sident of the board of public improvements. The elective officers, including the members of the board of public improvements, are nominated by the mayor and approved by the council, and the appointments are made at the beginning of the third year of the mayor’s term, so as to remove the distribution of municipal patron- age from the influences of a general city election. The power of the mayor and council touching appointments to office and removals is subject to certain reciprocal checks.

The bonded debt of St Louis at the close of the fiscal year, 13th April 1885, was $22,016,000. This debt is reduced each year by the operation of the sinking fund. The city has no floating debt. The receipts for the fiscal year ending 13th April 1885, deducting proceeds of revenue bonds and special deposits, were $5,659,086, or with balance in treasury at opening of year $6,514,877. The total expenditure was $5,681,557. The city tax rate for the year 1884 was $1·75 on the $100. During the last few years the rate of interest on the bonded debt has been reduced from 6 and 7 per cent. to 5 per cent., and more recently to 4 per cent. Most of the outstanding bonds are held in England and Germany. All appropria­tions are rigidly limited to the available means, and the increase of the bonded debt is forbidden by law. In 1860 the taxable valuation was $69,846,845, in 1870 it was $147,969,660, in 1880 $160,493,000, and in 1885 $207,910,350.

*Commerce.—*Subjoined are a few of the more important facts and figures respecting the commerce of St Louis. In 1884 there were 6,440,787 tons of freight received by rail and 520,350 by river, making a total of 6,961,137 tons. In the same year there were shipped by rail 3,611,419 tons and by river 514,910 tons (total 4,126,329). The total receipts of grain for 1884, including wheat reduced to flour, were 52,776,832 bushels, as against 51,983,494 bushels in the previous year. During 1884 the amount of flour manufactured was 1,960,737 barrels, and the amount that changed hands 4,757,079 barrels ; 302,534 bales of cotton, 19,426 hogsheads of tobacco, and 118,484,220 lb of sugar were received; and 193,875,479 lb of pork in various forms were shipped. There are thirteen tobacco manufactories, with a production in 1884 of 22,631,104 lb. In live stock, lumber, hides, wool, salt, lead, and a long list of other com­modities the business is large and increasing. Extensive stock- yards are established in the northern part of the city, and also in East St Louis, where they are known as the national stock-yards, and cover a space of over 600 acres. In 1884 there were imported— cattle, 450,717 ; sheep, 380,822 ; pigs, 1,474,475 ; horses and mules, 41,870. The shipments in the same year were—cattle, 315,433 ; sheep, 248,545 ; pigs, 678,874 ; horses and mules, 39,544. There are twelve grain elevators, with a total capacity for bulk grain of 10,950,000 bushels and 415,000 sacks. The coal received during the year amounted to 52,349,600 bushels. The foreign value of imports for the year was $2,586,876, and the collections at the custom-house were $1,463,495.

Among the more important manufactures may be mentioned those of iron and steel, glass, flour, sugar, beer, bagging, prepared foods, tobacco, boots and shoes, furniture, planed and sawed lumber, wire and wire-work, carriages and waggons, foundry and machine- shop products, hardware, agricultural implements, &c. Meat pack­ing is also an important industry. The summary of manufactures in the United States census of 1880 shows 2924 establishments, having a capital of $50,832,885 ; amount paid in wages during the year, $17,743,532 ; value of materials, $75,379,867 ; value of products, $114,333,375. These figures ought probably to be largely increased now (1886). In the wholesale grocery trade St Louis is ahead of nearly all the inland cities of the Union. There are be­tween twenty and thirty wholesale houses, and it is estimated that the annual sales exceed $30,000,000. The Belcher sugar-refinery is able to turn out 1200 barrels a day. The capital employed in the wholesale and retail dry goods establishments is estimated at between $10,000,000 and $12,000,000, and the annual amount of business at $35,000,000 to $40,000,000. The brewing business of St Louis has had an astonishing development, and its product is shipped to all parts of the world. It employs over $8,000,000 of capital, and pays out in wages over $2,000,000 per annum. The ale and beer shipments during 1884 numbered 1,834,545 packages. The brick-making industry has recently become important, and the hard red brick for building and the fire brick produced in St Louis are among the best to be found in the United States. In 1884 there were eighteen State banks and six national banks representing—capital and surplus, $14,742,123 ; savings and time deposits, $9,102,021 ; current deposits, $29,000,691 ; circulation, $674,150 ; total, $53,518,985. The clearings for 1884 amount to $785,202,177, and the balances to $125,260,945, making a total of $910,463,122.

