cent moisture, "as received"; 19 per cent volatile matter, 1 per cent sulphur, 3 per cent ash, 15,100 B. t. u., "dry coal." Price, \$2.95 per ton.

646. Semibituminous coal delivered to the navy yard at Washington, D. C., Navy Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 22 per cent volatile matter, 1 per cent sulphur, 4 per cent ash, 15,000 B. t. u., "dry coal." Price, \$3.10 per ton.

647. Semibituminous coal delivered to the navy yard at Charleston, S. C., Navy Department, 1908-9. Contract guaranties: 7 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$4.03 per ton.

648. Semibituminous coal delivered to the Bureau of Engraving and Printing, Washington, D. C., Treasury Department, 1911-12. Contract guaranties: 5 per cent ash, "dry coal"; 14,700 B. t. u., "as received." Price, \$3.15 per ton.

649. Semibituminous coal delivered to the State, War, and Navy Building, Washington, D. C., 1911-12. Contract guaranties: 5 per cent ash, "dry coal"; 14,700 B. t. u., "as received." Price, \$3.45 per ton.

650. Semibituminous coal delivered to the Treasury Building, Washington, D. C., Treasury Department, 1911-12. Contract guaranties: 5 per cent ash, "dry coal"; 14,700 B. t. u., "as received." Price, \$3.60 per ton.

651. Semibituminous coal delivered to the Naval Medical School Hospital, Washington, D. C., Navy Department, 1911-12. Contract guaranties: 5 per cent ash, 14,300 B. t. u., "as received." Price, \$3.35 per ton.

652. Semibituminous coal delivered to the Weather Bureau, Bluemont, Va., Department of Agriculture, 1912-13. Contract guaranties: 2 per cent moisture, "as received"; 5 per cent ash, 14,600 B. t. u., "dry coal." Price, \$3.80 per ton.

653. Semibituminous coal delivered to the second lighthouse district, Boston, Mass., Bureau of Lighthouses, Department of Commerce, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 18 per cent volatile matter, 1 per cent sulphur, 6 per cent ash, 14,750 B. t. u., "dry coal." Price, \$4.12 per ton.

654. Bituminous coal delivered to Galveston, Tex. (for vessels), Quartermaster Corps, War Department, in June and July, 1914.

655. Semibituminous coal delivered to Freedmen's Hospital, Washington, D. C., Department of the Interior, 1911-12. Contract guaranties: 5 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$3.44 per ton.

656. Semibituminous coal delivered to the fourth lighthouse district, Philadelphia, Pa., Bureau of Lighthouses, Department of Commerce, 1911-12. Price, \$2.65 per ton.

657. Semibituminous coal delivered to the Panama Railroad Co. (bunker coal), at New York, N. Y., 1910-11. Contract guaranty: 14,000 B. t. u., "as received." Price, \$2.77 per ton.

658. Semibituminous coal delivered to the Government Hospital for the Insane, Washington, D. C., Department of the Interior, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$2.75 per ton.

659. Semibituminous coal delivered to Fort Howard, Md., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 7 per cent ash, 14,100 B. t. u., "dry coal." Price, \$2.85 per ton.

660. Semibituminous coal delivered to Fort Howard, Md., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 14,200 B. t. u., "as received." Price, \$2.70 per ton delivered to vessels.

661. Semibituminous coal delivered to Fort Howard, Md., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 3 per cent moisture, "as received"; 6 per cent ash, 14,400 B. t. u., "dry coal." Price, \$2.70 per ton for delivery to vessels and \$3.38 per ton for delivery to post.

662. Semibituminous coal delivered to the Southern Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Va., 1910-11. Contract guaranties: 4 per cent ash, "dry coal"; 14,750 B. t. u., "as received." Price, \$2.89 per ton.

663. Semibituminous coal delivered to Winder Building, Washington, D. C., Treasury Department, 1910-11. Contract guaranties: 5 per cent ash, "dry coal"; 14,700 B. t. u., "as received." Price, \$3.35 per ton.

664. Semibituminous coal delivered to the Bureau of Engraving and Printing, Washington, D. C., Treasury Department, 1910-11. Contract guaranties:

4 per cent ash, "dry coal"; 14,710 B. t. u., "as received." Price, \$3.19 per ton.

665. Semibituminous coal delivered to the Treasury Building, Washington, D. C., Treasury Department, 1910-11. Contract guaranties: 5 per cent ash, "dry coal"; 14,700 B. t. u., "as received." Price, \$3.30 per ton.

