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## THE AMERICAN RAPIDS.

THE Rapids far from being the least interesting feature of Niagara. There is a violence and a powd their foaming carcer, which is seen in no phenomenon of the same class. Standing on the bridge which connects Goat Island with the Main, and looking up towards Lake Erie, the leaping crests of the Rapids form the horizon, and it seems like a battle-charge of tempestuous waves animated and infuriated against the sky.

No one who has not seen this spectacle of turbulent grandeur can conceive with what force the swift and overwhelming waters are flung upwards. The rocks, whose soaring points show above the surface, seem tormented with some supernatural agony, and fling off the wild and hurried waters, as if with the force of a giant's arm. Nearer the plunge of the $\boldsymbol{C F a l l , ~ t h e ~ R a p i d s ~ b e c o m e ~ s t i l l ~ m o r e ~}$ agitated; and it is almost impossible for the spectator to trid himself of the idea that they are conscious of the abyss to which they are hurrying, and struggle back in the very extremity of horror.

This propensity to invest Niagara with a souland human feelings is a common effect upon the minds of visitors, in every part of its wonderful phenomena. The torture of the Rapids, the clinging curves with which they embrace the small rocky islands that live amid the serge, the sudden calmness at the brow of the cataract, and the infernal writhe and whiteness with which they re-appear, powerless from the depths of the abyss, all seem, to the excited imagination of the gazer, like the natural effects of impending ruin, desperate resolution, and fearful agony, on the minds and frames of mortals.-Nathdouicl Parker Willis.

## NIAGARA FALLS.

OF all the sights on this earth of ours which tourists travel to see,-at least of all those which I have scen,-I am inclined to give the palm to the Falls of Niagara. In the catalogue of such sights, I intend to include all buildings, pictures, statues and wonders of art made by men's hands and also all beauties of nature prepared by the Creator for the delight of His creatures. This is a long word; but, as far as my taste and judgment go, it is justified. I know no other one thing so beautiful, so glorious, and so powerful. I would not say that a traveler, wishing to do the best with his time, should first of all places seck Niagara. In visiting Florence, he may learn almost all that modern art can teach. At Rome, he will be brought to understand the cold hearts, correct eyes and cruel ambition of the old Latin race. In Switzerland, he will surround himself with a flood of grandeur and loveliness, and fill himself, if he be capable of such filling, with a flood of romance. The tropics will unfold to him all that vegetation in its greatest richness can produce. In Paris, he will find the supreme of polish, the ne plus ultra of varnish, according to the world's capability of varnishing; and, in London, he will find the supreme of power, the ne plus ultra of work, according to the world's capability of working. At Niagara, there is that fall of waters alone. But that fall is more graceful than Giotto's tower, more noble than the Apollo. The peaks of the Alps are not so astounding in their solitude. The valleys of the Blue Mountains in Jamaica are less green. The finished glaze of life in Paris is less invariable; and the full tide of trade round the Bank of England is not so inexorably powerful.-Anthony Trollope.

## THE ICE BRIDGE.

UPON the occurrence of a thaw sufficient to break up the ice in Lake Erie, masses of floating ice are precipitated over the Falls in blocks of several tons each. These remain at the foot of the cataract, from the stream being elosed below, "and form a natural bridge across it. As they accumulate, they get progressively piled up, like a cyclopean wall. Built of huge blocks of ice instead of stone, this singular masonry of nature gets cemented by the spray, which, rising in clouds of mist as usual from the foot of the Falls, attaches itself in its upward progress to the icy wall, and soon gets frozen with the rest of the mass, helping to fill up the interstices between the larger blocks of which this architecture is composed."

This icy wall or mound rises up from the base in front of the Falls to a height approaching the level of the upper stream. . Scaling the mound is an exhilarating and laborious exercise, but the near sight of themaddened waters plunging into the vortex below is a fitting reward for the adventurous undertaking.

The ice bridge generally extends from the Horse-shoe Fall to a point near the raikway bridge, lasts generally from two to three months, and is crossed by hundreds of foot passengers during the winter. The ice forming the bridge is ordinarily from one hundred to one hundred and fifty feet thickrising from fifty to sixty feet above the natural surface of the river. Huge icicles, formed by an. accumulation of frozen spray, hang from the rocks; a mass of quaint and curious crystalline forms stand in licu of the bushes; the buildings seem to sink under ponderous coverings of snow and ice ; the trees and rocks on which the dazzling frost work does not lie stand out in bold contrast, forming the deep shadows of the entrancing picture; the whole presents a wild, savage aspect, grand and imposing.

niagara falids in winter garib.

