

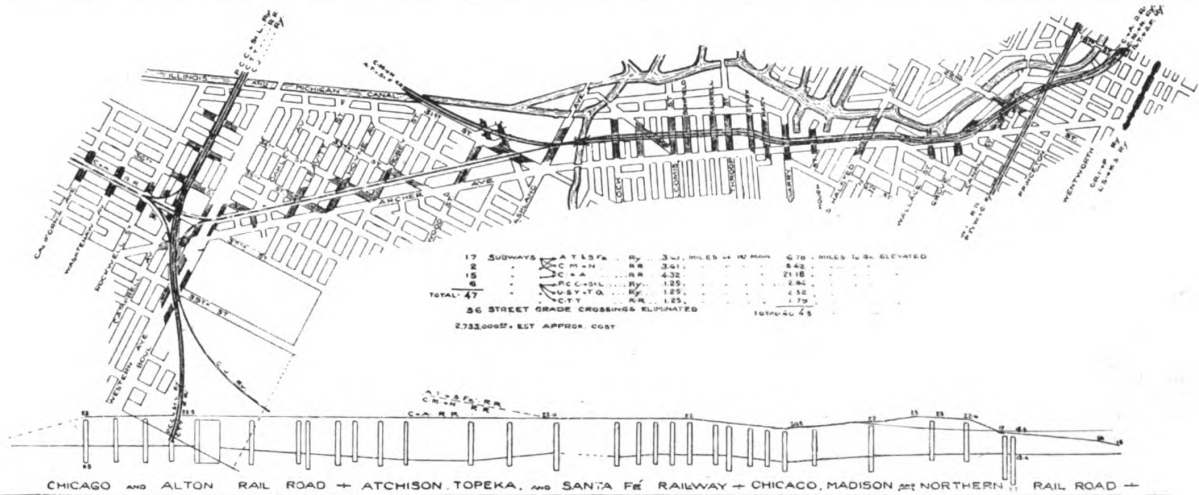
TRACK ELEVATION IN CHICAGO.

The Eighteenth Street Section of the Chicago & Alton, Santa Fe and Illinois Central Lines.

A summary of the work of track elevation in the city of Chicago, completed, about to begin, and proposed, was given in The Railway Age of April 26. It is proposed to take up in detail, from time to time, the work to be done under the various ordinances which have been passed by the city council and adopted by the railway companies, involving the raising of 227

continued to the Illinois and Michigan Canal, while the tracks of the Chicago & Alton, diverging at Ashland avenue to the southwest, will be elevated independently by that company from Ashland avenue to Western avenue.

The average number of tracks for the entire length of the line to be elevated is about eight, the largest number being 16, between Salt and Quarry streets, which point is included in the yards of the Chicago & Alton, which extends from Halsted to Throop street. The smallest number of tracks is found at Ashland avenue just west of the Chicago River, where the



TRACK ELEVATION IN CHICAGO—BETWEEN STARK STREET AND CHICAGO RIVER.

miles of additional tracks at an estimated cost of nearly \$10,000,000.

Work is now progressing rapidly on raising the tracks of the Chicago & Alton, the Atchison Topeka & Santa Fe and the Chicago Madison & Northern, between Eighteenth street and Ashland avenue. The ordinance for this elevation was passed on October 23, 1899, but the work has but recently been started. This will include about 2 3/4 miles of line and 16 miles of main tracks. The roads here run nearly east and west and slightly

tracks of the three roads number but four. Allowing 13 feet right of way for each track, the average width of the elevation would be 104 feet. The only tracks which will not be elevated within the points mentioned are those leading to the Keit's grain elevators, situated just west of Halsted street, between the main tracks of the lines and the Chicago River. The elevators and the lines here are so arranged that, should all of the tracks be raised, it would be impossible to use the elevators without their being rebuilt and rearranged. It was the con-



TRACK ELEVATION IN CHICAGO—BEGINNING OF WORK ON THE SANTA FE, ALTON AND ILLINOIS CENTRAL BETWEEN CHICAGO RIVER AND STARK STREET.

south, and for nearly the entire distance lie between and practically parallel to Archer avenue and the Chicago River. Jointly, the tracks of the three roads will be elevated from Eighteenth street to Ashland avenue, under the direction of Major G. W. Vaughn, who has fitted up offices at 2476 Archer avenue, and to Major Vaughn and Mr. M. K. Trumbull The Railway Age is indebted for much of the information obtained in this article. From Ashland avenue the elevation of the Atchison Topeka & Santa Fe and the Chicago Madison & Northern will be con-

tion in connection with this point that has caused the delay in the work, and, when passed, the ordinance provided that for a period of 10 years the tracks leading to the elevators should be allowed to remain down. The ordinance also provided that the three tracks crossing Halsted street and leading to the elevators should be reduced and only one track be allowed to cross the street at this point.

