were $1,540,000 above last year's totals. If we take up the operating expenses for three years we have the following comparative table, 000's being omitted:

	Maintenance of way.	Maintenance of cars.	Motive power.	Cond transportation	General
1897	$3,464	$1,536	$4,879	$6,999	$576
1896	3,710	1,300	4,298	6,643	540
1895	3,873	1,619	4,465	6,518	546
1894	3,769	1,537	4,382	6,297	498
1893	3,938	1,489	5,083	7,185	552
1892	4,486	1,561	5,397	7,203	601

The maintenance of way expenditures show a pretty constant tendency to fall. Those for 1897 are less than for any other of the years named and amount to about $700 per mile as compared with $900 per mile in 1892. But during these years the company has carried out some extensive improvements and perhaps it needs to spend less now than formerly to keep its property up to the same standard. The company gives in its reports full data of repairs carried out in its bridge and track departments, and those interested will find details of the condition of the property in each report.

The larger share of the $963,000 increase in operating expenses in 1897 was absorbed by motive power repairs, this account increasing $581,000. This was chiefly due to the larger amount of rebuilding going on, 173 engines being rebuilt as against 73 last year. The increased cost of transportation over 1896, some $356,000, is due to the heavier freight train mileage, which increased 13.9 per cent. In passenger train mileage there was a decrease of 0.6 per cent. In view of the improvement which the company has shown in train loads and in other transportation accounts it seems worth noticing that it has not been able to save materially in the cost of handling traffic as compared with the total of five years ago. The ton mileage in 1897 was, it is true, larger than in 1892, but not very much more, while there was a considerable saving in freight train mileage, and a less saving in passenger train mileage. Freight statistics, with the traffic movement for five years, follow:

	Ton miles (000,000 omitted).	Freight train miles (000 omitted).	Rate, cent.	Train load, tons.
1897	2.150	11,094	.843	194
1896	1.782	9.738	.865	183
1895	1.808	9.349	.99	172
1894	1.694	8,970	.96	178
1893	1.824	10.650	.92	171
1892	2.040	11.476	.93	178

NEW PUBLICATIONS.

"The Railroad as an Element in Education," by Prof. Alexander Hogg, M. A. Press of John P. Morton & Co., of Louisville, Ky. 1897.

We have here a pamphlet of 128 pages, containing an "Address," which covers the whole range of human knowledge. It touches slightly, but not lightly, poetry, chemistry, electricity, philology, the catenary curve, the census, the Bible, socialism and, not to extend the list, dwells largely on the generosity of our rich railroad men. The interest is sustained, and is full of surprises. We find, for instance, that "General orders are beginning to read, 'No man who uses intoxicating liquors will be retained in the service of this company,' and 'The next step will be to prohibit the use of tobacco; a narcotic only.'"

The Address (we are not told in the pamphlet where the Address was delivered) occupies but 25 pages, while to the addenda 101 pages must be charged. But this is not singular, for we find the same independence of method throughout the whole book. For instance, under the head of industrial education, we are told that Texas can furnish 64,000,000 bushels of wheat for exportation. This may be entirely true, and we feel that we can safely accept it, but how can we be persuaded that a very inferior wood cut of the New York and Brooklyn bridge (made probably 25 years ago, before the bridge was built), shown on page 8 of the Address, is really a picture of the new East River bridge, which is just now begun?

The book closes with a sketch of the life of the late Jay Gould, and its peroration is of such a character that we are impelled to quote it:

"Suppose with the death of Mr. Gould the interests he controlled had been destroyed, what would have become of the five hundred thousand dependents upon the daily employment furnished by the forethought, the business capacity, the labor of mind and of body of this man, who, though rich, was both good and great?

"EXITUS ACTA PROBAT."

"The Birth of Ocqueoc."—The Detroit and Mackinac Railway Company issues a volume about the size of an ordinary monthly magazine, with this not indicative title. The breezy text, evidently written by President Hawks, describes the hunting, fishing and summer resorts and hints at the business opportunities along the line of the road from Bay City north along the Lake Huron beach. The illustrations are fine, most of them half tones, which do not exaggerate, some of them wash drawings, which are distinctly creditable, and a colored frontispiece of October maple leaves—seventy-five pictures. The map shows the line along the Huron coast to Alpena and from there northwesterly through the wilderness, nearly completed to Cheboygan. Why was this coast section of the road built in the depressing years of 1896-97? This volume tells of the energetic measures taken by the company in building up the watering place at Tawas beach and of aiding and encouraging individual enterprise, and the question is answered by the fact that the new road is already profitable. The rich crop of pine has been taken from North Michigan, but it is not all gone, and this company is trying to make two blades of grass grow where one grew before. Its cheaper transportation is developing through the pine and hardwood forests factories for hoops, staves, headings, handles, excelsior, spools, wood pulp, etc. The road makes a market for the gypsum and limestone. It reaches to the Straits of Mackinac, from where the map shows a short railroad route to Sault Ste. Marie, which may mean much or little.