## FROM THE SUSPENSION FOOT BRIDGE.

THE last hues of sunset lingered in the mists that sprung from the base of the Falls with a mournful, tremulous grace, and a movement weird as the play of the northern lights, They were touched with the most delicate purples and crimsons, that darkened to deep red, and then faded from them at a second look, and they flew upward, swiftly upward, like troops of pale, transparent ghosts, while a perfectly clear radiance, better than any other for local color, dwelt upon the scene. Far under the bridge the river smoothly swam, the undercurrents forever unfolding themselves upon the surface with a vast rose-like evolution, edged all round with faint lines of white, where the air that filled the water freed itself in foam. What had been clear green on the face of the cataract was here more like rich verd-antique, and had a look of firmness almost like that of the stone itself. So it showed beneath the bridge, and down the river till the curving shores hid it. These, springing abruptly from the water's brink, and shagged with pine and cedar, displayed the tender verdure of grass and bushes intermingled with, the dark evergreens that climb from ledge to ledge, till they point their speary tops above the crest of bluffs. In front, where tumbled rocks and expanses of naked clay varied the gloomier and gayer green, sprung those spectral mists; and through them loomed out, in its manifold majesty, Niagara, with the seemingly immovable white Gothic screen of the American Fall, and the green massive curve of the Horse-shoe, solid and simple and calm as an Egyptian wall; while behind this, with their white and black expanses broken by dark foliaged little isles, the steep Canadian rapids billowed down between their heavily-wooded shores.


NIAGARA FAI,LS BY NLOONLIGHT, FROM NEW YORK STATE RESERVATION.

## NIAGARA FALLS.



HERE'S nothing great or bright, thou glorious fall! Thou mayest not to the fancy's sense recallThe thunder-riven cloud, the lightning's leap, The stirring of the chambers of the deep;

Earth's emerald green and many-tinted dyes,

- The fleecy whiteness of the upper skies;

The tread of armies, thickening as they come,
The boom of cannon and the beat of drum;
The brow of beauty and the form of grace,
The passion and the prowess of our race;
The song of Homer in its loftiest bour,
The unresisted sweep. of human power;
Britannia's trident on the azure sea,
America's young shout of liberty!
Oh! may the waves which madden in thy deep
There spend their rage, nor climb the encircling steep;
And, till the conflict of thy surges cease,
The nations on thy banks repose in peace.


## THE HORSE-SHOE FALL FROM GOAT ISLAND.

 HERE is no grander spot than this. The waters are absolutely around you. If you have that power of eye-control which is so necessary to the full enjoyment of scenery, you will see nothing but the water. That converging rush of water may fall down, down at once into a hell of rivers for what the eye can see. It is glorious to watch them in their first curve over the rocks. They come green as a bank of emeralds; but with a fitful flying color, as though conscious that in one moment more they would be dashed into spray and rise into air, pale as driven snow. The vapor rises high into the air, and is gathered there, visible always as a permanent white cloud over the - cataract; but the bulk of the spray which fills the lower hollow of that horse-shoe is like a tumult of snow. The head of it rises cver and anon out of that caldron below, but the caldron itself will be invisible. It is ever so far down-far as your own imagination can sink it. But your eyes will rest upon the full curve of the waters. The shape you will be looking at is that of a horse-shoe, but of a horse-shoe miraculously deep from toe to heel-and this depth becomes greater as you sit there. That which at first was only great and beautiful, becomes gigantic and sublime, till the mind is at a loss to find an epithct for its own use. To realize Niagara you must sit there till you see nothing else than that which you have come to see. You will find yourself among the waters as though you belonged to them. The cool liquid green will run through your veins, and the voice of the cataract will be the expression of your own heart. You will fall as the bright waters fall, rushing down into youp new world with no hesitation and with no dismay; and you will rise again as the spray rises, bright, beautiful and pure. Then you will flow away in your course to the uncompassed, distant and eternal ocean.-Anthony Trollope.


## THE GREAT CATARACT FROM THE CANADA SIDE.

BEFORE the balcony in which this is written, the great cataract of America is thundering, smoking, glittering with green and white rollers and rapids, hurling the waters of a whole continent in splendor and speed over the sharp ledges of the long, brown rock by which Erie, "the Broad,": steps proudly down to Ontario, "the Beautiful." Close at hand" on our left-not, indeed, farther removed than some six hundred or seven hundred yards-the smaller, but very imposing American Fall speaks with the louder voice of the two, because its coiling spirals of twisted and furious flood crash in full impulse of descent upon the talus of massive boulders heaped up at its feet.

