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CHAPTER 7

THE CONSTRUCTION INDUSTRY ¹

(SHIPBUILDING EXCLUDED)

§ 7a. Introduction

This is one of the so-called hand trades of which the Census Bureau has taken no cognizance since 1900. Even in that year, according to statements in the Census volume, reports were not secured from a large proportion of the smaller concerns; hence the Census totals for 1900 cannot be taken to represent the size of the industry at that date. Without any definite Census base to build upon, it is impossible to follow the usual method of extending the data therefrom by means of other available criteria. The actual amount of construction done in each year must, then, be estimated from sources other than the Census.

§ 7b. Sources of Data

Search has thus far revealed only two extensive collections of data concerning the volume of building. A record of building permits issued in the principal cities is kept by certain financial newspapers. These data throw no light upon construction in the rural districts and do not include contracts let by the Federal Government. The F. W. Dodge Company, publishers of *The American Contractor*, compiles figures supposed to represent for certain well-defined sections of the country the total volume of contracts let each year. It appears probable, however, that some of the smaller contracts fail to appear in their records and that the records were much more incomplete in former years than at present.

Both of these sources of data are, therefore, more or less unsatisfactory, but, since nothing better is at hand,² they must form the basis for estimating the amount of construction undertaken in each year. The way in which these sources have been used is described in the following pages.

§ 7c. The Volume of Construction

From the reports of building permits quoted in *The Statistical Abstracts*

¹ Includes construction of buildings, highways, bridges, new railways, docks, etc.

² The bulletin entitled *Statistics of Income* published by the Bureau of Internal Revenue gives data concerning gross construction by corporations, but such a large proportion of building is done by individuals that it seems impracticable to obtain from these figures totals representing the entire industry.

of the United States for various years, an estimate has been made of the building permits issued by the list of cities cited in the 1916 number. The population of these cities in 1910 and 1920 can be ascertained from the Census reports and the fraction of the population of the entire United States residing in these cities in the various years has been closely approximated by aid of a smooth curve. The tentative assumption has been made that the amount of building per capita in these cities is typical of the country as a whole, and an estimate for the entire nation has been made upon this basis.

However, these building-permit records do not include the construction contracts awarded by the Federal Government, hence it is necessary to add estimates for this source. A careful study has been made of the records of the Federal Departments and certain information for recent years has also been secured through the courtesy of Mr. Homer Hoyt, formerly with the Building Materials Division of the War Industries Board. The estimates derived from these sources are shown in Table 7A and are there converted to indices based upon the value for 1918.

The method just described gives an estimated gross construction value in 1918 of \$2,979,000,000. The F. W. Dodge Company reports contracts in 1918 aggregating \$1,655,099,000, for that part of the United States, east of the Missouri and north of the Ohio. The wealth of the whole nation is estimated from the Census of Wealth, Debt, and Taxation to have been in 1918 about 1.685 times as great as that of the reporting territory. If construction is in proportion to wealth, then the total contracts let in the United States should have been about \$2,786,000,000, in 1918.

It seems probable that the rural population does not build quite as much in proportion as do the inhabitants of great cities, and because of the difficulties involved it also appears unlikely that the F. W. Dodge Company gets a record of every building contract made. Furthermore, many buildings are constructed without any contract. Under the circumstances, therefore, it seems well to average the estimate for 1918 made on the basis of building permits with that of the F. W. Dodge Company. The resulting average is \$2,766,000,000. This figure has been multiplied by the construction index previously described in order to approximate the amount of construction in the United States for each year. The results appear in Table 7A.

TABLE 7A

THE VALUE OF CONSTRUCTION WORK IN THE CONTINENTAL UNITED STATES AS ESTIMATED FROM THE F. W. DODGE COMPANY'S REPORTS ON CONTRACTS LET AND THE BUILDING PERMITS ISSUED IN LEADING CITIES

Year	Building permits issued in a selected list of large cities (Millions)	Ratio of population of given cities to that of U. S. ^b	Private building in U. S.; estimated from permits ^c (Millions)	Federal government construction in U. S. ^d (Millions)	Construction work by railways ^e (Millions)	Sum of preceding three columns (Millions)	F. W. Dodge Co.'s estimate of total construction (Millions)	Estimated value of construction work in U. S. ^f (Millions)
1909..	\$772	.2181	\$3,540	\$ 123	\$16	\$3,679		\$3,708
1910..	726	.2193	3,311	122	38	3,471		3,498
1911..	701	.2210	3,172	143	41	3,356		3,383
1912..	754	.2231	3,380	139	29	3,548		3,576
1913..	686	.2242	3,000	153	44	3,257		3,283
1914..	631	.2257	2,796	154	26	2,976		3,000
1915..	654	.2279	2,870	131	20	3,021		3,045
1916..	840	.2298	3,656	90	53	3,799		3,829
1917..	603	.2315	2,605	419	63	3,087		3,111
1918..	363	.2333	1,556	1,161	28	2,745	\$2,786	2,766 ^g

^a For list, see the *Statistical Abstract* of the U. S. for 1916; figures partly estimated.