The elevation this year will include the tracks between the river and Stark streets, a distance of about 3,600 feet. The work

has been started at the river, and is being conducted eastward from this point. The tracks will rise gradually from Eighteenth street, at which the elevation is 7.6 feet above Chicago datum. At Stewart avenue the tracks of the Chicago & Western Indiana and the Pennsylvania will be crossed, and at this point the elevation will be 15.5 feet, while at Twenty-second street it will be 20.5 feet, and the highest elevation reached will be 25 feet, between Twenty-second and Halsted streets. At the latter street the elevation is 23.6 feet, and from this point the tracks will continue, with one slight depression, practically level at an

be used. The bridges crossing the subways will be of the plate girder type, and will be built on concrete abutments. Concrete will be used for all abutments and retaining walls, to the practical exclusion of masonry work. Two brands of cement are being used. For all footing work Louisville natural cement is being employed, mixed in the proportions of 1-2-4, while for the copings and neat work Portland cement is being used in the proportions of 1-3-6. The foundations for the retaining walls will generally be started at a depth of 6 feet above Chicago datum, and the abutment foundations at 5 feet, with exceptions.



TRACK ELEVATION IN CHICAGO—BEGINNING OF WORK ON THE SANTA FE, ALTON AND ILLINOIS CENTRAL BETWEEN CHICAGO RIVER AND STARK STREET.

elevation of 23.55 feet. The average natural surface of the ground along this section is about 6 feet above Chicago datum.

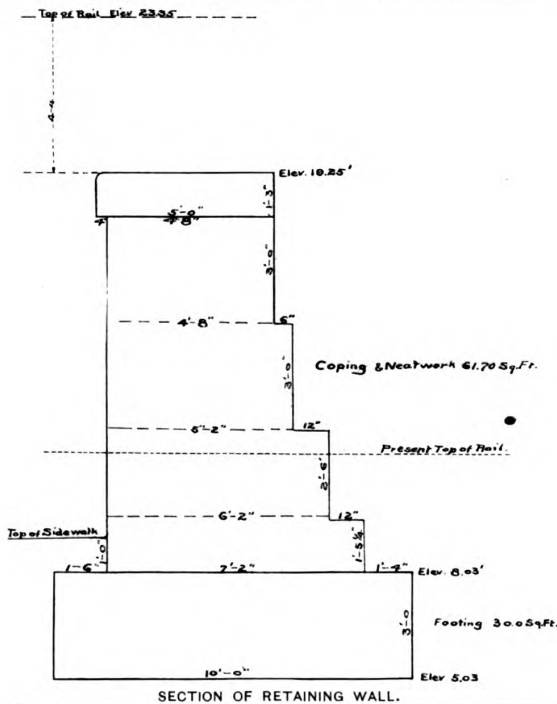
The embankments will be of sand, which is being secured along the shores of Lake Michigan in Indiana, and is hauled a distance of about 30 miles. Ordinary coal cars are being used;

such as at Twenty-second street, where the foundations will be started at a depth of 3.8 feet. About 25,000 barrels of Portland cement and 18,000 barrels of Louisville cement will be required for the work in connection with the abutments, and retaining walls. The brand of the Portland cement now being used in the work is the Iola. A sectional view of the general form of abutments and retaining walls to be used is here given, and any change in the height of the same will be made in the section immediately above the footing. All above this section will remain uniform for the different heights, as will also the footings, the one section alone changing in height to bring the top of the wall to the elevation desired. In connection with the building of the retaining walls care will be taken not to allow the water from the tracks to drain over the top of the walls and thus give cause for complaint from owners of the adjoining property.

In the construction of the bridge floors a new device is expected to be used in the way of a creosoted timber floor, beneath the ballast, which will drain the water falling on the bridge to one end of the structure instead of allowing it to pass through the bridge into the subway. It is also planned to have this portion of the floor higher at one end than at the other, allowing the water to drain in the direction of the length of the bridge. The difference in elevation of the two ends of the bridge will be made up for in the ballast, thus allowing the tracks to remain perfectly level.