The resounding impact of water on rock, the clouds of water-smoke which rise high in air, while the river below is churned into a whirling cream of eddy and surge and back-water, unite in a composite effect at once magnificent and bewildering. But if you listen attentively you will always hear the profound diapason of the great fall-that surname the Horse-shoe-sounding superbly amid the loudest clamor and tumult of its sister, a deeper and grander note; and whenever for a time the gaze rests with inexhaustible wonder upon that fierce and tumultuary American Fall, this mightier and still more marvelous Horseshoe steals it away again with irresistible fascination. Full win front lies that wholly indescribable spectacle at this instant. Its solemn voice-an octave lower than the excited, leaping, almost angry cry of fervid life from the lesser cataract-resounds through the golden summer morning air like the distant roar from the streets of fifty London all in full activity.



## FROM CITY TO CATARACT.

FROM Toronto we steam across the lake to the village of Niagara, where a train is waiting to carry us on to the Falls about half an hour further on. We all watch from the windows, eager to catch our first glimpse of the world's great wonder. We feel a nervous anxiety to stand in its majestic presence. I quote from my companion's note-book on the spot: "There was a break in the wood, a flash of white, a cloud of spray tossed high above the tree-tops; then the dark woods closed again. That glimpse, flashing upon us and passing before we could fully realize that the great tumbling mass was indeed Niagara, can hardly be called our first view of it. * * * It wast a
moonless night, and in the dusk we could only obscurely trace the vast, vague outline of the two falls, divided by the blurred mass of shapeless shadows which we learned was Goat Island. As we looked upon them silently, and listened to the ceaseless boom, like distant thunder, which shook the ground beneath our feet, across the snowy veil of the American Fall, to our left, shot rays of rosy light, which melted into amber, then into emerald. They were illuminating the great waters with colored calcium lights. * * * But the brilliant rays which fell across the American Falls, and which were turned on and off like a dissolving view, did not reach to the Horse-shoe Fall, away to our right. Vast, solemn, shadowy, we could just distinguish its form in the darkness, could hear the deep murmur of its awful voice. And there, between it and us, what was that we saw? Was it some huge, pale ghost standing sentinel before Niagara? White, spectral, motionless, it rose up and reached towards the stars-shapeless, dim, vague as a veiled ghost. There was something almost supernatural about it ; it was like a great, colossal spectre wrapped in a robe of strange, dim light."

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## NIAGARA IN WINTER.

AFTER a few days of hard frost in winter, the Falls become more of a vision of some enchanted land than a real scene in our world. No marvels wrought by genii and magicians in the Eastern tales could surpass the wonderful creations that rise along the surrounding banks and lang over the walls of the cataract. Glittering wreaths of icicles, like jeweled diadems, glean on the brow of every projecting rock and jutting crag. Arches, pillars, and porticos of shining splendor are frouped beneath the overhanging cliffs, giving fanciful suggestions of fairy palaces beyond. Every fallen fragment of rock under its icy covering becomes a marble pyramid or obelisk, and masses of frozen spray stand out here and there in graceful and statuesque forms, easily shaped by imagination into the half-finished work of a sculptor. Every rift and opening in the cliff is transformed intor an alabaster grotto with friezes and mouldings all fretted and froze; with filagree wreaths and festoons and filmy veils and canopies of lace-like patterns and gossamer texture; and on every curve and angle, round every fissure and crevice, some fantastic and lovely decoration is woven by winter's master artist, King Frost. Over the Horse-shoe, towards Goat lsland and the Bridal Veil Fall, the water pours in thin silvery sheets, which dissolve in white curving mists as they slide slowly down pilniacles of ice, stretching high above them break these falling streams. The American Falls, througl its hovering veil of spray, seems transformed into wreaths of frozen foam. The face of Goat Island is resplendent with huge many-tinted icicles, showing all the colors of the rock on which they are formed, and on either shore the under cliffs are hung with lovely draperies of frozen spray. -Lonise Marray.