*Railways.—*St Louis is one of the most important railroad centres in the United States ; the nineteen lines which run trains into the Union depot represent nearly 20,000 miles of railway. The Union passenger depot, contiguous to the business centre of the city, is connected with the bridge over the Mississippi by a tunnel. The buildings are of a temporary character, and are not adequate to the enormous business transacted; a new depot of imposing proportions is now in contemplation. Over 150 passenger

trains arrive and depart daily. The tunnel already referred to commences a few hundred yards east of the Union depot. It has double tracks throughout its length, which is about 1 mile, and is supplied with electric lights, ventilating shafts, and the best ap­pliances for safety and convenience. It is leased by the Wabash, St Louis, and Pacific and the Missouri Pacific Railroad Companies, which are also the lessees of the bridge. The bridge across the Mississippi river at St Louis is one of the most remarkable structures in the world in character and magnitude. It consists of three arches, the two side spans being 502 feet in the clear and the centre span 520 feet, and carries a roadway for ordinary traffic 54 feet wide and below this two lines of rail. The dimensions of the abutments and piers are as follows :—

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | |
|  |  | Dimensions at foundation. | | Dimensions at top. | | Height from foundation to top of M. | Foundation below extreme low water. |
| Length. | Thickness. | Length. | Thickness |
| East abutment East pier | ft.  83  82  82  94 | ft. in. 70 6  60 0  48 0  62 81/2 | ft. in. 64 31/2 63 0   1. 0 2. 31/2 | ft. in. 47 6  24 0  24 0  47 6 | ft. in. 192 9 197 11/4 172 11/4 112 81/2 | ft. in.  93 31/4  86 21/4  61 21/4  13 31/4 |
| West pier .... West abutment |

The foundations of abutments and piers rest on solid rock. The two piers and the east abutment were sunk by means of pneumatic caissons. The greatest depth below the surface at which work was done was 110 feet, the air-pressure in the caisson being 49 lb. Each arch consists of four equal ribs ; each rib is composed of two circular members, 12 feet apart, which are connected by a single system of diagonal braces. The circular members consist of steel tubes, which are 12 feet long and 18 inches in diameter ; each tube is composed of 6 steel staves, varying in thickness between 13/16 and 21/8 inches. These staves are held together by a steel envelope, a quarter of an inch thick. The tubes are joined together by coup­lings, and the end tubes are rigidly connected with wrought-iron skewbacks, which are fixed to the masonry by long bolts. The arches were erected without using any false work. Work on the bridge was commenced March 1868, and it was opened for traffic on 4th July 1874. The total cost of bridge and approaches was $6,536,730. The traffic across the bridge is rapidly developing. In 1876 the gross earnings were $448,447 (loaded waggons, 45,027 ; railway passengers, 496,686); in 1884 the gross earnings were $1,520,483 (loaded waggons, 172,730; railway passengers, 1,333,360); a total of 2,225,994 tons was carried ; and the total number of cars which crossed the bridge was 472,324.

*History.—*The first permanent settlement on the site of St Louis was made in February 1764, and was in the nature of a trading post, established by Pierre Laclede Liguest. Long prior to this event there had been some exploration of the vast regions of the Mississippi and its tributaries by Marquette, Joliet, La Salle, Hennepin, and others ; but, although a few widely separated mili­tary and trading posts had been established, there was no accurate knowledge of the character and resources of the country. Laclede’s expedition was nearly contemporaneous with the treaty of Paris, 1763, by which the title of France to the regions in the valley of the Mississippi was practically extinguished, Spain becoming owner of all Louisiana west of the Mississippi, and England of all territory east of that river, excepting New Orleans. The few French forts north of the Ohio were nominally surrendered to the English, in­cluding Vincennes, Cahokia, Kaskaskia, and Fort de Chartres ; but there was no immediate formal assertion of English control, and French sentiments and manners and customs remained undisturbed. In 1771 St Louis was formally occupied by a small body of Spanish troops, commanded by Don Pedro Piernas, and a period of somewhat over thirty years of Spanish rule followed, during which few local events of noteworthy character occurred. On 25th May 1780—the festival of Corpus Christi—the post, or village, was attacked by Indians, and about thirty of the citizens were killed ; but the savages were beaten off and did not renew the attack. In 1800 Spain ceded back to France all her territory of Louisiana, and three years later—30th April 1803—France ceded to the United States all her right, title, and interest in the territory for eighty million francs. At this time St Louis and the adjacent districts had a population of not over 3000, and the total population of Upper Louisiana was between 8000 and 9000, including 1300 Negroes. There were not over 200 houses in the embryo city, which con­sisted mainly of two streets parallel to the river. For fifty or sixty years after the landing of Laclede the progress of the town was necessarily slow. In 1810 the population was less than 1500, and in 1830 it had not reached 6000. From the latter date progress became steady and rapid, and the real growth of the city was compressed within half a century. An extensive conflagration occurred in 1849, which destroyed most of the business houses on the Levee and Main Street. During the Civil War the commercial advancement of St Louis was seriously retarded ; but the city continued to expand in population owing to its advantageous geographical position. (D. H. M‘A.)