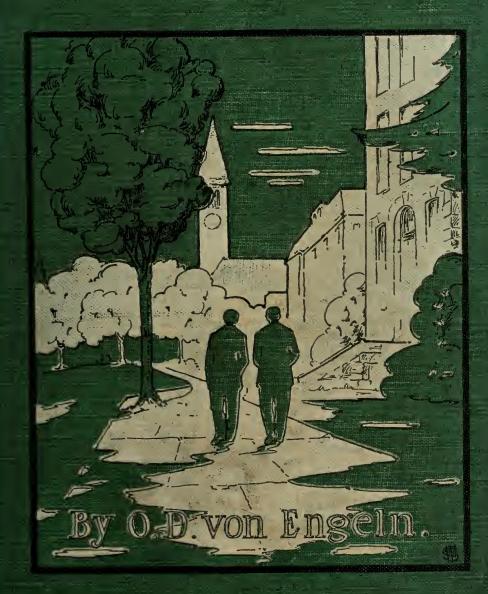
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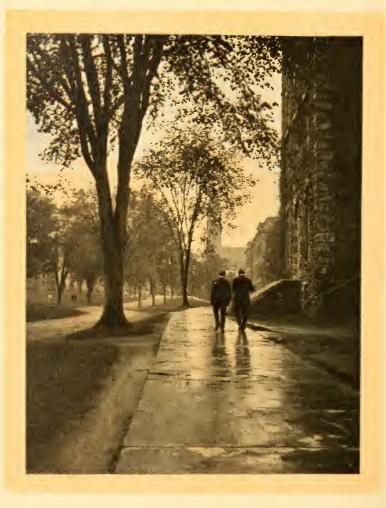
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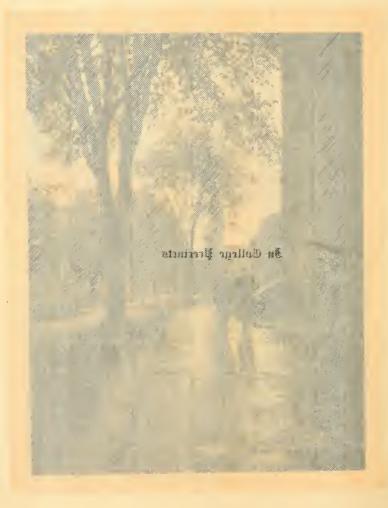
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By

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Author of "An Alaskan Wonderplace,"
"On Being Abroad In Winter,"
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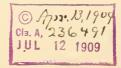
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THE AUTHOR.



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The Typical American College



The Typical American College

N a recent newspaper article,* entitled:—
"Working Students at Harvard," there occurred the following paragraph, picturing the arrival, at that University, of a freshman from a far western state, and presenting him inquiring of the bus-driver, who has just set him down, "Where is Harvard?"

"That's Harvard, right over there." The slender Westerner thanked him "kindly" and entered the yard somewhat bewildered at finding Harvard a composite article made up of many more or less insignificant buildings, crowded in by commonplace streets. He had expected to find it no doubt the typical American college, a few imposing edifices, surrounded with glorious country, a great campus and the Charles River. The few red buildings, forming a rectangle, looked like something out of the ordinary, it is true, but still he half doubted the transfer man's directions, and to make sure, he hailed the first man who looked like a student with, "Say, is this Harvard?"

^{*} New York Tribune, March 24, 1907. Page 4, col. 5

"The typical American college, a few imposing edifices, surrounded with a glorious country, a great campus, and the Charles River." The characterization, you will agree, is so complete as to be epigrammatic, for in its few phrases it includes every ideal. Yet the writer impliedly negatives the existence of this ideal college, and therefore we must perforce quarrel with him. For does not Cornell fulfill the every requirement of that description? We have more than a few imposing edifices, and surely we can be justly proud of the great campus. Again, instead of the Charles River we may read, with even greater enthusiasm, fair Cayuga Lake. The glorious country unrolls itself from my window as I write, miles and miles of green, sunkissed hilltops and dark valleys, gloomed by tall evergreens. The sum is complete. Cornell can justly lay claim to be the typical American college. More than this she is the only one which in all this broad land can satisfy all these ideals—and add to them. If other colleges meet some, they do it inadequately.