^b Calculated by aid of smooth curves.

^c Calculated by dividing items in the second column by those in the third.

^d Compiled from records of various Departments; shipbuilding and railway work excluded.

^e Average of figures in two preceding columns.

^f The ratio of 2,766 to 2,745 is 1.008. The items in the second column preceding have been multiplied by 1.008 to obtain the items in this column.

^g Equals two-thirds of amounts appropriated by railways for "Additions to Physical Property." See *Statistics of Railways* by Interstate Commerce Commission.

§ 7d. The Aggregate of Wages and Salaries

Although the information concerning the volume of construction is scanty and unreliable enough, that pertaining to the division of the gross receipts between employees, entrepreneurs and other property owners in this field, and other industries contributing materials or supplies to this industry, is still less adequate.

Contractors in this field do not care to make public either their profits or an itemized list of their expenses. Only one concern has been discovered which publishes annual reports, and even these reports do not extend over the period desired. This concern, the United States Realty Co., is fortunately a large operator and carries on building enterprises of different types in various parts of the United States. It is possible, therefore, that its financial history may be rather typical of that of construction companies

in general. However, this is an assumption resting upon decidedly slender foundations.

The Department of Internal Affairs of Pennsylvania shows in its annual report the relationship between the amount paid for wages and salaries and the gross value of construction for each year. Although fluctuations from year to year doubtless are not uniform in the various sections of the country, it seems probable that the trend of the Pennsylvania ratios does not differ widely from that of the country as a whole. In the absence of more complete data, it has been necessary to rely solely upon these figures in calculating the amount of the payments for wages and salaries.

Under these circumstances, it is clear that estimates of the various shares in the net value product of the building industry are necessarily very crude. The method of deriving such estimates as are possible from the fragmentary information available is described in the following pages.

Table 7B furnishes an estimate of the amount paid by the industry to employees in the form of wages and salaries. It is based wholly upon the assumption that the Pennsylvania ratio of this amount to the gross value of construction is the same as the average ratio for the entire United States.

TABLE 7B

AN ESTIMATE OF THE TOTAL AMOUNT RECEIVED IN THE FORM OF WAGES AND SALARIES BY EMPLOYEES ENGAGED IN THE CONSTRUCTION INDUSTRY

Calendar year	Gross value of construction in the Continental United States ^a (Millions)	Fraction of gross value going to employees	Total payments for wages and salaries ^c (Millions)
1909.....	\$3,708	.3215 ^d	
1910.....	3,498	.3276 ^d	\$1,192
1911.....	3,383	.3263 ^d	1,146
1912.....	3,576	.3406 ^d	1,104
			1,218
1913.....	3,283	.3888 ^b	
1914.....	3,000	.3107 ^b	1,276
1915.....	3,045	.3043 ^b	932
1916.....	3,829	.2785 ^c	927
			1,066
1917.....	3,111	.3127 ^b	
1918.....	2,766	.3484 ^b	973
			964

^a See Table 7A.

^b Assumed to be same as in Pennsylvania; see Reports of Pa. Commissioner of Labor and Industry and Report on Productive Industries for 1919 by the Pa. Dept. of Internal Affairs.

^c Based on ratio of wages in 1916 to those in 1915 in State of Pennsylvania.

^d Interpolated between fraction of gross output going to employees in the U. S. according to the Census of 1900 (.2685) and the Pa. figures for 1913. Changes in the hourly wage rate for building labor were used as aids in the interpolation. For wage rates, see Table 7C.

^e Product of two preceding columns.