666. Semibituminous coal delivered to Fort Williams, Me., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 14,300 B. t. u., "as received." Price, \$4.65 per ton, delivery at Portland, Me.

667. Semibituminous coal delivered to Fort Monroe, Va., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6 per cent ash "dry coal"; 14,600 B. t. u., "as received." Price, \$3.11 per ton for delivery to post and \$3.29 per ton for delivery at artillery school.

668. Semibituminous coal delivered to the Winder Building, Washington, D. C., Treasury Department, 1911-12. Contract guaranties: 5 per cent ash, "dry coal"; 14,600 B. t. u., "as received." Price \$3.50 per ton.

669. Semibituminous coal delivered to Fort Monroe, Va., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, "as received"; 6 per cent ash, 14,850 B. t. u., "dry coal." Price, \$3.09 per ton for delivery at the artillery school.

670. Semibituminous coal delivered to Fort Williams, Me., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 4.5 per cent moisture, "as received"; 6 per cent ash, 14,500 B. t. u., "dry coal." Price, \$4.80 per ton, delivery at Portland, Me.

671. Semibituminous coal delivered to the Southern Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Va., 1912-13. Contract guaranties: 2 per cent moisture, "as received"; 4 per cent ash, 14,950 B. t. u., "dry coal." Price, \$2.76 per ton.

672. Semibituminous coal delivered to Fort Williams, Me., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 3.5 per cent moisture, "as received"; 22 per cent volatile matter, 1 per cent sulphur, 6 per cent ash, 14,300 B. t. u., "dry coal." Price, \$5.30 per ton for delivery at post and \$4.90 per ton for delivery to vessels.

673. Semibituminous coal delivered to the Southern Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Va., 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 22 per cent volatile matter, 0.95 per cent sulphur, 6.5 per cent ash, 14,800 B. t. u., "dry coal." Price, \$3.13 per ton.

674. Semibituminous coal delivered to the United States engineer office, Georgetown, S. C., War Department, 1912-13. Contract guaranties: 2.5 per cent moisture, 1 per cent sulphur, 6 per cent ash, 14,500 B. t. u., "as received." Price, \$3.65 per ton (2,000 pounds).

675. Semibituminous coal delivered to the District Building, Washington, D. C., 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 22 per cent volatile matter, 1 per cent sulphur, 5 per cent ash, 15,000 B. t. u., "dry coal." Price, \$3.65 per ton.

676. Semibituminous coal delivered to the Treasury Building, Washington, D. C., Treasury Department, 1913-14. Contract guaranties: 3.5 per cent moisture, "as received"; 5 per cent ash, 15,000 B. t. u., "dry coal." Price, \$3.95 per ton.

677. Semibituminous coal delivered to the New National Museum, Washington, D. C., Smithsonian Institution, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 5 per cent ash, 15,000 B. t. u., "dry coal." Price, \$3.90 per ton.

678. Semibituminous coal delivered to the Government Printing Office, Washington, D. C., 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 22 per cent volatile matter, 1 per cent sulphur, 5 per cent ash, 15,000 B. t. u., "dry coal." Price, \$3.75 per ton.

679. Semibituminous coal delivered to the Treasury Building, Washington, D. C., Treasury Department, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 22 per cent volatile matter, 1 per cent sulphur, 5 per cent ash, 14,895 B. t. u., "dry coal." Price, \$3.73 per ton.

680. Semibituminous coal delivered to the District Building, Washington, D. C., 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 22 per cent volatile matter, 1 per cent sulphur, 5 per cent ash, 14,895 B. t. u., "dry coal." Price, \$3.64 per ton.

681. Semibituminous coal delivered to Fort Monroe, Va., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 2.5 per cent moisture, "as received"; 6 per cent ash, 14,850 B. t. u., "dry coal." Price, \$3.505 per ton for delivery at fort, and \$3.22 per ton f. o. b. vessels at Norfolk, Va.

682. Semibituminous coal delivered to the navy yard at Washington, D. C., Navy Department, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 22 per cent volatile matter, 1 per cent sulphur, 4 per cent ash, 14,900 B. t. u., "dry coal." Price, \$3.05 per ton.