Yet despite this preeminent position, we Cornellians, curiously enough, have been so jealous of her that we have not let the world see too. Her fame is that which has been grudgingly accorded her because of the victories of her athletic teams, her great alumni, her engineers and scholars. This earned praise we modestly accept, but of the rest which is due we say nothing. So little has been written of the real, the inspiring Cornell. In one

The Typical American College

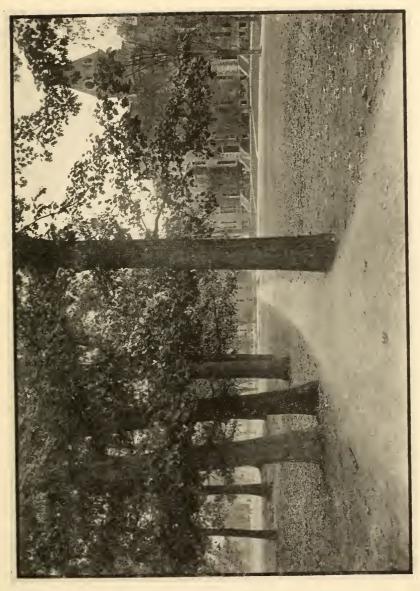
book there are only a few pictures with no accompanying description; and, although this is the day of illustration, when it is often preached that one picture tells the story of a chapter of prose; yet, without the imagery of words the pictures are meaningless. My excuse in venturing to supply those which follow is that no one more competent has put pen to paper—and, that the attempt has long been due her who,

Far above Cayuga's water
With its waves of blue,
Stands: Our noble Alma Mater
Glorious to view!

Perhaps the most eloquent reason which has deterred more competent writers from attempting to put Cornell before the world is her mutability. I remember vividly, in connection with this point of view, my wonder, when first studying history, at reading of a country ravaged and harried by war and famine; its people all but destroyed—in one paragraph; and then finding them described in the next breath, as it were, the time only a hundred years later, as enjoying the most abundant prosperity, and their land a very hive of industry and the place of palatial cities. This was perhaps due to the finiteness and the false perspective of the elementary world history, in whose pages a hundred years are verily but as a day. Nevertheless we have the moral: In America we are still young, very young, and of this youth the colleges partake. Thus

in the West they consist of characterless brick buildings, with gravel driveways, sapling trees, and an air of 'don't walk on the grass' writ large over the whole campus. In the East—well, we have the freshman's impression of Harvard, its growth hemmed in by the more rapid industrial development of its surroundings. Yet the typical American college has passed the first stage, and fortunately escaped the second; thus Cornell is neither a sapling, nor yet a girdled tree—she has traditions, but she is still growing. If then freshmen, you find in these pages history, instead of reality, you may know that the dawn of still another tomorrow has come to Cornell since the writing of this book.

With this conception of the ideal in an American college, I can not find myself in sympathy with the American professor, happily not of Cornell, who mourns for the moss-grown picturesqueness of the continental institutions. In a magazine article this man quotes from Mr. Benson's essays: "From A College Window," as follows: "My room looks out into a little court, there is a plot of grass, and to the right of it an old stone-built wall, close against which stands a row of aged lime-trees. Straight opposite, at right angles to the wall, is the east side of the Hall, with its big traceried windows enlivened with a few heraldic shields of stained glass. While I was looking out today, there came a flying burst of sun, and the little corner became a sudden feast of delicate color; the rich green of the grass, the



"A Short Cut to Tearning" on the Cornell Campus



The Typical American College

foliage of the lime-trees, their brown wrinkled stems, the pale moss on the walls, the bright points of color in the emblazonries of the window, made a sudden delicate harmony of tints. I had seen the place a hundred times before without ever guessing what a perfect picture it made. Inside the porter sat in his comfortable den with his feet on the fender, reading a paper. "

After this quotation, the American professor bemoans his fate because he finds that from his office window at the University: "The outlook is pleasing but lacks inspiration. The grass is green enough, when not wholly worn shabby by students seeking a short cut to learning. The American elms rival the English lime-trees, the sun is brighter, the sky bluer than across the waters. But there is no den, no porter! The roller top desk, the typewriter stand, the filing cabinet greet me with a business-like air." And so on. But why? If he can not find inspiration in the brighter sun, the bluer sky, and the graceful American elms, which not only rival but fairly outrival the English limes; let the fates help him, he is not an American.

