TRACK ELEVATION IN CHICAGO.

WORK has at last been begun in the great task of track elevation in Chicago. After several futile attempts an ordinance has been passed by the city council which has proved acceptable to the railroads concerned, and the Lake Shore and Rock Island Railroad companies have paid over to the city the sum of fifty thousand dollars each in quittance of land-damage claims, and have begun to lay the foundations for the retaining walls which shall carry a solid causeway for the tracks of the two companies seven miles south of the city's centre. Plans are now under consideration for the elevation of other eastern and southern trunk lines, and after these are decided attention will be given to the western and northern lines, until the whole vast system of tracks which encumber the surface of the city with a network of iron is finally removed, and the lines restricted to some half-dozen elevated trunk terminals.

The subject of track elevation is one which has been fought for years in Chicago, where the average sacrifice of life upon the surface tracks is over one a day (in 1893 the number was 389). As the main principles of the problem are common to all large cities, the solution will have an important bearing upon the situation in all large railway centres, the more so as this city is the key to the greater part of the railway systems of the United States. More than a score of trunk lines making this city a terminal are directly interested, and when elevation is adopted here on an extensive scale there will be no good reason why every other railway terminal city in the land should not follow its example. This is, indeed, said to be the real reason why the plan was not adopted before, as engineers have pointed out its entire feasibility as well as ultimate economy in reduction of working expenses.

The problem presented is immense in labor and expenditure, but comparatively simple in its engineering features. The district in which track elevation is to be first undertaken is about five miles in width and eight in length. It is practically level, with a sandy soil and abundance of sand and gravel within easy reach. The main difficulty lies in the multiplicity of the tracks themselves, which do not enter the city in the form of a geometrical spider-web, but instead, in the proud diction of the Chicagoese, "form the most complicated network of railway intersection in the civilized world." They cross and recross each other in the most bewildering manner, so that if a general elevation is once attempted, it seems necessary to accompany it by a sweeping reformation and simplification of the whole system.

Thirty railways, embracing with their connections more than half the railway mileage of the country, converge into six terminal stations in the centre of the city, and in doing so tie themselves into a juggler's knot that only their own engineers know how to unravel. For example: Every Fort Wayne (Pennsylvania) train in and out of the city crosses, at grade, every other line entering the city from the east, south, southwest, and west, from the Lake Shore line clear round to the northwest, with the sole exception of the Chicago and Northwestern, and the Milwaukee and St. Paul systems. Nor is this condition at all peculiar to that road. Every train from the east, upon whatever road, crosses at grade the tracks of a dozen or more other railroads. Beside these trunk lines the subject is further complicated by four belt-line roads, intersecting the former at various distances from the city's centre and constantly occupied in transferring trains.

It was because of this fact of Chicago's being the great round-house, as it were, of the railway systems of the country, rather than any excess of the lawless spirit among the railroad employés or the working classes generally, that caused Chicago to be recognized by the American Railway Union as the great strategic point in the fight. They knew that if they tied up the railroads in Chicago they tied them up over the great portion of the United States.

But to return to the topographical situation. The innumerable crossings form but one of the many difficulties which have long tended to make track elevation an impossible dream. When the majority of these lines first laid their tracks into Chicago the city was an ordinary Western terminal surrounded by numerous cross-road settlements, at which, upon the wide prairies, the roads spread out into extensive freight and switching yards, with the accompanying repair-shops, round-houses, etc. Now these yards, occupying many hundreds of acres, are included in the rapidly-growing city, to the serious interruption of street traffic and injury to neighboring property. European railway terminals have learned how to handle freight and to make up trains far more conveniently and rapidly by using two levels and less surface, but American railways "want the earth," and in Chicago they take it. These yards are from twenty to over one hundred tracks in width, in the business centre of the second largest city in the country. The property owned by the railways in the business district of Chicago was estimated, two years ago, by a committee of the Chicago Real Estate Board, at 11,616,719 square feet, and valued at $50,271,326. The streets unlawfully occupied would probably make fully half as much more of ground (mostly public street).

In addition to these are the crossing-yards, all of them the scene of many a "grade-crossing horror." One of these, at Stewart Avenue and Twenty-first Street (less than two miles from the city hall), where the Western Indiana tracks (used by six lines), the Chicago and Alton, the Pittsburg and Fort Wayne, the Illinois Central (western division), and the Santa Fé cross each other, occupies twenty acres and boasts the largest interlocking-switch system in America. The fifty-point levers (or switch-bars) throw thirteen single points, thirty-seven "cross-overs," and twenty-two "puzzle switches," while fifty-eight other levers control one to five signals each. At this crossing it is said that there is never a minute, day or night, when a moving train is not in sight. And this is but one of many similar "complicated networks of railway intersection" in Chicago.