## THEIR PILGRIMAGE•TO NIAGARȦ.

THE slight bridge to Goat Island appeared more presumptuous by daylight, and the sharp slope of the rapids above it gave a new sense of the impetuosity of the torrent. As they walked slowly on, past the now abandoned paper mills and the other human impertinetices, the elemental turmoil increased, and they seemed entering a world the foundations of which were broken up. This must have been a good deal a matter of impression, for other parties of sight-seers were coming and going, apparently unawed, and intent simply on visiting every point spoken of in the guide-book, and probably unconscious of the all-pervading terror. But King could not escape it, even in the throng ascending and descending the stairway to Luga Island. Standing upon the platform at the top, he realized for the first time the immense might of the downpour of the American Fall, and noted the pale green color, with here and there a violet tone, and the white cloud mass spurting out from the solid color: On the foamcrested river lay a rainbow forming nearly a complete circle. The little steamer "Maid of the Mist" was coming up, riding the waves, dashed here and there by conflicting currents, but resolutely steaming on-such is the audacity of man-and poking her venturesome nose into the boiling foam under the Horse-shoe. "On the deck are pigmy passengers in oil-skin suitsclumsy figures, like Arctic explorers. The boat tosses about like a chip, it hesitates and quivers, and then, slowly swinging, darts away down the current, fleeing from the wrath of the water and pursued by the angry roar.


## NIAGARA IN WINTER.

I
HAVE seen the Falls in all weathers and in all seasons, but to my mind the winter vifw is most beautiful. I saw them first during the hard winter of 1854, when a hundred cataracts of ${ }^{\text {B }}$ ice hung from the cliffs, on either side, when the masses of ice brought down from Lake Eric were together at the foot, uniting the shores with a rugged bridge, and when every twig of every tree and bush on Goat Island was overlaid an inch deep with a coating of solid crystal. The air was still, and the sun shone in a cloudless sky. The green of the Fall, set in a landscape of sparkling silver, was infinitely more brilliant than in summer, when it is balanced by the trees, and the rainbows were almost too glorious for the eye to bear. I was not impressed by the sublimity of the scene, nor even by its terror, but solely by the fascination of its wonderful beauty,-a fascination which continually tempted me to plunge into that sea of fused emerald, and lose myself in the dance of the rainbows. With each succeeding visit Niagara has grown in height, in power, in majesty, in solemnity; but I have seen its climax of beauty.


La grandeur merveilléuse dú tableau qu'il vous est donnés de contempler est telle qu'on éprouve une émotion sans páreille. De gigantesques stalactites glacées, de 50 mètres de hauteur envinon, toutes brilliantes au soleil, semblent prètes à vous écraser par leur masse formidable. Les chutes d'eau étincelantes aux couleurs d'émeraude qui se précipitent du fer à cheval accomphgnées des vapeurs d'eau s'élevant dans le ciel, la neige eblouissante des premiers plans, forment des scènes si extraordinaires qu'elles dépassent véritablement ce que l'homme peut rèver et pendent les quelques instants de contemplation notre imagination err restrait presque comme troublée.Albert Tissandier.

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## IMPRESSIONS OF NIAGARA.

THEN, when I felt how near to my Creator I was standing, the first effect and the enduring one-instant and lasting-of the tremendgus spectacle was Peace." Peace of Mind, tranquillity, calm recollections of the Dead, great thoughts of Eternaß Rest and Happiness, nothing of gloom or terror. Niagara yas at once stamped upon my heart, wan Image of Beauty; to remain there, changeless and indelible, until its pulses cease to beat, for ${ }^{A}{ }^{A} e^{*}{ }^{*}$

Oh, how the strife and trouble of daily life receded from my view, and lessenced. in the distance, during the ten memorable days we passed on that, Enchanted Ground! What voices spoke from out the thundering water; what faces, faded from the earth, looked out upon me from its gleaming depths; what Heavenly promise glistened in those angel's tears, the drops of many hues, that showered around, and twined themselves about the gorgeous arches which the changing rainbows made!

I think in every quiet season now, still do those waters roll and leap, ind roar and tumble, all day long; still are the rainbows spanning them, a hundred feet below. Still, when the sun is on them, do they shine and glow like molten gold. Still, when the day is gloomy, do they fall like snow, or seem to crumble away like the front of a great chalk cliff; or roll down the rock like dense white smoke. But always does the mighty stream appear to die as it comes down, and always from its unfathomable grave arises that tremendous ghost of spray and mist, which is never laid; which hals haunted this place with the same dread solemnity siuce Darkness brooded on the" deep, and that first flood before the Deluge-Light-camerrushing on Creation at the word of God.