But be all this as it may; Cornell is today the typical American college, even the detail of the 'short cut to learning' which the professor so much deplores, is not lacking. More than that, keeping pace with the progress of the American people, Cornell is broadly cosmopolitan; her students number representatives from almost every nation

in the world. And in herself and her setting, her life and activities, her customs and traditions, we have a fount of inspiration for the American people.

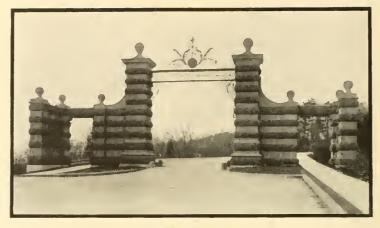
The Cornell Campus — A Guide Book Chapter



The Cornell Campus—A Guide Book Chapter

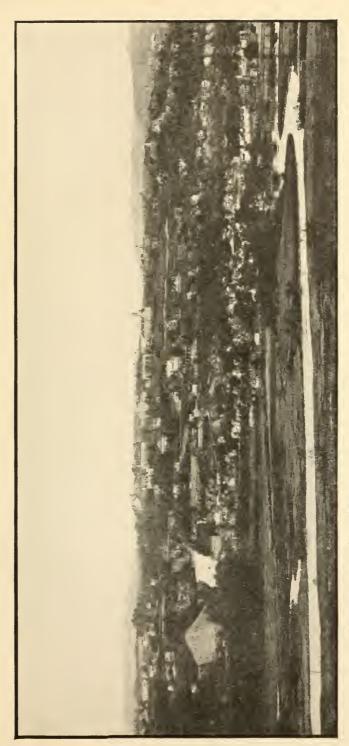
HE nature lover, and indeed anyone in whom is not lost a sense of the eternal fitness of things, could scarcely dream of a more appropriate location for a university than that which is Cornell's. When the founder, Ezra Cornell, fixed upon the height above the southeast end of Lake Cayuga as the site for the new university, he was, no doubt, moved in his choice by such a feeling of the entire adequateness of the place—and today the Cornell Campus is everywhere acknowledged the most beautiful in America.

Situated where she commands a broad outlook over all the world about—the long line of hills across the valley to the west, the blue reach of the lake for miles to the north, and the green slopes and bottoms of its tributary stream valleys to the south and east—Cornell by virtue of her very position becomes at once a beacon tower and a citadel of our civilization. Nestling at her feet, and spreading down the hillside and across the flat floor of the valley below, is the town of Ithaca.



The Mhite Gateway

If one comes into Ithaca from the east on the Lackawanna railroad, or from the west on the Lehigh, the trains in each case abruptly descend nearly four hundred feet to the valley floor. Coming over the Lehigh from the west one gets the best first-glimpse of the grav towers, and the red tiled roofs of Cornell, as they peep out from between the green tree tops of the forest on the summit of the hill to the east, opposite. On the other hand, coming from the east and south, over the Lackawanna, one gets a better appreciation of the commanding position of the University, overlooking, as one does from the car window, the whole town and the blue lake to the north while one is descending into the valley by much switching and backing over the broad "Z" in the course of this railway, necessitated by the steep grade.



A First Glimpse of Cornell from the Train Window



Undoubtedly the best place to enter the Campus on a first sight-seeing visit is through the White Gateway at the head of Eddy street. This is reached directly by the Eddy street car from down town, and also, after completing the loop ride, by alighting at Eddy street from the Stewart avenue car. Imagine then that we are starting from the White Gateway to see the Campus.

Over the gateway is the University seal and its motto, expressing in his own words Ezra Cornell's ideal of the University's purpose, from the date of its inception: "I would found an institution where any person can find instruction in any study." The sentiment which the donor, President White, has



The Square Cascadilla Building

engraved on the west entrance of the gateway is also worthy of note:

"So enter that daily thou mayest become more learned and thoughtful,

So depart that daily thou mayest become more useful to thy country and to mankind."