Commercial and Agricultural Organizations.—The Interstate Commerce Commission has just issued a book showing all existing National, State and local commercial organizations, National, State and local agricultural associations, and the various railroad associations, their location, and the names of the presidents, secretaries and commissioners. The list embraces about 3,500 boards of trade and other commercial societies, about 4,000 agricultural associations, and approximately 300 railroad organizations. The preface contains the announcement that producers and shippers may obtain from the commission without cost information concerning railroad facilities, charges for freight or passenger service, capitalization and operation of railroads, the workings of the Interstate Commerce law and how it has been interpreted by the commission and the courts.

TRADE CATALOGUES.

Steel Gears for Railroad Motors.—The General Electric Company issues a little pamphlet under the title of A Modern Gear Plant, briefly describing the works of that company established at Lynn, Mass., for cutting gears for street railroad work. In the practice of the company the gear wheels are made of cast steel and the pinions of forged steel. It is estimated that at least 50,000 electric motor gears are in daily operation in the United States, and as their life is only about two years, a yearly manufacture of between 20,000 and 30,000 gears is necessary for renewals alone. In the early days of electric railroads cast iron gears with gun metal pinions were used. The steel gears have reduced the weight from 65 to 70 pounds, and it is said doubled the useful life of the gears. It is claimed that the company is able to produce as sound steel castings as can be turned out in the world, and that the gear cutting machinery in use at the River Works at Lynn cannot be excelled anywhere.

Car Curtains, Car Curtain Fixtures and Car Curtain Materials.—The E. T. Burrowes Co., of Portland, Me., has just issued two new catalogues, designated respectively Catalogue C and Catalogue E. The former describes the Burrowes curtains and fixtures for railroad coaches and closed street cars, and the latter treats of the use of these materials for open or summer street cars. Both catalogues are well illustrated with the different styles of curtains and curtain fixtures made by the company. The Oakette and Crown car curtain fabrics, which are largely used in connection with the fixtures of the E. T. Burrowes Co., are also described.

The Q & C Company, Chicago, has issued a new supplemental catalogue illustrating and describing various styles of the Q & C-Stanwood steel car steps for street cars, and also containing information regarding the new Q & C rail drills for street railroads. This catalogue will be furnished upon request.

The Coffin Toughening Process.

(Continued from page 199.)

(a) is hard enough to resist the heaviest blow and (b) possesses enough ductility or "flow" in the metal to yield some—to "cushion" the blow, as it were. Ordinarily, to have an ideal elastic limit to cover the points of "ductility" and flow of the material, would compel a lowering in ultimate strength, or sacrifice of power to withstand the hard blows.

With the Coffin process this difficulty is eliminated as it enables the forging to have the desired or ideal hardness and, at the same time, the required ductility, because the peculiar treatment increases the elastic limit without change in ultimate strength. This offers to the designer exceptional and ideal material for the claims of severe service coupled with a large factor of safety.

The percentage of axles which have broken under 50 blows is less than the percentage of rejection on the inspection (5 blows at 25 ft. of 1,640 lb. weight) before adopting the process, and this is continually becoming less, as of the last 32 axles tested none have broken, all having had 50 blows. We have on record only one axle carried beyond the 50 blows to breakage; this broke on the 121st blow. Some time since the writer witnessed a test of an axle selected at random (4 in. x 8 in. journal and 4⅞ in. diameter at center), which on the first 5 blows deflected 7⅝ in., ⅝ in., 6 9-16 in., 1 3-16 in., and 6 3-16 in. respectively, and 44 additional blows (49 in all), before breaking.

Another case where an axle was cut in two after forging, one-half toughened, and then both portions tested under the drop; the half that was toughened broke on the 49th blow, while the remaining half that was untoughened broke on the 6th blow.