§ 7e. The Share of the Entrepreneurs and Other Property Owners: First Estimate

The next step necessary was the computation of the share going to entrepreneurs and other property owners. The starting point was the partial census of the building industry in 1900. In Volume 7, Part 1, page cxxlvi, of the Manufactures Census for that year, there is given a summary of the findings. It shows a payment of \$190,898,680, for wages and \$321,-339,847, for materials. Depreciation was assumed to have been high and has been estimated at 10% annually on the capital invested. This would give a depreciation allowance of \$19,372,564. By adding this amount to the reported expenses of production and deducting the sum from the gross value of the products, the amount received by the entrepreneurs for their services and for the use of their invested resources was estimated at \$119,767,815.

A foundation having thus been laid, the next essential was to estimate the relative shares of the leading productive agents for the different years. The steps in order were as follows:—

First, a weighted index of wages per hour in the building trades was computed from the data furnished in Bulletins 131 and 259 of the United States Bureau of Labor. The weights used for the different occupations correspond to the number of men engaged in each trade in 1910 as estimated from the data in the Census of Occupations. They are as follows:—

Bricklayers.....	156
Building Laborers.....	686
Carpenters.....	696
Hod Carriers.....	170
Inside Wiremen	50
Painters.....	278
Plasterers.....	50
Plumbers & Gasfitters	105
Steam Fitters.....	35
Stone Masons.....	39
Structural Iron Workers.....	11
Stone Cutters.....	10

The indices for each trade were reduced to a common base, then multiplied by the weights specified, and an average of the indices obtained. This average index appears in Table 7C.

Average index numbers for the price of building materials were taken from page 179 of Bulletin 149 of the Bureau of Labor Statistics and from

the *Statistical Abstracts* of the United States for 1918 and 1919 on pages 578 and 568 respectively. These indices were converted by division to the common base 1913.

The profits from construction are shown in the annual reports of the United States Realty Company. This company also derives a large income from rentals. General expenses were divided in proportion to the respective receipts from these two sources and the fraction apportioned to construction was subtracted from the profits from that field. Unfortunately, the operations of the United States Realty Company only go back to 1904, hence it was necessary to manufacture a figure to represent 1899. This quantity was assumed to bear the same ratio to the actual profits for 1909 as the average index of the prices of wages and materials in 1899 bears to the corresponding average in 1909. The imaginary quantity thus computed for 1899 was \$903,000.

An estimate of net profits having been thus arrived at for each year, the actual amounts were next converted to an index number based upon the year 1913. Table 7C shows the net results of the operations just described.

TABLE 7C

AN ESTIMATE OF THE RELATIVE VARIATIONS IN PAYMENTS GOING TO SOME OF THE LEADING AGENTS OF PRODUCTION IN THE CONSTRUCTION INDUSTRY

(For the Continental United States)

Year	Estimated net profits of the United States Realty Company derived from construction ^b	Indices of comparative change (Base 1913)		
		Profits of U. S. Realty Company	Wages per hour of building workers ^c	Prices of materials ^c
1899.....	\$ 903,000 ^a	.870	.663	.696
1909.....	1,215,000	1.171	.918	.911
1910.....	1,102,000	1.062	.949	1.010
1911.....	931,000	.897	.960	.996
1912.....	1,113,000	1.072	.973	.976
1913.....	1,038,000	1.000	1.000	1.000
1914.....	892,000	.859	1.017	.97
1915.....	796,000	.767	1.024	.94
1916.....	392,000	.378	1.065	1.01
1917.....	947,000	.912	1.147	1.24
1918.....	1,485,000	1.431	1.288	1.506

^a Assumed; see text for basis.

^b Calculated from *Annual Reports*.

^c From U. S. Bureau of Labor Statistics data; for description, see text.

An effort was next made to use the data just presented to ascertain the fraction of the gross value of the output of the industry going to entre-

preneurs and other property owners. As a first step, the actual values representing each productive agent in 1899 were multiplied by the indices shown in Table 7C. The next step was to reduce the resulting products to percentages of the gross output for each year. In 1899, 85.40 per cent of the gross value of the product went to the three factors, wages, materials and the entrepreneur.¹ For want of better evidence, this percentage was assumed to have remained constant. The calculated percentages for each year were therefore made to total 85.40. The results derived appear in Table 7D.