Passing through the gate, and uphill along the walk which follows the gorge of



The Arch of the Cascadilla Bridge and the Falls below it

Cascadilla stream, one has on the right the massive, square, stone pile of the Cascadilla Building; the first building owned by the University. At the opening of the school it contained the Registrar's and the Faculty offices, besides recitation and student living rooms. It is now wholly given over to dormitory purposes.

Turning abruptly a little above this building, we face about for a second glimpse of its front, and then cross the stone arch bridge over Cascadilla Stream. Over the parapet of this bridge one peers down with delight at the rushing white of the fall, one hundred feet below, known as the Giant's

Staircase; and then down the length of the gorge for the vista far across the Cayuga Valley to its distant western side. Starting again, we go on up Central avenue, passing first on the right the Kappa Alpha fraternity house, and directly opposite on the left, the Psi Upsilon house, embowered among tall pines.

At the crest of the rise we gain on our left a distant glimpse of Cayuga Lake, with the broad lawn and the lodge of the Sigma Phi fraternity in the foreground. Just across the road is the red brick Armory, and attached to it the gymnasium. a

paltry affair, utterly inadequate to the present needs of the University, although at its building it was the best equipped college gymnasium in the country. On the walls of its entrance stairway is hung a gallery of Cornell's unconquer-Rehind able crews. the gymnasium, in the hollow, is the University heating plant, recently enlarged and reconstructed to meet the increased needs of the school.



The Armory

The University owes part of its endowment to land grants made by Congress under the Morrill Act; and, pursuant to the provisions of this, undergraduates, with certain exceptions, are required to take two years of instruction in military tactics, under an officer of the United States Army. The broad sweep of lawn on the left of the avenue and north of the Armory is the drill ground. It is also the scene of the Freshman Banquet Rush and the annual Spring Day show, two of the most amusing of Cornell student customs.

At the rear of the Armory and a little to the north, stands the Totem Pole, brought from Alaska by Professor Fernow, who accompanied the famous Harriman Expedition to that country. These poles are to the Alaskan Indian what a coat of arms is to a European family. The erection of this particular specimen on the Cornell Campus was preceded by an interesting chain of occurrences connected with its securing. It seems that the Harriman Expedition got word of a deserted Thlinket Indian village, said to contain



The Cotem Pole

a great number of these totem poles, and to be situated on Cape Fox. They readily located it; and immediately all the professors from other Universities who were members of the expedition, set to work to secure one of a small type of poles which the Indians kept indoors. Professor Fernow had scruples about taking the totems, moreover, he was not sure that Cornell wanted one. So it was not until some of the others vaunted of their prowess in getting down to the ship some unusually large specimens of the indoor type, working in pairs, that he essayed the same task single handed. Having some knowledge of mechanics, as he modestly puts it, he easily succeeded in this, and then attempted the removal of the large pole now on the Campus. At this task the ship's company helped him, with their tackle, at a critical moment, else he might have been discomfited. Having to choose between the two poles, he fixed on the larger weatherbeaten one, and thus Cornell was the first University to secure a 'full-grown' specimen of the Alaskan totem pole.

Retracing our steps back to Central avenue, we next cross South avenue, and come then to Sage Cottage, the smaller of the women's dormitories. Sage College, across the lawn to the right, is the other and larger, women's dormitory; but the Botany department is also housed in this building and has its conservatories attached as a wing. In the cornerstone of Sage College,

Ezra Cornell deposited a mysterious letter, of which only he knew the contents, saying in the closing remarks of his speech at the laying of the stone: "The letter, of which I have kept no copy, will relate to future generations the cause failure of the of this experiment, if it ever does fail, as I trust God it never will." Cornell, it will be remembered, was one of the first



Sage College Tower

schools in which co-education was introduced.