The following tests of comparative wear are interesting because the conditions were identical in all cases and the results fairly comparable:

These were made on small 1-in. cubes cut from the wheel-seat portions of the axles and near the surface, the wearing face of the cubes being the portions adjacent to the outer surfaces of the axles. The cubes were all planed accurately to 1-in. dimensions and carefully weighed before and after testing.

The tests were made on the Riehle abrasion testing machine, on a hard, smooth steel disk, about 12 in. in diameter, which revolves in a horizontal plane at the rate of 60 to 62 revolutions per minute. The cubes are held in a frame and rest on this disk, the pressure being obtained by a weighted lever above. A cone motion moves the cube and frame in and out over the disk, to which is attached a revolution counter. The tests were all made on the same disk and under a pressure of 50 lbs. to the square inch. The number of revolutions in all cases was 200,000, taking about eight days' time. Two sets of tests were made on each cube and gave practically the same results.

The results of tests and the chemical analysis of the axles are given in the accompanying table. The amount of abrasion of wear is given in grams and also in percentages of weight or of volume of the original cubes. The diagram shows the comparative wear of several of the specimens which were tested. The results show that the open hearth treated axle has the best wearing qualities; next comes the untreated open hearth axle. The Bessemer freight No. 9 axle shows more wear than some of the wrought iron axles.

And finally, what we consider the most interesting test of all was made by a Western road, where the left side of the locomotive was equipped with case hardened Low Moor iron crank pins, while the opposite side was equipped with Coffin process pins. The pins were applied October, 1892, and at the time report was made, December 3, 1896, had made 156,515 miles and at last accounts (September, 1897) were still in service. The report goes on to say "all the pins appear to be in good shape, smooth and nearly true. Measurements show that the right forward (Coffin) pin is the largest of the four by about one one-hundredth of an inch and one one-hundredth of an inch out of round.

"The right back (Coffin) pin is one one-hundredth of an inch out of round, and two one-hundredths of an inch smaller than the forward pin.

"Left forward pin (case hardened) is about two one-hundredths of an inch smaller than the right forward (Coffin) pin, and about one one-hundredth of an inch out of round.

"Left back (case hardened) pin is one one-hundredth of an inch smaller than right forward (Coffin) pin, and about one one-hundredth of an inch out of round."

Abrasion Tests of Car Axles.

No.	Tests of Axles.	Weight of a cubic inch gms.	Loss, per cubic inch, gms.	Loss, per cent.	Analysis. C.	Si.	P.	S.	Mn.
	A.—Wrought Iron Axles.								
1	Scrap axle	125.75	24.06	19.1	.09	.160	.175	.027	..
2	" "	125.80	24.20	19.2	.09	.160	.175	.027	..
3	Michigan Central Railway	126.04	26.38	21.1	..	.138	.302	.033	..
4	" " "	126.00	24.48	19.4	..	.050	.098	.052	.25
5	" " "	125.41	28.78	22.9	..	.134	.234	.067	..
6	N. Y., Ont. & W. "	125.00	29.08	23.2	..	.164	.213	.039	.26
7	" " "	125.00	29.06	23.2	..	.164	.213	.039	.26
8	" " "	125.44	27.65	22.0	..	.147	.237	.032	.32
	B.—Steel Axles.								
9	Bess. freight—N	128.20	25.92	20.2	.12	.012	.078	.109	.52
10	" " —N	127.90	20.02	15.7	.10	..	.075	.101	.54
11	" " —T	127.96	17.01	13.3	.10	..	.075	.101	.54
12	O. H. Pass. No. 21,159—N	128.26	20.78	16.2	.38	..	.049	..	.60
13	" " " " 21,159—T	129.26	19.42	15.2	.38	..	.049	..	.60
14	" " " 21,812—N	128.25	16.55	12.9	.38	..	..	..	.61
15	" " " 21,812—T	128.24	14.06	11.0	.38	..	..	..	.61
16	" " " 21,796—N	128.00	19.02	14.9	.45	..	.066	..	.51
17	" " " 21,796—T	128.05	12.35	9.6	.45	..	.066	..	.51
18	" " " 21,827—N	128.04	11.22	8.8	.47	..	.043	..	.50
19	" " " 21,827—T	128.04	10.41	8.1	.47	..	.043	..	.50
20	" " " 21,845—N	128.17	20.92	16.3	.45	..	.054	..	.55
21	" " " 21,846—T	128.20	12.86	10.0	.45	..	.054	..	.55
22	" " " 22,150—N	128.00	11.66	9.1	.41	..	.049	..	.75
23	" " " 22,150—T	128.06	9.69	7.6	.41	..	.049	..	.75
24	" " " 22,153—N	128.00	14.52	11.3	.38	..	.034	..	.68
25	" " " 22,153—T	128.10	13.58	10.6	.38	..	.034	..	.68

Steel axles marked N are in natural state after forging. "T" are "Coffin Treated." Heats Nos. 22,150 and 22,153 are basic steel; the rest acid steel.