Visitors to the Columbian Exposition will remember the raised tracks of the Illinois Central road just west of Jackson Park. It was simply a raised bed of sand, carrying eight tracks and crossing streets upon steel viaducts. Its construction cost the company $1,360,000 (a small sum compared to the cost of elevated railway terminals in London), and was effected without delaying the passage of a single train. At Sixty-third Street the electric cars pass under the viaduct, and the South Side elevated road passes over a span two hundred and twenty-nine feet long. Besides the Illinois Central traffic, regular and suburban (and the extra World's Fair traffic last year), these tracks also carry the heavy traffic of the Michigan Central and Canada Southern railroads. During all the congested period of 1893 there was not a collision or accident of any kind to train or passenger upon this elevated system; a powerful argument in itself for track elevation. The chief fault of this work is that it is incomplete; that the tracks descend to the surface three miles north of the southern line of Jackson Park, and follow the lake front and enter the terminal station at grade.

It is unfortunate that in adopting plans for the elevation of the other tracks in the city, preference should be given to the cheaper earth and masonry work over the more open and less unsightly steel construction, the former being entirely unsuitable to either the business or the residence district of a city. According to the plan now being carried out, the tracks of the Lake Shore and Rock Island roads will leave the station at Harrison Street and run south several blocks at grade, beginning to rise at Sixteenth Street, and crossing above grade the Santa Fé, Fort Wayne, Wabash, and other roads, whose elevation will be considered later. Thirty subways for street-crossings will be provided by depressing the street surface four to five feet and carrying the tracks across upon steel spans. The general elevation will be nine to ten feet, but at two points the tracks are to approach within four feet of grade to allow the roads access to their respective yards. This appears to be a needless provision, as the yards should be abolished from the city proper.

One great advantage of a thorough and well-constructed elevated system will be the increase of speed, or rapid transit, for suburban service, and a marked shortening of time on through trains, it requiring now from forty-five to fifty minutes between the Indiana State line and the city station. With the elevated terminal and block system this will be reduced one-half, with almost entire safety to passengers and no interruption of city traffic.

Besides the shortening of time there will necessarily be an economy of operation, with a new system of switching and "making up," and, it is probable, very soon the total abolition of the coal-burning locomotive for city service, electric motors taking their place and abating the nuisance of smoke and cinders from which Chicago has long been a patient sufferer.

It is probable that the whole cost of track elevation in Chicago will be well within twenty million dollars, instead of two hundred million dollars as previously estimated, and the work is likely to be completed before the dawning of the twentieth century. Then will Chicago at last see her streets her own, from the prairies to the lake. JOHN T. BRAMHALL.

The Western Fires.

WE have already given an account of the terrible devastation of the recent fires in the Northwest. The stories of the eye-witnesses who escaped from Hinckley, Sandstone, and other towns add a ghastly realism to the history of this most horrible of tragedies.

Two months of drought had parched this area. Some heedless hunters' camp-fire was but half raked out. A gust of wind revived the dying coals. For days the thick smoke oozed through the silent woods, spreading bewildering shadows everywhere—a treacherous warning, since none could tell whence it came. At noon on the 1st the sun shone a dim, red disk in the hot, yellow sky, but soon its light was hidden and black, unnatural night rolled down a curtain till the tragedy should begin. Men ceased their work and stumbled toward their homes, all now in dread. Far away in the wood a deep rumbling was borne by the rising wind nearer and nearer, until its mighty roar drowned the shrieks of the terrified as they ran blindly seeking shelter. The wind became a hurricane, before which the helpless refugees were driven, falling in unfamiliar ways as they ran on. Then with their withering breath the flames burst high in air and seemed to beat upon the fated towns, and instantly a thousand fires appeared and swept all things before them.

At the first warning rumbling at Hinckley many ran for shelter from the coming storm, hiding below the river's protecting banks; but those that hesitated or trusted to the fancied security of their homes are charred and shapeless corpses, buried in rude trenches or in unmarked graves. Hundreds of frightful forms portrayed the unimaginable horror of their death. Clasping her children in her fleshless arms, some mother's love had baffled even death, and still she held her dear ones to her breast; and thus they buried her. Writhing in their unconscious agony (for most must have lost their reason in the first fierce blast), some knelt in supplication on burnt stumps of limbs, or clutched their fleshless fingers in the earth. So on through the dreadful list. A chamber of horrors more ghastly than ever dreamt of could be filled to fearful repletion from any of these vanished villages.

Into the breath of the black inferno at Hinckley two trains were flying, bearing their loads of precious human lives. Before them blazed the bridges of the town, half hidden in smoke, and turning back, they ran a race for life. One laden with four hundred refugees gained free ground, but as the other fled its coaches burst in flames. But a hero stood at the throttle, and though the clothing burnt upon his back he ran his train into a swamp and helped to drive the frantic passengers to safety in the water.

Out of an unused well fragments of fourteen bodies were taken; within one door-yard lay two entire families, and buried in the cellar of their home a father, mother, and two children met their death while clawing with their hands to dig a way into the earthen wall. But the fierce fire spared little of its victims. Among two hundred corpses buried side by side in one vast trench but three were recognizable.