TABLE 7D

ESTIMATES OF THE PERCENTAGE OF THE GROSS VALUE OF CONSTRUCTION GOING TO EACH OF THREE IMPORTANT AGENTS IN THE VARIOUS YEARS

(For the Continental United States)

Year	Relative amounts ^b in millions of dollars				Percentage of gross value of construction ^c			
	Profits	Wages	Materials	Total	Profits	Wages	Materials	Total
1899.....	104.2	125.6	223.6	454.4	19.58	23.78	42.04	85.40
1909.....	140.3	175.2	292.7	608.2	19.71	24.61	41.08	85.40
1910.....	127.2	181.2	324.5	632.9	17.18	24.41	43.81	85.40
1911.....	107.4	183.3	320.0	610.7	15.03	25.62	44.75	85.40
1912.....	128.4	185.7	313.6	627.7	17.51	25.28	42.61	85.40
1913.....	119.8 ^a	190.9 ^a	321.3 ^a	632.0 ^a	16.20	25.76	43.44	85.40
1914.....	102.9	194.1	311.7	608.7	14.44	27.20	43.76	85.40
1915.....	91.9	195.5	302.0	589.4	13.34	28.29	43.77	85.40
1916.....	45.3	203.3	324.5	573.1	6.58	30.31	48.51	85.40
1917.....	109.2	219.0	398.4	726.6	12.83	25.72	46.85	85.40
1918.....	171.4	245.9	483.9	901.2	16.23	23.30	45.87	85.40

^a Amounts as shown in Census of 1900: here used as bases.

^b Derived by multiplying the bases by the indices recorded in Table 7C.

^c The mode of deriving these percentages is illustrated by the following proportion representing profits in 1899—1.042: 4.544:: 19.58: 85.40.

From data furnished on pages ccxvi and 50 of Volume 7, Part 1, of the *Census of Manufactures* for 1900, the following estimates have been derived for the construction industry:—

¹ The entrepreneurs' share includes not only net profits but also all gains due to resources of any sort invested in the construction industry.

Item	Thousands
Wages.....	\$190,899
Salaries.....	8,652
Land rent ^a	966
Building rent ^a	1,098
Interest paid to private parties (assumed to be two-thirds of all interest).....	5,064
Profits.....	119,768

Total Value Product in 1899.....\$326,447

^a Assumed to be five per cent of the value of this type of assets devoted to the industry.

From the above estimates, it appears that the total share of entrepreneurs and investors is about 1.054 times that of entrepreneurs alone.

The percentages shown in the sixth column of Table 7D have therefore been multiplied by this factor to obtain estimates of the proportion of the gross value of construction going to the propertied classes.

TABLE 7E

FIRST ESTIMATE OF THE TOTAL SHARE OF ENTREPRENEURS AND OTHER PROPERTY OWNERS, BASED UPON THE CENSUS OF 1900 AND THE PROFITS OF THE UNITED STATES REALTY COMPANY

A	B	C	D	E
Calendar year	Fraction of gross value constituting profits ^a	Fraction of gross value going to entrepreneurs and other property owners $1.054 \times B^b$	Gross value of construction ^c (Millions)	Share of entrepreneurs and other property owners $C \times D$
1909.....	.1971	.2077	\$3,708	\$770
1910.....	.1718	.1811	3,498	633
1911.....	.1503	.1584	3,383	536
1912.....	.1751	.1846	3,576	660
1913.....	.1620	.1708	3,283	561
1914.....	.1444	.1522	3,000	456
1915.....	.1334	.1406	3,045	428
1916.....	.0658	.0694	3,829	266
1917.....	.1283	.1352	3,111	421
1918.....	.1623	.1711	2,766	473

^a See Table 7D.

^b For explanation of ratio, see text.

^c See Table 7A.

§ 7f. The Share of the Entrepreneurs and Other Property Owners: Second Estimate

Because of the unreliability of the basis for the fractions recorded in Column C of Table 7E, it seems desirable to make another and independent

estimate of the share of the entrepreneurs and other possessors of property. This has been done by first estimating certain expenses incurred by the builders and subtracting the amounts thus arrived at from the gross value of the output. Table 7F illustrates the *modus operandi*.

TABLE 7F

SECOND ESTIMATE OF THE SHARE OF THE ENTREPRENEURS AND OTHER PROPERTY OWNERS; DERIVED BY SUBTRACTING CERTAIN EXPENSES FROM THE GROSS VALUE OF CONSTRUCTION

(Millions of Dollars)