Continuing up Central avenue, we pass on the left, a row of professors' cottages, which extends to the Library tower; but opposite the cottages, on the right, is Barnes Hall, the home of the Chris-



Sage Chapel Entrance

tian Association. In it we will find the trophy room, containing a number of the various banners, cups and emblems, which proclaim Cornell's victories in athletics and debate. Here an interesting half hour may be spent; but the rather inadequate manner in which the collection is displayed is to be regretted, and detracts much from its appeal.

Just beyond Barnes Hall, also on the right, is Sage Chapel. In the Memorial Chapel of this are interred the Founder and his wife; John McGraw and Jennie McGraw Fiske, his daughter; both the latter being notable benefactors of the University. In the Sage Memorial Apse are interred the mortal remains of Henry W. Sage and his wife, after whom the Chapel is named, and whose gift it was to the University.

The interior decorations of the Chapel are the subject of much comment. They include many

memorial windows (notably the ones placed last, those commemorating the victims of the Chi Psi fire, the burning of the famous McGraw-Fiske mansion), whose brilliant coloring contrasts strongly with the more somber decorations of the roof, though this is also illuminated by glorious splashes of color. Of the decoration as a whole, it has been said that "it is rich in its suggestiveness of the centuries of Christian tradition, harmonious in its coloring, and entirely appropriate in its design and execution," and the Chapel is now pronounced generally to be one of the most beautiful places of worship in America. There are but few examples of mosaics to be found in the United States which rival, in either size or merit, those in the Memorial Apse.

Painted on the brown ground of the center of each of the sloping panels of the roof are ecclesiastical emblems on canvases of quatrefoil shape; namely, "the temple, the ship on the wave, and the ship and the pennant—all symbols of the church; the anchor, which is a symbol of hope and patience; the lamp, of piety and wisdom; the lamb and pennant, of the Redeemer; the cross, of the redemption; the interwoven triangles, of the Trinity; the lion, symbol of the Tribe of Judah; the open book with a hand pointing to the Beatitudes, symbol of the Gospels; the sword and the palm, of martyrdom and victory; the chalice, of faith; the flaming heart, of fervent piety and love; the standard, the

wreath and the crown, symbols of victory over evil; the sun, stars and the crescent moon; of the luminous nebula which emanates from and surrounds the Divine Essence; and finally the burning bush, symbol of the religious fervor of the martyrs."

Cornell students are not required to attend chapel at any time, nevertheless the building is generally crowded beyond its capacity every Sunday, and at both services, the one in the afternoon being principally musical. Before the doors are opened one may often see the curious spectacle of



Sage Chapel Interior

a long waiting line before a church, and standing room only is often the order of the day. There are reasons for this. The congestion is partly due to the attendance of the townspeople, who, however, must wait until five minutes after the hour before being admitted. But the more potent reason for the large attendance is the list of notabilities of all creeds, who, on succeeding Sundays, fill the pulpit. Of those who have been heard there in recent years are the Rev. Lyman Abbott, Edward Everett Hale, Hugh Black, Dr. Henry VanDyke, Robert Collier, and others of equal renown.

Emerging from the dim aisles of the Chapel, we stand at the foot of the great square tower of the Library, from whose spire the chimes ring forth their merry peal every morning, noon and night. These chimes are one of the first gifts of a sentimental character which the University received; and were presented by Miss Jennie McGraw in 1868. On the great bell which strikes the hours is inscribed this stanza, composed for it by Professor James Russell Lowell, one of the University faculty at the time of its founding:

"I call as fly the irrevocable hours,
Futile as air, or strong as fate to make
Your lives of sand or granite, awful powers;
Even as men choose they either give or take."

Before continuing farther we can not do better than climb to the top of the tower (obtaining the key to the door at the librarian's desk), and, after



The Huruffled Krach of Lake Cayuga

taking a peep at the mechanism of the great clock, clamber up the spiral stairway to the highest platform. From that lordly vantage point we may make a comprehensive survey of our surroundings. To the west spreads the broad plain of the Inlet delta, rimmed on its far side by the long ridge of West Hill. The projecting spur of South Hill is the valley boundary to the south, as is East Hill to the east. The East Hill comprises the highland on which the University is located, and it falls away southward to the Six Mile valley, and is cut to the southeast by the broad shallow trough of the Cascadilla valley. Directly to the east of the University the land is higher than the Campus, but it remains nearly the same level to the northeast. To the



The Quadrangle from the Library Tower

north, the most beautiful outlook of all, one surveys the unruffled reach of Lake Cayuga stretching away as far as the angle of the bend at Crowbar Point permits one to see. Beyond that there are indications of its extension in the slope of the hills, but the blue of the water is hidden. The reach from the mouth of the Inlet, marked by the lighthouse, to Crowbar Point is the stretch used by the Cornell crews during their training. Directly below us is spread forth the great quadrangle of the Campus.