## "THE NIAGARA FALLS ROUTE."

THE Michigan Central is the only real "Niagara Falls Roüte." It is the only railroad that gives a satisfactory view of the Falls. Every trum stops five minutes at Falls.View, which is what the name indicates, a splendid point from which to view the great cataract. It is right on the brink $8 f$ the grand cañon, at the Canadiar ȩnd of the Horse-shoe, and every part of the Falls is in plain sight. Even if he is too ill or too lazy to get out of his car, every passenger can see the liquid wonder of the ivorld from the window or the platform. This is the Michigan Central's strongest hold on popular favor, its greatest advantage, its chicf attraction. So long as the waters of that mighty river thunder down to the awful depths below, so long as the rush and roar, the surge and foam and prismatic spray of nature's cataractic masterpiece remain to delight and awe the human soul, thousands and tens of thousands'of beauty-lovers and grandeur-worshipers will journey over the only railroad from which it can be seen. There is but one Niagara Falls on earth, and but one direct great railway to it.

After leaving Falls View, the train sweeps along the mighty chasm to the Cantilever Bridge, giving frequent and ever-changing views of the cataract and the surging, boiling river as it madly rushes and rages between the perpendicular walls of stone, two hundred feet high, that form the great cañon of Niagara.' Erom the bridge there is a magnificent view of the Falls, the Rapids and the Suspension Foot-Bridge, above the Cantilever; while below it the eye takes in the Lower Rapids and the awful Whirlpool where Captain Webb's body was found.-Col. P. Donan, in St. Louis Spectator.

train of the michigan central, "The miagara falls kozte," at filils view.

## THE EARLIEST ACCOUNT.

BETWIXT the Lakes Ontario and Erie, there is a vast and prodigious cadence of water, which falls down after a surprising and astounding manner; 'insomuch that the universe does not afford its parallel. 'Tis true, Italy and Sucdland boast of some such things, but we may well say they are but sorry patterns when compared with this of which we now speak. At the foot of this horrible precipice we meet with the river Niagara, which is not above a quarter of a leaguc broad, but is wonderfully deep in some places. It is so rapid above this descent that it violently hurries down the wild beasts while endeavoring to pass it to feed on the other side, they not being able to withstand the force of its current, which inevitably casts them headlong, above six hundred feet high.

This wonderful downfall is compounded of two great cross streams of water and two falls, - with an isle sloping along the middle of it." The waters which fall from this horrible precipice do foam and boil after the most hideous manner imagitable, making an outrageous noise, more terrible than that of thunder; for when the wind blows out of the south, their dismal roaring may be heard more than fifteen leagues off.

The rebounding of these waters is so great that a sort of cloud arises from the foam of it -. which is seen hanging over this abyss, even at noon-day, when the sun is at its height. In the midst of summer, when the weather is hottest, they rise above the tallest firs and other great trees which grow on the sloping island which makes the two falls of water that I spoke of.-Father Louis Henncpin, in his "New Diseovery," publishiced in 1697.


TIIE WIIIRL,POOI, RAPIDS, FROM TIII AMIERICAN SIDE.

## THE CANTILEVER BRIDGE.

EACH end is made up of a section, entirely of steel, cxtending from the shore nearly half way over the chasm. Each section is supported near its center by a strong stecl tower, from which extend two lever arms, one reaching the rocky bluffs, the other extending over the river 175 feet beyond the towers. The outer arm hiving no support, and being subject like the other to the weight of trains, a counter-advantage is given by the shore arm being firmly anchored to the rocks on the shore. The towers on either side rise from the water's edge; between them a clear span of 495 feet over the river, the longest double-track truss-span in the world. The ends of the cantilevers reaching on each side 395 feet from the abutments, leave a gap of 120 fect, filled by $a n^{3}$ ordinary truss bridge loung from the ends of the cantilevers. Here provision is made for expansion and contraction by an ingenious arrangement between the ends of the truss bridge and of the cantilevers, allowing the ends to move freely as the temperature changes, but at the same time preserving perfect rigidity against sido pressure from the wind. There are no guys for this purpose, as in a suspension bridge, but the structure is complete within itself. The total length of the bridge is 910 feet. It has a double track, and is strong enough to cárry upon each track at the same time the heaviest freight train, extending the entire length of the bridge, headed by two "consolidation" engines and under a side pressure of thirty pounds per square foot, produced by a wind having a velocity of seventy-five miles per hour, and even then will be strained to only one-fifth of its ultimate strength.