683. Semibituminous coal delivered to the Panama Railroad Co., Newport News, Va., 1908-9. Contract guaranty: 14,600 B. t. u., "as received." Price, \$2.65 to \$2.80 per ton, f. o. b. steamers; April 1 to August 31, 1908, \$2.65; September 1, 1908, to March 31, 1909, \$2.80.

684 and 685. Semibituminous coal delivered to the Panama Railroad Co., at Sewalls Point, Norfolk, Va., 1910-11. Contract guaranty: 14,600 B. t. u., "as received." Price, \$2.60 per ton.

686. Semibituminous coal delivered to the Panama Railroad Co., Newport News, Va., 1911-12. Contract guaranty: 14,600 B. t. u., "as received." Price, \$2.51 per ton.

687. Semibituminous coal delivered to the Panama Railroad Co., Newport News, Va., 1912-13. Contract guaranty: 14,800 B. t. u., "dry coal." Price, \$2.70 per ton.

688. Semibituminous coal delivered to the Panama Railroad Co., at Sewalls Point, Norfolk, Va., 1912-13. Contract guaranty: 14,800 B. t. u., "dry coal." Price, \$2.70 per ton.

689. Semibituminous coal delivered to the Panama Railroad Co., at Sewalls Point, Norfolk, Va., 1913-14. Contract guaranty and price same as No. 688.

WEST VIRGINIA AND VIRGINIA COALS.

690. Semibituminous coal delivered to the United States engineer office, Charleston, S. C., War Department, 1910-11. Contract guaranty: 6 per cent ash, "dry coal"; 14,500 B. t. u., "as received." Price, \$3.23 per ton.

691. Semibituminous coal delivered to Fort Monroe, Va., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 14,600 B. t. u., "as received." Price, \$2.95 per ton.

692. Semibituminous coal delivered to Fort Monroe, Va., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 2.67 per cent moisture, "as received"; 6 per cent ash, 14,900 B. t. u., "dry coal." Price, \$2.95 per ton.

693. Semibituminous coal delivered to the navy yard at Norfolk, Va., Navy Department, 1913-14. Contract guaranties: 2.54 per cent moisture, "as received"; 19.35 per cent volatile matter, 0.7 per cent sulphur, 6.5 per cent ash, 14,950 B. t. u., "dry coal." Price, \$2.85 per ton.

694. Semibituminous coal delivered to the naval hospital, Norfolk, Va., Navy Department, 1913-14. Contract guaranties same as No. 693. Price, \$3.21 per ton.

695. Semibituminous coal delivered to Fort Monroe, Va. (vessels at Norfolk and Lamberts Point, Va.); Quartermaster Corps, War Department, 1913-14. Contract guaranties: 2.67 per cent moisture, "as received"; 22 per cent volatile matter, 2 per cent sulphur, 6 per cent ash, 14,900 B. t. u., "dry coal." Price, \$2.95 per ton.

696. Semibituminous coal delivered to New Bedford, Mass., second lighthouse district, Bureau of Lighthouses, Department of Commerce, 1913-14. Contract guaranties: 3 per cent moisture, "as received"; 19 per cent volatile matter, 0.75 per cent sulphur, 6 per cent ash, 14,900 B. t. u., "dry coal." Price, \$4.23 per ton.

697. Semibituminous coal delivered to the navy yard at Norfolk, Va., Navy Department, 1914-15. Contract guaranties: 2.75 per cent moisture, "as received"; 18 to 20 per cent volatile matter, 0.05 to 1 per cent sulphur, 5 per cent ash, 14,800 B. t. u., "dry coal." Price, \$2.80 per ton.

698. Semibituminous coal delivered to the naval hospital, Norfolk, Va., Navy Department, 1914-15. Contract guaranties same as No. 697. Price, \$3.16 per ton.

699. Semibituminous coal delivered to the Northwestern Branch of the National Home for Disabled Volunteer Soldiers, National Home, Wis., 1914-15. Contract guaranties: 4 per cent moisture, "as received"; 19 per cent volatile matter, 0.75 per cent sulphur, 5 per cent ash, 14,750 B. t. u., "dry coal." Price, \$3.07 per ton (2,000 pounds).

700. Semibituminous coal delivered to the second lighthouse district, New Bedford, Mass., Bureau of Lighthouses, Department of Commerce, 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 20 per cent volatile matter, 0.6 per cent sulphur, 6 per cent ash, 14,750 B. t. u., "dry coal." Price, \$4.28 per ton.