Now having gained our bearings anew, we may recommence our tour with a visit to the Library. The inscriptions on the bronze tablet in the doorway hint a curious story. A few words will suffice to explain, without attempting to consider the right

or wrong of the actors. It was the will of Jennie McGraw Fiske that after her death a large part of her fortune should come into the coffers of the University; especially to endow a library. This will was contested, and her immediate purpose was defeated when Cornell lost the suit; but it was in a way fulfilled by the gift of her friend Henry W. Sage, and to this gift the inscriptions refer.

The collection of medieval illuminated manuscripts and specimens of early printing, in the entrance halls, always attracts attention; and the walls of the big reading rooms are hung with the portraits of great lecturers. Especially notable is a life portrait of the founder, Ezra Cornell. In the north wing of the Library is housed the White Historical Library, a wonderful collection of books; and here are also on exhibition many interesting relics connected with the history of the University. Other interesting and valuable collections of books are the Dante, Petrarch and Icelandic libraries, recently acquired by the University.

In the main library are some three hundred and fifty thousand volumes, to which large additions are being made yearly. The reference library of about eight thousand volumes is arranged on the shelves of the main reading room, which seats some two hundred and twenty readers, and are thus accessible to any student; while the rest of the volumes are stored in the fireproof stacks in the south and west wings of the Library building. A

visit to these stacks is well worth while to anyone interested in books, as their construction is wholly of glass, iron and stone, affording no opportunity for the spread of the flames; thus safe-guarding this great storehouse of human knowledge.

Leaving the Library and going still northward now along Central avenue, one passes in succession Morrill, McGraw and White Halls. These are the oldest buildings on the Campus, and from their shape and similarity they have not inappropriately been called the "three caskets." This resemblance is partly due to the fact that the University, as originally planned, was to face the west; and these first three buildings all have the ornateness of their fronts facing the long slope of the valley, while their square backs are ranged along Central avenue.

In Morrill, the first building erected by the University (with stone quarried on the Campus), are the University offices, including those of the Registrar, an official who is well versed in all that pertains to the institution, and who is glad to dispense information when he is not too busy. On the upper floors of Morrill is the laboratory of Experimental Psychology, worthy of a visit by those interested in this science. McGraw, which is next in line, contains the departments of Physiography, Geology and Zoology. Entering first the south door of the building, one sees mounted on the wall a huge slab of Triassic Connecticut sandstone with gigantic fossil foot imprints of the three-toed Bron-

tozoum Giganteum (terrible lizard) — one of the great biped reptiles of Mesozoic Time, an age whose remoteness is measured by perhaps a million years. In one of these foot prints even the delicate mold of the beast's scales can be clearly seen, preserved throughout all the ages which have since passed.

On the second floor of McGraw, south entrance, is the laboratory of the department of Physical Geography, replete with maps, relief models and pictures of all the phenomena of the earth's surface configuration. It is said to be the most complete laboratory for Physical Geography study in the



ArGram Gall

country. A collection of Alaskan Glacier pictures forms a gallery in the upper hallway.

On the first floor, middle entrance of McGraw, and passing through the first door to the left, one finds the Silliman collection of mineral specimens, with recent additions, handsomely displayed in a number of cases. If you have invested money in mining stocks it will interest you to peer over the collection and note the ores of the metal for which you are helping to delve. Indeed, the beauty of these specimens makes them attractive to anvone. Of especial interest to all visitors is the Museum of Natural History on the second floor, middle entrance of McGraw Hall. This is connected with the department of Zoology. The Museum comprises some very noteworthy specimens but in very shabby quarters. The morbid person, who likes to see monstrosities, may find an attraction here in the shape of three legged and two headed calves, and other abnormal variations in animal life. Here is also an Egyptian mummy, divested of all its wrappings, enabling one to see the form and features of a man who lived his mortal span thousands of years ago. In the gallery above the main floor of the Museum is a very complete collection of shells from all parts of the world.