## THE EROSION OF THE GORGE.

IT is a matter of direct observation that, from time to time, large rocks of the upper limestone fall away into the pool, and there seems no escape from the inference that this occurs because the erosion of the shale beneath deprives the limestone of its support. Just how the shale is eroded, and what is the part played by the harder layers beneath, are questons in regard to which we are much in doubt. In the Cave of the Winds, where one call - pass beneath and behind one of the thinner segments of the divided fall, the air is filled with spray and heavier masses of water that perpetually dash against the shale, and though their force in that place does not seem to be violent, it is possible that their continual beating is the action that removes the shall rock. The shale is of the variety known as calcareous, and as its calcareous element is soluble, it may ,be that solution plays its part in the work of undermining. What goes on beneath the waters of the pool must be essentially different. The Niagara River carries no sediment, and therefore cannot scour its channel in the manner of most
rivers, but the fragments of the limestone bed that fall into the pool must be moved by the plunging water, else they would accumulate and impede its work; and, being moved, we can understand that they become powerful agents of excavation. Water plunging into a pool acquires " gyratory motion, and, carrying detritus about with it, sometimes bores deep holes, even in rocks that are hard. These holes are technically called "potholes," and there is much to commend the suggestion that the excavation within the pool is essentially pothole work.


RAPIDS AND STATE RESERVATION AS SEEN FROM INTERNATIONAL HOTEL

## AN IDĘAL VIEW OF NIAGARA.

THERE is one view of Niagara Falls which may be regarded as ideally perfect, and that is best obtained from the piazzas or magnificent private park of the well-known International Hotel forest-crowned slopes of Goat Iss leading to the American Falls, the brink of the Falls, the terraces and sunny sward of Queen Victoria Park, with its we sweep and grandeur of the great river between, the tinted by distance-the lofty Canadian uplands, Central Railroad, giving to that road an advantage rama unites in itself $\cdot$ more varied elements of beaue unique of its kind in the world. This vast panobe found combined elsewhere in the world. There is not grandeur, power and sweetness than can tranquillity and exquisite beauty of thescene. On the a single sight or sound to mar the perfect the glare of light reflected from the falling wat On the Canadian side our eyes soon became weary of that the atmosphere was damp and chilly with mist we sat for hours, until the shadows of the vere On this favored 'spot, however this lovely lawn, upon the lawn, and the spray from the brink of the e trees alternated with broad bands of sunlight and ámethyst, suggesting the glory that the eyes of fait Falls became suffused with colors of rose City. All noise, confusion, glare, bustle were of faith believe conceal the portals of the Heavenly perfectly happy. If this view be missed, the traveler. One was alone with Nature, and, therefore, s trip to Niagara will be sadly incomplete, while to be able to see it frequently, is a liberal education in the study of the Beautiful.-L. B. Procter.

## NIAGARA IN SPRING.

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0
I. I could gaze forever on thy face.

Unwearied still thou matchless, waterfall,
Whose twining spells of majesty and grace
My ardent sense bewilder and enthrall.
In all my moods thy charms' puissant sway, Enforce my will their master-spell to own;
My heart leaps at thy voice, or grave or gay
And every chord is vibrant to thy tone
So many years I have confe back to stand, With reverent awe liefpre thy glorious shrine,
so close and long thy lingaments I've scanned-
it seems thou shouldst grow something less divine 1
I know thy face-its shifting glooms and smilesAs clond, or sun, upon thy bosom lies,
Thy wrathful guise, thy witching rainbow wiles, Can wake no more for me the sweet surprise.

I know thy voice, its terror and its glee,
Have in my ear so of their changes rung-
Nor forest winds, nor anthems of the sea,
speak to my soul with more familiar tongue.
My feet have scaled thy storm-scarred battlements, And pressed the moss most emerald with thy tears;
Aud still profaned thy lucent caverns whence
The neophyte comes pale with ghostly fears.
Yet. as the more of God the soul perceives, And nigher Him is drawn, it worships more-
So in ny lieart thy matchless heauty leaves Constraint in thine IIis grandeur to adare.