New Kinzie Street Drawbridge, Chicago & Northwestern Railway.

The new swing bridge of the Chicago & Northwestern near the Kinzie Street Station, Chicago, was

floated into place last Sunday. The central pier and abutments of the old bridge had been rebuilt without delay to traffic, while the superstructure of the new bridge was erected on false work directly below the old bridge. After the last train passed Saturday night, March 12, the old bridge was raised on scows and floated out of the way, and the new superstructure was brought up and lowered into place.

The new bridge, which provides for two parallel tracks, is a riveted through-truss, 187 ft. 6 in. long, and the trusses are 28 ft. center to center. To prevent interference, when open, with the swing bridge at Kinzie Street on the north, it was necessary to place the center about which the new draw turns directly under the center of the south truss, the bridge being supported by two sets of cone rollers. One set, the balancing wheels, run on a track with an 8 ft. radius, while the maximum radius of the track supporting the outer wheels is 28 ft. 4½ in. As the bridge is built on a skew, revolving it through an angle of 75 deg. opens the channels on either side, so that the outer track is made a segment only of a circle.

The bridge was designed and the construction superintended by Mr. W. H. Findley, Engineer of Bridges of the Chicago & Northwestern, and the superstructure was built by the Lassig Bridge & Iron Works; George P. Nichols & Bro. will install the electrical machinery by which the bridge will be operated, the current for which will be taken from the power station of the railroad adjacent to the bridge. The bridge locks and jacks will be operated by compressed air.

The Ussuri Railroad.

The Ussuri Railroad, planned as the Pacific outlet of the Siberian Railroad, will probably be open the coming season throughout its length of 474 miles between its southern terminus at Vladivostok and the Amoor River at Chabarovsk, in the general direction north 25° east. We shall realize its position best by comparing it with a line from the north line of California across Oregon and Washington to Puget Sound. The Ussuri Railroad is built near the Chinese border, nearly parallel with the coast and for the most part about 180 miles inland, and is separated from the sea by parallel ranges of mountains almost absolutely barren. The valleys through which it is built are liable to overflow, and grain can be produced only by sowing it on ridges thrown up by the plow, and then is frequently so mouldy as to be unfit for food.

The climate is more severe than in the corresponding latitude on our coast, but much milder than in Siberia proper. The mean temperature at Vladivostok is 10° Fahr. in winter and 64° in summer, and at Chabarovsk — 8° winter and 66° in summer. The rainfall is deficient, 14 in. at Vladivostok and 22 in. at the northern terminus.

As the Siberian Railroad is to have an outlet to a port in China, near cities with a great commerce, by a much shorter route which will pass through a populous country, the Ussuri Railroad loses much of its importance and may never have a rail connection with the Siberian line. But it will remain the outlet of the great Amoor basin, that river being navigable for hundreds of miles, and much of the distance above Ussuri passing through a fertile country; while its course below Ussuri is not fitted for an outlet for traffic.

The southern 256 miles of the Ussuri Railroad, from Vladivostok to a point on the river where it is navigable, has been open for more than three years; but its traffic has consisted very largely in carrying materials and supplies for the North Ussuri Railroad and the men employed in building it. By it and the steamboats on the Amoor the ambitious traveler will be able next summer to penetrate far into the interior of Asia, well towards Lake Baikal.

Foreign Railroad Notes.

A Russian official has been negotiating with the authorities in Berlin to secure lower rates on Russian petroleum shipped to Germany. In the first half of 1897 the shipments of petroleum and its products from the oil fields at Baku to the Black Sea at Batum amounted to about 163,000,000 gallons, compared with 63,000,000 in the first half of 1896. The exports from Batum in the first half of 1897 were 141,000,000 gallons of petroleum and its products, 98,000,000 of which was oil; but of this latter only 27,280,000 gallons, or 28.3 per cent. went to European markets. Now, in 1896, 44 per cent. of the Batum exports went to European markets and in 1895 47 per cent. Thus it would seem that the Standard Oil Co. has not permitted the European market to slip away from it, and Russian oil has had to look for a market in Asia Minor, Egypt, India, etc.