A	B	C	D	E	F	G
Calendar year	Payments not going to entrepreneurs or property owners				Gross value of construction ^d	Share of entrepreneurs and property owners F — E
	Cost of materials ^a	Wages and salaries paid ^b	Miscellaneous expenses 0.16 (B + C) ^c	Total B + C + D		
1909...	\$1,346	\$1,192	\$406	\$2,944	\$3,708	\$764
1910...	1,277	1,146	387	2,810	3,498	688
1911...	1,187	1,104	367	2,658	3,383	725
1912...	1,284	1,218	400	2,902	3,576	674
1913...	1,360	1,276	422	3,058	3,283	225
1914...	1,219	932	344	2,495	3,000	505
1915...	1,229	927	345	2,501	3,045	544
1916...	1,462	1,066	404	2,932	3,829	897
1917...	1,565	973	406	2,944	3,111	167
1918...	1,283	964	359	2,606	2,766	160

^a Excludes those used in shipbuilding; calculated from data given in the Census reports on manufactures, the Government bulletins on forestry, the reports of the Geological Survey on *The Mineral Resources of the United States*, various numbers of *The Statistical Abstract*, and the *Annual Reports* of the Secretary of the Navy.

^b See Table 7B.

^c Ratio in 1899 according to the Census of 1900.

^d See Table 7A.

It is improbable that the actual fluctuations in the share of the entrepreneurs and property owners were as violent as those shown in Column G of Table 7F. However, since there seems to be no better criterion by which to adjust the estimates, the best course seems to be to leave them as they stand, remembering meanwhile that they are not accurate enough to portray anything more than general tendencies.

§ 7g. Purchasing Power of Share of Entrepreneurs and Other Property Owners

In Table 7G, the two estimates of the share of property and entrepreneurial effort have been averaged and reduced to a basis of constant pur-

chasing power by dividing by a price index representing estimated changes in expenditures of families having annual total expenses of \$5,000. The estimate of the fraction of the net value product received by the employees appears in Table 7H.

TABLE 7G

FINAL ESTIMATE OF THE SHARE OF THE ENTREPRENEURS AND PROPERTY OWNERS IN THE NET VALUE PRODUCT OF THE CONSTRUCTION INDUSTRY

Calendar year	Estimate based on profits of the U. S. Realty Co. ^a (Millions)	Estimate obtained by deduction of expenses ^b (Millions)	Average ^c of two preceding estimates ^f (Millions)	Index of prices of goods consumed by families spending \$5,000 per annum ^d	Purchasing power of share of entrepreneurs and property owners at prices of 1913 ^e (Millions)
1909.....	\$770	\$764	\$767	.956	\$802
1910.....	633	688	661	.977	677
1911.....	536	725	631	.984	641
1912.....	660	674	667	.999	668
1913.....	561	225	393	1.000	393
1914.....	456	505	481	1.013	475
1915.....	428	544	486	1.002	485
1916.....	266	897	581	1.088	534
1917.....	421	167	294	1.252	235
1918.....	473	160	317	1.448	219

^a See Table 7E.

^b See Table 7F.

^c Simple arithmetic average.

^d See Table 2G.

^e Money value divided by price index.

^f In the opinion of Col. M. C. Rorty (a director of this Bureau), these figures are too high.

TABLE 7H

THE ESTIMATED NET VALUE PRODUCT OF THE CONSTRUCTION INDUSTRY AND THE SHARE THEREOF GOING TO THE EMPLOYEES

Calendar year	Share of entrepreneurs and other property owners ^a (Millions)	Share of employees ^b (Millions)	Total net value product (Millions)	Per cent of net value product going to the employees
1909.....	\$767	\$1,192	\$1,959	60.8
1910.....	661	1,146	1,806	63.4
1911.....	631	1,104	1,734	63.6
1912.....	667	1,218	1,885	64.6
1913.....	393	1,276	1,669	76.5
1914.....	481	932	1,413	66.0
1915.....	486	927	1,413	65.6
1916.....	581	1,066	1,647	64.7
1917.....	294	973	1,267	76.8
1918.....	317	964	1,280	75.2

^a See Table 7G.

^b See Table 7B.

The last column of Table 7H indicates that the employees receive from three-fifths to four-fifths of the net value product and that this proportion has been an increasing one during the decade under consideration.

From the standpoint of the average employee, it is a matter of much moment to know whether he is able to buy more or less with his wages than he could have done a decade ago. The data are too unreliable to be depended upon to give more than a broad outline of the changes that have occurred. The estimates appear in Table 7I.