In White Hall are found the College of Architecture and the recitation rooms of the Mathematics department. Here we may pause for a moment to clear up a possible misconception. Although the

College of Architecture, as such, only occupies part of White, the activities of its students are by no means restricted to these quarters. On the contrary, they go to classes and laboratories in several of the other colleges, wherever it may happen, in accordance with University economy, that instruction in the subject can best be given. For example, if the majority of students in Civil Engineering must use a certain laboratory, whereas only a small proportion of Architecture students do, then the laboratory is to be found as a rule in the Civil Engineer's quarters. The same arrangement applies to other The drawing rooms of the College of Architecture, which are in White, are models of convenience, and are worthy of a climb to any one interested, especially as there is almost always a collection of art and architectural sketches posted on the walls of the display rooms adjoining.

Beyond White the Central avenue walk terminates in front of Franklin Hall, the headquarters of the Department of Electrical Engineering. This building is adorned by a frieze of medallions of famous scientists. The cross street from the west, which has its terminus here, is University avenue, and on it, just beyond Franklin Hall, is Morse Hall, a building devoted wholly to the uses of the Chemistry department. With possibly one exception, this is the most completely and elaborately equipped department on the Campus, of those connected with the College of Arts and Sciences.

An inspection of the laboratories, with their complete equipment of desks with gas, water and compressed air cocks, available to each worker, is well worth while; as are also the lecture room fittings. The lecturer's desk is a veritable maze of stop-cocks and switches for supplying various gases and electrical currents of all intensities, making the demonstration of almost any chemical experiment feasible in full view of all the class. Visitors are privileged to attend single lectures of the University courses if they enter without disturbing classes at the regular periods; and the lectures in Elementary Chemistry often have a spectacular interest.

In the north wing of the second floor of Morse Hall is the Chemical Museum, where are exhibited jars of hundreds of chemical compounds in crystal form—many of them very rare. The visitor can see "how it looks," but of its properties this will tell him little. The assay, combustion and electrical furnace rooms are in the basement of this wing, and are also deserving of a visit.

The view up the valley, from the entrance to Morse, of itself commands the attention. Below is spread the wide valley floor, and beyond, in a broad perspective, are the lines of the hills with their varied configuration, and the play of the light and shade on their slopes as the cloud forms hurry in procession before the sun. It is an outlook which stirs within us the desire to wander over their sides to the far distant notches, and look at the great



The Mirw Up the Nalley



world which, it seems, must lie beyond, all outspread. Can one wonder, when gazing on such a scene, at the trend of primitive peoples, valley born, to picture in imagination the lands beyond the hills as the realm of myths; a fancy world wherein dwelt all that to them was strange and unaccountable?

Down the slope, to the west of this vantage point, is the terrace where stood the famous Fiske-McGraw mansion, afterwards the Chi Psi fraternity house, whose destruction by fire, with a loss of seven lives, marks at once one of the greatest tragedies and the brightest star of heroism in the history of Cornell. A new lodge takes the place of the one thus destroyed, but money can never restore the art and the furnishings of the former mansion, on



Sibley College

which the builders lavished thousands, and ransacked Europe to provide it with fittings and decoration.

Retracing our steps now toward the east, we pass along before the length of Sibley, the home of the College of Mechanical Engineering. The recitation and drawing rooms are in front, while behind, in separate buildings, are the shops, testing and dynamo laboratories, and the forge and foundry. Under the central dome of Sibley, which was added recently to fill in the gap between two buildings which formerly stood on its flanks, is Sibley Hall, on the second floor; and on the first floor, below this, the Siblev Club Room, the meeting place of the Sibley students. In a case in this room is preserved an interesting relic, the first telegraph instrument. This relic is of especial interest to Cornellians, for by the financial success of the telegraph, due largely to his scheme of stringing the wires on poles, Ezra Cornell's fortune was amassed; and this fortune he subsequently gave in large part to the University. The original tape of the first message lies beside the instrument, and on it may be read the historic words, "What hath God wrought?"