Some German newspapers, especially the Socialist organs, lose no opportunity to cast slurs on the Prussian State Railroad administration. It has authority to give rewards to employes by whose vigilance or thoughtfulness an accident has been avoided. A newspaper recently declared that a locomotive engineer who had done such a service was rewarded with the magnificent sum of two marks—48 cents. It seems that it was not true, and that such rewards are usually 50 or 100 marks, and sometimes 300; but the story has gone the rounds of the papers all the same, and has served as text for some very sarcastic sermons.

The people who are thinking of taking a run over to China when the Siberian Railroad is finished, will do well to bear in mind that it takes 4 days and 16 hours by the fastest trains to get from London to the near end of the Siberian Railroad, and that the latter, abbreviated by the Chinese cut-off, will be 4,400 miles long.

The Hungarian millers seem to have trouble in selling their flour, and the State Railroads have recently made a great reduction in the freight rates on flour shipped to Fiume, on the Adriatic, to be exported to British, Dutch, Belgian, French Atlantic and Brazilian ports, and through the Suez Canal to Eastern Asia. The reduction amounts to about 9 cents per 100 lbs. below the regular rate, which has been about 22 cents. To get the benefit of the reduction, the mills must make their shipments to ports beyond Gibraltar exclusively by way of Fiume, and shipments to Brazil must go by certain specified steamship lines.

The Austrian railroads in 1897 carried about 2 per cent. more passengers and 3½ per cent. more tons of freight than in 1896, and earned 1¼ per cent. more. As the length worked increased from 10,335 to 10,615 miles, the earnings per mile decreased slightly—from $12,049 to $11,941. The largest earnings per mile of any railroad were $51,090.

The report of the Hungarian State Railroads has an entry of considerable significance not usually found in railroad reports. This is, the average time that each kind of rolling stock was withdrawn from use on account of repairs. During 1896, on the average, 16.8 per cent. of the Hungarian locomotives, 8.8 per cent. of the passenger, baggage and mail cars, and 5.5 per cent. of the freight cars were out of service for repairs; in 1895, a larger proportion.

The Berlin City Railroad (elevated), which serves as an entrance to main lines entering the city, and has their suburban traffic, or part of it, as well as a city traffic pure and simple, has not had a very large city traffic, but it is growing. In the year ending with March last, its earnings from that traffic were $1,583,000, which is 33 per cent. more than the year before, and twice as much as in 1890-91.

TECHNICAL.

Manufacturing and Business.

The Hartford City Gas Light Company, of Hartford, Conn., has placed another contract with the Berlin Iron Bridge Company, of East Berlin, Conn., for a steel roof lined with patent anti-condensation fireproof roof lining.

Pawling & Harnischfeger of Milwaukee, Wis., have received an order from the Consolidated Traction Co. of Pittsburgh for a 50 ton traveling crane, with a span of 55 ft., a runway 250 ft. long and a lifting capacity of about 50 tons. This company has just finished an electric crane for the Midvale Steel Co., Philadelphia, being one of five which the latter company has ordered. It is a 40-ton double trolley five motor traveling crane to be used in the oil tempering plant.

The Edward P. Allis Co. of Milwaukee, Wis., has sold to the Aetna Standard Iron & Steel Co. of Bridgeport, O., for the Mingo Junction plant, one of their steeple type, cross compound, condensing blowing engines. This engine will be capable of delivering 40,000 cubic feet of free air per minute at 20 lbs. pressure to the square inch.

At the annual meeting of the stockholders of the Dickson Locomotive Works, held at Scranton, the following were elected directors: Robert Olyphant, S. S. Palmer, Mark T. Cox and R. R. Brown of New York; H. M. Boies, C. H. Zehnder, C. C. Rose, W. H. Storrs and C. S. Weston, Scranton.

The cars for the two new express trains for the Chicago, Milwaukee & St. Paul, being built by the Barney & Smith Car Company, will be equipped with the two-coil, jointless steel, fire-proof Baker heater. Mr. Baker also reports that he has just furnished 28 single coil fire-proofs for the Great Northern Railway's new cars, building at Barney & Smith Company's. Louisville & Nashville, Missouri Pacific and Pennsylvania lines have also been liberal buyers of his fire-proof heaters during the last few months.

The report of the Wagner Palace Car Co., for the quarter ending Dec. 31, 1897, shows gross earnings to be $809,174, expenses $609,422 and net earnings $199,752.