The work of elevation will be conducted on two tracks at a time. These will be elevated to one-half of their final height, and during work the traffic of these two tracks will be diverted to the other lines. When the first two tracks have been raised, the work will be changed to the next adjoining tracks, and thus in succession will be carried entirely across the roadbed until all of the tracks have been semi-elevated, when work will again be changed to the first tracks, and these raised to their final height. Temporary bridges will be built across the streets during the progress of the work, and when finished these will be replaced by the permanent structures. The temporary bridges will consist of piles driven in rows about 12 feet apart, and upon these posts or timbers will be placed, bringing the bridge to the required elevation.

The construction of the embankments, temporary bridges and



the loading is done with steam shovels, while the sand is unloaded by hand. The work is expected to require between 600,000 and 700,000 cubic yards of embankment. The roadbed on the embankment will be ballasted with 12 inches of broken stone, while on the bridges a minimum depth of 6 inches will

general work is being done by the railroad companies under the direction of Major Vaughn; the concrete work is being done by the Brownell Improvement Company, and the bridge work by the American Bridge Company. About 9,000 tons of metal will be used in the construction of the bridges.

The work is at present progressing with some 400 men employed, and the first section of two tracks has been raised for nearly the entire distance to be elevated this year, to their first elevation. The number of men employed will be increased as the work progresses, and it is expected that 1,000 men will shortly be engaged in the work.

The estimated cost of the work, subways to be constructed and crossings to be eliminated as shown in the accompanying diagram, is as follows: Grade crossings to be eliminated, 56; subways, 47; estimated cost, \$2,733,000.

**FREIGHT CLAIM ASSOCIATION.**

At the annual meeting in Milwaukee last week it was decided to hold the next semi-annual meeting at Saint Augustine, Fla., on the second Wednesday in January, 1902.

The committee appointed to confer with the committee of the Association of American Railway Accounting Officers in regard to various matters of interest to both associations submitted a report, which was accepted by the convention, except that section 6 was referred to the committee on overcharge rules, and section 8 was referred to a committee to ascertain by correspondence what would be a satisfactory blank. It was the unanimous opinion of the Freight Claim Association Committee that the suggestions outlined in the joint report are decidedly in line of improvement in the saving of time and labor and in tending to a material reduction in the enormous amounts now being carried in paid claim accounts. While not recommending that the suggestions covered in the joint report be formulated into obligatory rules of the association, the committee did recommend that it receive the approval of the association and be recommended to carriers who can reciprocally use the methods outlined. The following is the report of the joint committee:

**I.**

As to delay on the part of carriers in reclaiming after authorizations have been given, submitted on page 29 of the fifteenth annual report of the Accounting Officers' Association.

Remark was made that no doubt many cases of this kind arose from the inability of carriers to find and make payments to claimants, in other cases from slowness in freight claim and audit offices; also that the matter seems to be bound up with the question of abandonment of duplicate receipts from claimants. The following was moved and adopted:

Resolved, That it is the sense of this meeting that no general rule can be prescribed which will obligate billing roads to rush collections on the one hand, or paying roads to invite rendering of bills on the other hand. We are of the opinion, however, that both associations may very properly call attention of their members by circular to existing conditions, and ask that particular attention shall be given to this feature of the work of their departments. We heartily commend the regulation that no carrier shall require from another a claimant's receipt, unless found necessary by reason of a connecting road's being interested which insists on having one. We further recommend that reclamation bills shall carry on their face a statement that claims have been paid or vouchered in such a month; also that the understanding shall be general, that in case a voucher shall be finally canceled, the amounts already collected from other roads shall be promptly refunded by the road making such cancellation.

**II.**

As to hindrance of claim work caused by failure of carriers to give particulars in waybills of advance charges, points of origin, waybill references and other information necessary to enable delivering lines to revise waybills and arrive at the correct charges from point of origin to destination.

It was the sense of the meeting that a full compliance with the resolution on page 129 of the fourteenth report of the Accounting Officers, reading as follows:

Resolved, That all charges accruing up to and including the point at which the bill of lading is issued, and which are to follow to destination, must be shown on the bill of lading in detail, that there may be no misunderstanding with the consignee at the point of delivery. And that space be provided on the face of the bill of lading for the purpose of showing the advances in detail, and they should also be shown in detail on the waybill,

would be of the greatest assistance in the handling of interline freight claims, and in importance next in order to the establishment of universal interline billing.