Within thy courts, I come this vernal day,
Fre Fashion's chimes invite the thoughtless throng; Almost alone I watch thy curling spray,

And lose my breath to swell thy eeaseless song.
I mark the flowers upon thy marge that blow, Sweet violets blue and campaniles, white bells;
Their azure shines unblenched, unblushed their snow,
These timid things feel not, as $\mathbf{I}$, thy spells.
And in thy woods the birds heed not thy roar,
Where the brown thrish and painted oriole,
All unahashed, their tides of song outpour
As if thy floods in terror did not roll.
They do not know, the buds and birds around.
How wonderful, how grand, how dread thoy art; But I, transfixed by every sight and sound,
stand, worshiping thy Maker, in my heart.
I must go baek where tides of Commerce flow,
And the dull roar of traffic cleaves the air;
But in my heart sweet memories still shall glow, And to my slumbers summon visions fair.

Niagara ! thou wift freshen all my thought,
And cool the breath of fervid hours for me;
My days shall lapse with thy remembrance fraught,
Thy voices chant my nights sweet lullaby.
Great Torrent; speed thee to the lake and sea,
With tireless smoke of spray and thunderous roar;
I bless my God, for all thy joy to me,
Though I should see thy marvelous face no morel "



## ADMISSION FeES, RATES AND TOLLS

Cave of the Winds (with guide and dress)

Museum (American side)
Whirlpool Rapids (either side),
Whirlpool (either side),
Crossing Ncw Suspensio

- . . .

Crossing New Suspension Bridge (over and return), (no charge for carriage),
rossing Railway Suspension Bridge, over and return (no charge for carriage)
Ride in van from Goat lsland, 10 cents. Around Goat sland, Ride in van around the ride in following vans,
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Dufferin Islands, carriagc, with occupants. ${ }^{\circ}$, via Old Suspension Bridge and horse-car line,
Round trip to Whirpoool Rapids, American side, via cars,
Round trip to Whirs .
Round trip to Whirlpool, American side, via horse-car and transer

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than one mile and less than two miles,
For carrying one passenger and ordinary baggage from any point within the city limits, to any other point therein,
or carrying onan two miles and not exceeding three miles, more than wal passenger ald ordinary baggage,
or each additional passe defined to be one trunk and one bag, or band-box, or other small parcel. for the first hour and one Ordinary baggage is definea to be one trunk than three miles, for two-horse carriages, two dollars for the frst hour and ond For carrying passengers any distance more and for one-horse carriages, one dollar and fifty cents for the first hour, and
dollar and fifty cents for each addition
one dollar for each additional hour.

## Location of Chicago Depots.

ATCHISON, TOPEKA \& SANTA FEm, Polk street, between 3 d and 4 th avenues.
BALTIMORE \& OHIO,
Harrison street and Fifth avenue.
CHICAGO \& ALTON,
Canal)street, between Adams and Madison: CHICAGO \& EASTERN ILLINOIS, Polk street, between 3 d and 4 th avenues it CHICAGO \& ERIE,

Polk street, between 3d and 4 th avenue CHICAGO \& GRAND TRUNK, Polk street, between 3 d and $4^{\text {th }}$ avenue CHICAGO \& NORTHERN PACIFIC, Harrison street and Fifth avenue. CHICAGO \& NORTH-WESTERN Wells and Kinzie streets. CHICAGO, BURLINGTON \& QUINCY Canal street, between Adams and Madison. CHICAGO GREAT WESTERN, Harrison street and Fifth wince.
CHICAGO, MILWAUKEE \& ST. PAUL, Canal street, between Adams and Madison.

CHICAGO, ROCK ISLAND \& PACIFIC
Van Büren street, bet. Pacific ave. and Sherman at.
CLEVELAND, CINCINNATI, CHICAGO" \& ST, LOUIS
Lake Front, foot of 12 th street
ILLINOIS CENTRAL
$\left\{\begin{array}{l}\text { Foot of Lake street (Suburban.) } \\ \text { Lake Front, foot of } 12 t h \text { street. }\end{array}\right.$
LAKE SHORE \& MICHIGAN SOUTHERN
Van Buren street, bet. Pacific ave, and Sherman at
LOUISVILLE, NEW ALBANY ${ }^{\circ}$ Chicago
Pi. Polk afreet, between 3 d and 4 th avenues.
michigan central, "The Niagara falls Rote," . Lake Front, foot of $\mathbf{1 2 t h}$ street.
NEW YORK, CHICAGO \& ST. LOUIS,
Van Buren street, bet. Pacific ave, and Sherman st.
PITTSBURGH, FORT WAYNE \& CHICAGO,
Canal street, between Madison and Adams.
WABASH,
Polk street, between 3 d and 4 th avenues.
WISCONSIN CENTRAL