The Lap Joint Railway Track Co. of Bound Brook, has been incorporated in New Jersey with a capital stock of $100,000, by Charles H. Moore, Fanwood, N. J.; Harry M. Herbert, Bound Brook; Henry C. Day, Northampton, Mass.; Thomas H. Hibbon and Volney W. Mason, Jr., of New York.

The St. Louis Car Wheel Co. has filed articles of incorporation in Missouri, with a capital of $250,000, fully paid. J. H. Bass holds 2,496 shares and John W. Nute, S. F. Pryor, John J. Morse and Judge H. S. Priest one share each.

The Pegamoid Leather, Textile & Paper Co., Jersey City, has been incorporated in New Jersey with a capital stock of $1,000,000 by Theodore A. Dodge, Arthur W. Pope, Edward H. Haskell, Boston; Thos. Russell, Montclair, N. J.; Henry L. Herbert, Garden City, N. Y.; William B. Pierce and Gilbert S. Herbert of New York.

The Railroad Station & Car Advertising Co. of Jersey City, has been incorporated in New Jersey, with a capital stock of $300,000, by Ansley S. Davis, St. Louis, Mo.; John R. Dos Passos and R. Natili, New York.

Iron and Steel.

A return just issued shows that during the past year 35,875 tons of American pig iron were imported at the port of Hamburg, in Germany,

The official returns show that during the year no less than 18,036 tons of steel rails were exported from Germany to England.

It is reported that the Erie Foundry Co., Erie, Pa., has received an order from the Otto Gas Engine Co. for castings for 140 engines.

The Glendon Rolling Mill, Glendon, Pa., has started up after an idleness of two months, and will run double turn, giving employment to nearly 200 men.

The annual report of President E. C. Felton of the Pennsylvania Steel Co. shows that in the operation of the Steelton (Pa.) works there was a net loss for the year 1897 of $124,000, although the last six months of the year showed a profit of $163,000. The Maryland plant at Sparrow's Point was worked on ores purchased in 1895 at high prices and the comparative inefficency of new workmen rendered it impossible to operate the plant at a profit. However, according to the cost sheet for January, 1898, the plant is now being operated at a profit. The report suggests that, owing to the increase in business, more capital is needed, which makes it necessary to provide a fund. To accomplish this it is proposed to offer for subscription to the stockholders $300,000 of the Maryland company's 5 per cent. bonds and $500,000 consolidated 6 per cent. bonds now in the treasury of the company.

The Delaware Iron Works, Newcastle, Del., have started up after a suspension of four months.

Newspapers state that the London (England) iron trade has been considerably stirred by an article which appeared in "The Statist" pointing out that the exports and consumption of iron have exceeded the whole output of the Unted Kingdom by nearly half a million tons; and predicting a pig iron famine before the end of the year. "The Statist" concludes: "There is quite a large probability that we may have to fall back upon America at no distant future to make good our deficient supply—on America, once our largest buyer of pig and finishing material."

After an idleness of two and a half months the puddling department of the mill of the Reading Iron Co., at Reading, Pa., will resume operations on March 21, giving employment to 175 men.

The Aetna Standard Iron & Steel Co. of Bridgeport, O., is making some improvements and additions to its Bessemer steel plant at Mingo Junction, O. Large converters are being installed and new rolling mill equipment added. New blowing engines are also being added to the blast furnace equipment.

New Stations and Shops.

The plans for a large new passenger station for the Pennsylvania lines at Pittsburg, Pa., are now being prepared by D. H. Burnham & Co., Architects, Chicago. On Friday last the officers of the company announced at Pittsburgh that the work of building the station had been decided upon and that the tracks would be elevated. The new station will be on the site of the present one. The main line of the Fort Wayne road will be elevated so as to cross above the streets between the station and the Allegheny River bridge, and the elevation will continue across the river and through Allegheny City. The Pittsburgh, Cincinnati, Chicago & St. Louis, which diverges to the south at the station, will not be elevated.

The Cleveland Terminal & Valley has placed a contract with the Variety Iron Works of Cleveland, O., for the building of a storage warehouse at Cleveland, of either corrugated wrought iron or corrugated steel, the dimensions of which will be about 50x 500 ft.

The New York, New Haven & Hartford has come to an agreement with the city of Providence concerning the platform sheds for the new Union station in that city, and it is said that the sheds will be built substantially as asked for by the city. The station proper and the adjoining buildings have been finished for several months, but the railroad company has refused to build the sheds and the city has refused to allow the station to be used with uncov-