While interline billing prevents overcharges and claims resulting therefrom to a great extent, the showing of advances in detail on the rebilling, together with reference to back billing, enables the claim office of delivering line to locate the billing in which overcharge has occurred immediately and to ad-

just with the line concerned without burdening the lines who are not at fault.

The following is the committee's idea of the manner in which the information should be given by the various rebilling agents:

**SHIPMENT FROM BOSTON, MASS., TO PORTLAND, ORE., VIA BLUE LINE, C. M. & ST. P. RY. AND UNION PACIFIC R. R.**

Blue Line.				Jan. 25, 1901. No. 1524.
From Boston to Chicago.	Weight.	Rate.	Frt.	Adv.
	500	70	\$ 3 50	25c drayage.
John Smith 10 cases shoes, Portland, Ore.				
Through rate.		1 70		

C. M. & St. P. Ry.				Jan. 31, 1901. No. 23254
From Chicago to Council Bluffs.	Weight.	Rate.	Frt.	Adv.
	1500	15 70	2 25	25c drayage. \$3 50 to Chicago.
John Smith 10 cases shoes, Portland, Ore.				
Through rate.		1 70		
Boston Blue Line. W/B 1524, 1-25.				

Union Pacific.				Feb. 3, 1901. No. 1524.
From Council Bluffs to Portland.	Weight.	Rate.	Frt.	Adv.
	500	85	4 25	25c drayage.
	1500*	70	12 75*	\$3 50 to Chicago.
John Smith 10 cases shoes, Portland, Ore.				\$2 25 to Co. Bluffs.†
Through rate.		1 70		
Boston Blue Line. W/B 1524, 1-25.				
Chicago C. M. & St. P. W/B 23254, 1-31.				

\*Error in weight corrected by destination agent as shown. (A line is supposed to be drawn through the weight 1500 and freight of 12.75.)—SEC'Y.  
†Locating an error of \$1.50 in charges Chicago to Council Bluffs.

We believe that both associations would do well to call attention of their members to this matter; it might be included in the circular hereinbefore referred to.

**III.**

As to settlement of overcharge and loss and damage claims on monthly statements rendered between carriers with drafts for balances, it was

Resolved, That we recommend the plan whereby monthly statements of authorized debits on claims that have been settled (paid or vouchered), accompanied by claim papers, shall be rendered between carriers on or before the 15th of each month for the preceding calendar month, and drafts shall be drawn within ten days thereafter for balances shown to be due on statements thus exchanged.

In order to make this provision effective, it is recommended that when authorities have once been given it shall be understood that statements rendered carrying such authorities shall be paid in full, and that claims on which authorities have been issued shall not be subject to further investigation on the part of the lines issuing authorities previous to such payment.

In the discussion it was remarked, and subsequently agreed upon, that it would always be competent for the authorizing road to afterward call for adjustment of a bona fide error or mistake.

**IV.**

As to uniform blanks to be used in freight claim settlement, at the first meeting it was,

Resolved, That a sub-committee be appointed by the chair to take this matter under consideration and as a result thereof to submit standard forms to this joint committee at this meeting.

Pursuant to the above the chair appointed Messrs. Taylor, Draper, Hancock and Krebs as such sub-committee.

The chairman of this sub-committee verbally submitted his report, with three forms for use in the settlement of freight claims by monthly statements and drafts, and suggested that the blank for authorizing overcharge claims be printed in one color, and the blank authorizing loss and damage claims in another.

The report of the sub-committee was adopted by the joint committee. The three forms are submitted herewith.

**V.**

The following resolution was adopted:

Whereas, This committee has learned that there is in effect between several prominent railroads of the country an arrangement whereby reclamations are made monthly between these lines, without passing of authorities for freight overcharge and to an extent for loss and damage claims; settlement being made monthly by voucher or draft at a stated time without requirement of claimant's receipt, or anything further than the provision that the company charged is interested in the overcharge or loss and damage in question, and that bills are required to give full reference to tariffs and division sheets.

Resolved, That this committee is of the opinion that there is here presented an admirable and very advanced move in interline freight claim settlement work, and submits that an arrangement of the kind is very desirable between lines that can reciprocally enter into it.

For the information of both associations the following details of the plan are furnished:

"1. Each company accepts from the other a bill or charge