This is, in brief, the fate that came to twelve prosperous towns within the track of that terrific flame.

Strewn all about these ruins that were towns, ten thousand domestic animals lie where they fell. Behind every promised shelter some frightened thing has met its death. The swiftest bird could not escape the flame, the fleetest deer fell burning in its track. Five tortured horses plunged in their blind flight over a precipice above the river at Sandstone and met more merciful death upon the rocks a hundred feet below. A bridge spanned the river here, and ten hours after the storm passed the watchman's dog was rescued from the topmost beam of the remaining span, a hundred feet from either bank, a hundred feet above the stream.

The track of this fiery hurricane is marked by many strange sights not seen where timber fires have gone before. The steel rails on the Eastern Minnesota Railroad, near Sandstone, were abruptly curved in a dozen places, always in the direction whence the fire came, and the ties beneath them show scarce a trace of fire. In other places, where small wooden bridges were entirely burned beneath them, the rails remain almost unharmed. "Balls of blue and yellow fire," "clouds of flame bursting in myriad sparks,"—these are the unanimous expressions of beholders, and mark this fiery battalion which marched a ten-mile line of one unbroken flame (and even now lurks unsatiated, creeping toward other victims) as some more dread combination of the elements than ever traced a wreck-strewn way in the New World.

S. E. WHARTON.

A Song of Doubt.

I AM not conscious that I love you—
I've asked my heart, it will not tell—
Still, I am certain by its beating
Your love for me it prizes well;
Your love alone it prizes well.

I feel no troubled, restless pleasure
Combining bitter with the sweet,
As if the thorns were 'mong the roses
On which I press my willing feet,
On which I tread with willing feet.

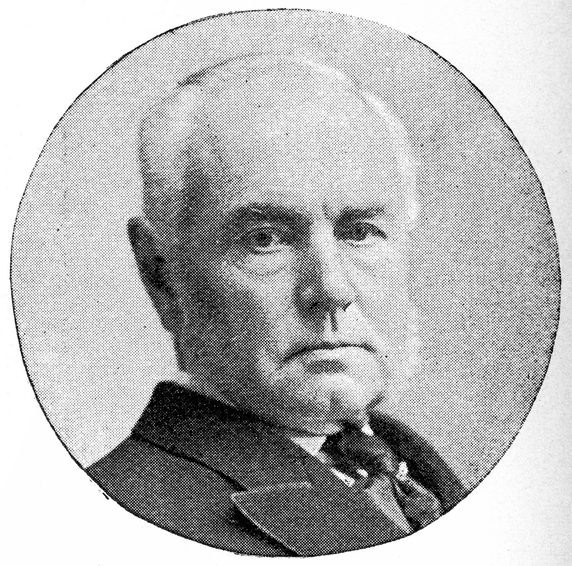
I only know that life is sweeter,
And all its phases grown so dear
That earthly thoughts and dreams of heaven
Unite their joys when you are near,
And heaven to earth seems strangely near.

'Tis of your love alone I'm conscious,
The love I know and cherish well;
But whether gift or giver's dearest
I've asked my heart—it will not tell;
My happy heart declines to tell.

FRANCES ISABEL CURRIE.

William Henry Hall.

MR. WILLIAM HENRY HALL, who died recently at Budapest, Hungary, was one of New York's oldest merchants. He was of English parentage, and was born July 21st, 1826, in Hackensack, New Jersey. When a boy of seventeen years he became an apprentice in this city with the firm of Bush & Hillyer. Later on he served with another well-known house, and subsequently he became proprietor of a retail drug store in Bleecker Street, the then fashionable quarter of the city, and by assiduity and perseverance in the management of his business he also became the proprietor of two other retail drug establishments. In 1851 he united his efforts with those of John Ruckel and founded the well-known wholesale drug and importing house of Hall & Ruckel. For nearly thirty years Mr. Hall was the sole proprietor of this house, having various branches in different parts of Europe, Asia, Australia, etc. In this



THE LATE WILLIAM HENRY HALL.

field prosperity greatly crowned his energy, calm judgment, and uncompromising integrity. These recognized sterling qualities in his business life made him conspicuous in New York and sought after by many who desired to avail themselves of his services in places of business trust and honor. He was a member of the Chamber of Commerce and the New York Board of Trade and Transportation; the National Wholesale Drug Association and the New York College of Pharmacy. His judgment in all important matters of finance was eagerly sought and greatly valued.

Although amassing large wealth, this successful man was as modest and retiring as a child. It was a characteristic fact that, with all of the demands upon his time and attention, he continued to the last to keep his desk in a modest office with and surrounded by his clerks, where any one could approach him. Another observable trait of Mr. Hall was his tender sympathy for, and fatherly interest in, the welfare of his employés. Rarely was a man or woman discharged from his employ. He tenderly chided their weaknesses and encouraged them to better performance of duty. As a consequence all about him respected and revered the man whose masterly qualities they continually recognized.