701. Semibituminous coal delivered to Fort Monroe, Va., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 3.5 per cent moisture, "as received"; 6.5 per cent ash, 14,850 B. t. u., "dry coal." Price, \$2.95 per ton at Norfolk, Va.

702. Semibituminous coal delivered to the navy yard at Charleston, S. C., Navy Department, 1914-15. Contract guaranties: 2 per cent moisture, "as received"; 19.35 per cent volatile matter, 0.6 per cent sulphur, 6 per cent ash, 14,800 B. t. u., "dry coal." Price, \$3.92 per ton.

703. Semibituminous coal delivered to the Panama Railroad Co. at Norfolk, Va., 1908-9. Contract guaranty: 14,600 B. t. u., "as received." Price, per ton, f. o. b. steamers, April 1 to August 31, 1908, \$2.65; September 1, 1908, to March 31, 1909, \$2.80.

704. Semibituminous coal delivered to the Panama Railroad Co. at Norfolk, Va., in 1909-10. Contract guaranty: 14,600 B. t. u., "as received." Price, per ton, f. o. b. steamers, April 1 to August 31, 1909, \$2.34; September 1, 1909, to March 31, 1910, \$2.44.

705, 706, 707. Semibituminous coal delivered to the Panama Railroad Co. at Lamberts Point, Va., 1910-11. Contract guaranty: 14,600 B. t. u., "as received." Price, \$2.60 per ton.

708. Semibituminous coal delivered to the Panama Railroad Co. at Lamberts Point, Va., 1911-12. Contract guaranty: 14,600 B. t. u., "as received." Price, \$2.51 per ton.

709, 710, 711. Semibituminous coal delivered to the Panama Railroad Co. at Lamberts Point, Va. Contract guaranty: 14,800 B. t. u., "dry coal." Price, \$2.70 per ton. No. 709 was delivered in 1912-13, No. 710 in 1913-14, and No. 711 in 1914-15.

712. Semibituminous coal delivered to the Panama Railroad Co. at Lamberts Point, Va., 1914-15. Contract guaranties: 3 per cent moisture, "as received"; 21 per cent volatile matter, 1.25 per cent sulphur, 7 per cent ash, 14,700 B. t. u., "dry coal." Price, \$2.70 per ton.

WYOMING COALS.

713. Subbituminous coal delivered to Fort Yellowstone, Wyo., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 9 per cent moisture, "as received"; 3 per cent ash, 12,000 B. t. u., "dry coal." Price, \$2.30 per ton f. o. b. Kirby, Wyo.

714. Bituminous coal delivered to Boise Barracks, Idaho, Quartermaster Corps, War Department, 1911-12. Contract guaranties: 10 per cent ash, "dry coal"; 12,500 B. t. u., "as received." Price, \$8.40 per ton before September 1, 1911, and \$8.96 per ton after September 1, 1911.

715. Subbituminous coal delivered to the Battle Mountain Sanitarium of the National Home for Disabled Volunteer Soldiers, Hot Springs, S. Dak., 1912-13. Contract guaranties: 20 per cent moisture, "as received"; 6 per cent ash, 12,500 B. t. u., "dry coal." Price, \$3.30 per ton (2,000 pounds).

716. Subbituminous coal delivered to the Rapid City Indian School, Rapid City, S. Dak., Office of Indian Affairs, Department of the Interior, 1910-11. Contract guaranties: 3 per cent ash, "dry coal"; 10,500 B. t. u., "as received." Price, \$4.70 per ton (2,000 pounds).

717. Subbituminous coal delivered to the Blackfeet Indian Agency, Browning, Mont., Office of Indian Affairs, Department of the Interior, 1910-11. Contract guaranties: 3 per cent ash, "dry coal"; 10,500 B. t. u., "as received." Price, \$6 per ton (2,000 pounds).

718. Subbituminous coal delivered to the Indian school, Crow Agency Station, Mont., Office of Indian Affairs, Department of the Interior, 1910-11. Contract guaranties same as No. 717. Price \$2.60 per ton (2,000 pounds).

719. Subbituminous coal delivered to Fort Keogh, Mont., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 20 per cent moisture, "as received"; 46 per cent volatile matter, 1 per cent sulphur, 4 per cent ash, 12,000 B. t. u., "dry coal." Price, \$3.98 per ton.