## THE HISTORY OF NIAGARA RIVER.

LET us put together what we have learned of the Niagara history. The river began its existence during the final retreat of the great ice sheet, or, in other words, during the series of events that closed the age of ice in North America. If we consider as a geologic period the entire time that has elapsed since the beginning of the age of ice, then the history of the Niagara River covers only a portion of that period. In the judgment of most students of glacial geology, and, I may add, in my own judgment, it covers only a small portion of that period. During the course of its history, the length of the river has suffered some variation, by reason of the successive fall and rise of the level of Lake Ontario. It was at first a few miles shorter than now ; then it became suddenly a few miles longer, and its present length was gradually acquired. With the change in the position of its mouth, there went a change in the height of its mouth; and the rate at which it eroded the channel was affected thereby. The influence on the rate of erosion was felt chiefly along the lower course of the river, between Lewiston and Fort Niagara. The volume of the river has likewise been inconstant. In early days, when the lakes levied a large tribute on the melting glacier, the Niagara may have been a larger river than now; but there was a time when the discharge from the upper lakes avoided the route by Lake Erie, and then the Niagara was a relativelyformall stream.


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CHE GRAND, Mackinac Island (J. R. Hayes, Proprietor), is one of the largest and most perfectly equipped resort hotels in the country, and is conducted in accordance with the advanced methods of the present day. From June ${ }^{2} 4$ th until the latter part of September it is the favored resort of the wealthy and fashionable class of pleasure seekers, and the many attractions of the Island, united to the amusement provided by the hotel, cover a sufficiently large field to embrace all tastes. The hotel will be under the personal management of Mr. Hayes.

- For further informition address THE WAYNE, DETROIT, unth June aist ; thereafter the "Orand," Mackinac.



## THE CITY OF CHARLESTON.

$C$
HARLESTON as a historical point, perhaps, has few equals, and certajnly none on the South Atlantic coast. She figured, or at least her adjacent island, Sullivan's, in the war of 1776 , and on he site of the old palmetto Fort Moultrie now stands a substantial fortress commanding the harbor. Fort Sumter, midway bet ween Sullivan's and Morris Island, stands proud in her ruins, awaiting an opportunity to again evidence her endurance against an invader. Both of these forts were prominent in the late war, and Fort Sumter partiçularly so by rcason of her participation in conflict under the flag of both sections engaged in the strife.

The city of Charleston is notable for the antiquated character of the architecture of lier buildings. Another feature of her buildings, much noted and admired, is the typical broad southern piazza, which gives so much comfort to its occupants during the summer. The streets are handsomely paved, and two street-car lines traverse and circle the city, making it possible to reach almost any point in the city by them. Chanleston has abundant first-class hotel accommodations, and a livery stable that compares favorably w.th any in the large eastern cities. Her climate is all that invalids or tourists could wish, with a meantemperature of 58 degrees during the winter months. The harbor of Charleston has a capacity and depth of water sufficient to loat the navy of the world, and the completion of the work for deepening the bar is progressing so successfully that it is believed the depth of water, which has been constantly increasing, will soon be ample to admit vessels of the greatest draught, the consumpation of which will open up Charleston as the South Atlantic outlet for the products of the great West and Northwest.

Stimmerville, S. C , Charleston's suburban resort for invalids during the frigid winter months, and of many of the citizens of Charleston in the summer, is delightfully tocated just twenty-two miles north of Charleston, and is easily reached by train at almost any hour of the day. Here will be found the piney wopds odor so much sought after by those afficted with lung or throat trouble. A bcautiful and modernly constructed hatel, "The Pine Forest lnn," with all the conveniences and comforts that the thoughtful owner could conceive of, and delightfully logated, will welcome the visitor.

Camden, S. C., is located 144 miles northeast from Charlestom and, like the latter mentioned city, prides herselt on her historical site and of the pages of events that "can be chronicled of her past. Upton Court and Hobkirk Inn are the principal hotels of Camden and many are the home comforts that can be procured there.

AIkin, S.C., situated 120 miles west of Charleston, is the most important town on the line of the South Carolina Railway, and the greatest sanitarium. It is delightfully located on an elevation of 505 feet above sea level. There are pleasant drives, and with the first-class accommodations afforded by the "Highland Park Hotel," the proximity of the city of Augusta ( 17 miles distant), and convenient schedules, there is no pleasanter point to spend the winter than at Aiken, S. C.


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