TABLE 71

THE PURCHASING POWER OF THE ESTIMATED COMPENSATION RECEIVED BY THE AVERAGE EMPLOYEE IN THE CONSTRUCTION INDUSTRY

A	B	C	D	E	F	G	H	I
Cal- endar year	Total salaries and wages paid ^a (Millions)	Average full time annual compen- sation ^b	Average number of em- ployees actually working (Thou- sands) $\frac{B}{C}$	Fraction of number attached to industry actually working ^c $\frac{D}{E}$	Number attached to industry (Thou- sands) $\frac{D}{E}$	Average pay per employee attached to industry $\frac{B}{F}$	Index of prices of goods pur- chased by manual and clerical workers	Purchas- ing power of annual earnings at prices of 1913 $\frac{G}{H}$
1909	\$1,192	\$ 786	1,516	.957	1,585	\$ 752	.955 ^c	\$787
1910	1,146	787	1,456	.910	1,600	716	.978 ^c	732
1911	1,104	807	1,368	.845	1,619	682	.984 ^c	693
1912	1,218	835	1,458	.902	1,617	753	.994 ^c	758
1913	1,276	830	1,537	.956	1,608	793	1.000 ^d	793
1914	932	835	1,116	.782	1,427	653	1.01 ^d	647
1915	927	879	1,054	.816	1,292	717	1.03 ^d	696
1916	1,066	930	1,146	.960	1,194	893	1.10 ^d	812
1917	973	973	1,000	.975	1,026	948	1.29 ^d	735
1918	964	1,328	726	.959	757	1,273	1.58 ^d	806

^a See Table 7B.

^b Based on average wages in construction industry in Pa., average pay of carpenters employed by railways, and the union scale of wages as shown by the records of the U. S. Bureau of Labor Statistics.

^c Method of calculation described in a separate report.

^d U. S. Bureau of Labor Statistics index.

So far as can be judged by the rather crude estimates just presented, the economic condition of the building workers has grown neither better nor worse during the decade under consideration.

§ 7h. The Total Value of Construction

It is a matter of interest to compare the gross amount of construction taking place in the United States with the growth in the population. A comparison with total population is of less significance than one with the increase in the number of inhabitants; for one of the prime reasons for new construction is the need of transportation, business buildings, housing and other accommodations for the additional members of the population. The fact should be kept in mind that no inconsiderable share of the construction work during 1917 and 1918 went to meet the temporary needs of war and hence added little to the total permanent improvements in the

country. Table 7J compares the gross figures only, as it is impracticable to segregate that part of the work which was transitory in nature.

TABLE 7J

THE RELATION OF CONSTRUCTION TO POPULATION AND POPULATION GROWTH IN THE CONTINENTAL UNITED STATES

A	B	C	D	E	F	G	H
Calen- dar year	Gross value of con- struction ^a (Millions)	Index of construc- tion costs ^b	Gross value of construc- tion at prices of 1913 (Millions) $\frac{B}{C}$	Population of Conti- nental U. S. in thousands ^c	Value of per capita construc- tion at prices of 1913 $\frac{D}{E}$	Increase in popula- tion since preceding year ^d (Thou- sands)	Construc- tion per additional person at prices of 1913 $\frac{D}{G}$
1909....	\$3,708	.939	\$3,948	90,370	\$44	1,783	\$2,214
1910....	3,498	.970	3,606	92,229	39	1,730	2,084
1911....	3,383	.966	3,502	93,811	37	1,530	2,289
1912....	3,576	.987	3,623	95,338	38	1,690	2,144
1913....	3,283	1.000	3,283	97,278	37	2,020	1,625
1914....	3,000	.969	3,096	99,194	31	1,560	1,985
1915....	3,045	.980	3,107	100,428	31	1,210	2,568
1916....	3,829	1.126	3,401	101,722	33	1,330	2,557
1917....	3,111	1.371	2,269	103,059	22	1,250	1,815
1918....	2,766	1.481	1,868	104,182	18	650	2,874

^a See Table 7A.

^b Derived by averaging indices representing respectively the hourly wages of building labor, the prices of lumber and building materials, and the prices of metals and metal products, using weights 2, 2, and 1 respectively. For data, see Table 7C of this report, and *Bulletin 269* of the U. S. Bureau of Labor Statistics.

^c Derivation described in Sec. 2a.

^d See the last column of Table 2A for data from which this is derived.

The indications are quite clear that the volume of construction per capita has declined almost steadily throughout the decade and, were the temporary war construction for 1917 and 1918 omitted from consideration, the building shortage in those years might be found to be considerable. However, the amount of construction work per additional member of the population has not fallen off. It is unfortunate that the paucity of data concerning the construction industry does not permit of more accurate estimates but it is hoped that even these rough approximations may give a general idea of the situation in this important field.