720. Subbituminous coal delivered to Fort Meade, S. Dak., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 22 per cent moisture, "as received"; 40 per cent volatile matter, 1 per cent sulphur, 3 per cent ash, 12,500 B. t. u., "dry coal." Price, \$5.20 per ton.

721. Subbituminous coal delivered to Fort Robinson, Nebr., Quartermaster Corps, War Department, 1914-15. Contract guaranties same as No. 720. Price, \$4.80 per ton.

722. Subbituminous coal delivered to Fort Robinson, Nebr., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 3.5 per cent ash, "dry coal"; 9,700 B. t. u., "as received." Price, \$4.45 per ton.

723. Subbituminous coal delivered to Fort Mackenzie, Wyo., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 3.5 per cent ash, "dry coal"; 9,700 B. t. u., "as received." Price, \$2.15 per ton.

724. Subbituminous coal delivered to Fort Mackenzie, Wyo., Quartermaster Corps, War Department, 1912-13. Contract guaranties: 15 per cent moisture, "as received"; 4 per cent ash, 10,000 B. t. u., "dry coal." Price, \$2 per ton.

725. Subbituminous coal delivered to Fort Meade, S. Dak., Quartermaster Corps, War Department, 1911-12. Contract guaranties: 6 per cent ash, "dry coal"; 9,500 B. t. u., "as received." Price, \$6.50 per ton.

726. Subbituminous coal delivered to Fort Robinson, Nebr., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 15 per cent moisture, "as received"; 40 per cent volatile matter, 1 per cent sulphur, 3 per cent ash, 12,500 B. t. u., "dry coal." Price, \$4.93 per ton.

727. Subbituminous coal delivered to the Battle Mountain Sanitarium of the National Home for Disabled Volunteer Soldiers, Hot Springs, S. Dak., 1913-14. Contract guaranties: 18 per cent moisture, "as received"; 44 per cent volatile matter, 0.43 per cent sulphur, 3 per cent ash, 12,585 B. t. u., "dry coal." Price, \$3.30 per ton (2,000 pounds).

728. Subbituminous coal delivered to Fort Meade, S. Dak., Quartermaster Corps, War Department, 1913-14.

729. Subbituminous coal delivered to the Battle Mountain Sanitarium of the National Home for Disabled Volunteer Soldiers, Hot Springs, S. Dak., 1910-11. Contract guaranties: 5 per cent ash, "dry coal"; 10,500 B. t. u., "as received." Price, \$3.30 per ton (2,000 pounds).

730. Subbituminous coal delivered to the Battle Mountain Sanitarium of the National Home for Disabled Volunteer Soldiers, Hot Springs, S. Dak., 1914-15. Contract guaranties: 19 per cent moisture, "as received"; 36.49 per cent volatile matter, 0.95 per cent sulphur, 3.5 per cent ash, 12,610 B. t. u., "dry coal." Price, \$3.30 per ton (2,000 pounds).

731. Subbituminous coal delivered to Fort Mackenzie, Wyo., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 22 per cent moisture, "as received"; 37.75 per cent volatile matter, 0.71 per cent sulphur, 6 per cent ash, 12,200 B. t. u., "dry coal." Price, \$2.25 per ton.

732. Subbituminous coal delivered to the Battle Mountain Sanitarium of the National Home for Disabled Volunteer Soldiers, Hot Springs, S. Dak., 1911-12. Contract guaranties: 4 per cent ash, "dry coal"; 10,000 B. t. u., "as received." Price, \$3.30 per ton (2,000 pounds).

733. Bituminous coal delivered to Fort D. A. Russell, Wyo., Quartermaster Corps, War Department, 1913-14. Contract guaranties: 5 per cent moisture, "as received"; 40 per cent volatile matter, 0.8 per cent sulphur, 3.55 per cent ash, 13,500 B. t. u., "dry coal." Price, \$5.91 per ton.

734. Bituminous coal delivered to Fort D. A. Russell, Wyo., Quartermaster Corps, War Department, 1914-15. Contract guaranties: 8 per cent moisture, "as received"; 43 per cent volatile matter, 0.85 per cent sulphur, 3.72 per cent ash, 13,500 B. t. u., "dry coal." Price, \$5.91 per ton.

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		Wylam, Ala., coal from (76-80)-	12, 13, 57
Y.			
		Yampa Valley mine, Colo., coal from (117-119)-----	14, 15, 59, 60
Z.			
		Zimmerman, Pa., coal from (464)--	34, 35, 83