Turning north, and then again to the east for half a block, we digress now for a few moments from the quadrangle, to peer from the iron bridge over Fall Creek, down on Triphammer Falls, and the Hydraulic Laboratory of the Civil Engineers;



Triphammer Falls and Beebe Lake

a building suggestive of a gray, old castle. Above the falls is Beebe Lake, and below it is the deep gorge, which in its traversing, will afford quite an experience to the visitor who hails from a section where such chasms are not found.

On returning to the quadrangle and

to the point in front of Sibley, at which we left it, and turning south from there, we pass the many gabled, ivy covered Lincoln Hall, where the College of Civil Engineering is housed. This college has a very pleasant location, with a beautiful clump of oaks just in front of the building, under which trees the Class Exercises, of the senior class, are held at commencement time.

It will be well worth while to step out under the low hung branches of these trees, to get the effect,



Lincoln Gall, Through the Trees

from this point, of the long front of Goldwin Smith Hall of Humanities, the most imposing building on the Campus, and one whose architecture has been alternately lauded greatly or condemned utterly. There are those who say it is a composite of a Grecian temple in the middle and an Indian wigwam at each end. On the other hand, the simplicity of its lines, the suggestiveness of its solid proportions; and especially the compelling power of the massive columns of the central portal, combined with the gleaming white of its material, lend it a grandeur which makes its own impression on the unprejudiced, unprofessional observer.

In the entrance hall are the busts of Goldwin Smith and his wife, the latter after a model by Thorwaldsen. There is also a bust of King

Alfred of England, the gift of Goldwin Smith and his wife.

In the basement rooms to the right and left of the entrance hallways is the Museum of Classical Archaeology, composed of plaster casts of the masterpieces of antique sculpture and bronzes. These are full size and over five hundred in number. As a museum of classical sculpture this is said to be un-

excelled among the collections of American Universities, and among other foundations only by that of the Museum of Fine Arts of Boston.

The modern class and lecture rooms of Goldwin Smith Hall also attract attention because of their convenience, and the invitation to work which they seem to extend; the latter a qual-



The Portal of Goldmin Smith Hall

ity sadly lacking in some of the older buildings. On the second floor is an educational museum which has an especial interest for teachers.

Emerging from Goldwin Smith Hall, through the south doorway, we see facing us, and completing the quadrangle, to the right Boardman Hall, the Law School building; and to the left Stimson Hall, the College of Medicine. Goldwin Smith, Stimson, Boardman and the Library are built of the same material, and in time of building date from youngest to oldest in the order named. Thus they illustrate the progressive changes in appearance that a building of such stone undergoes on exposure to the weather, and they are the stock illustration of this phenomenon to students of architecture and geology.

The laboratories and dissecting rooms of Stimson are interesting, but the latter are closed to visitors while the term's work is in progress.

Turning now again to the east, and crossing East Avenue, we find ourselves under the pines which surround the residence of former President of the University, Andrew Dickson White, educator, diplomat, author; the most famous living personage intimately connected with the history of Cornell.

His residence adjoins the Rockefeller Hall of Physics, which is of the same date as Goldwin Smith Hall of Humanities, but contrasts with that building in that Rockefeller Hall expresses the acme of utility in construction, whereas architecturally, Goldwin Smith Hall makes also an appeal to the aesthetic



Nem York State College of Agriculture



sense. Thus, although the interior arrangement of Goldwin Smith Hall is almost ideal, vet in the building of Rockefeller Hall the beauty of a thing has been measured solely by its utility. In the equipment of Rockefeller, the Physics department pressed into service every principle of the physics they teach, and the result is that the lecture and recitation halls are fitted up with all manner of devices for making demonstrations and experiments in their science; and for the convenience of those using them. The question comes up in every community when the building of a new school is contemplated, whether every cent expended shall subserve utility, or whether the beauty of the edifice shall also be considered. A suggestion on this question may be gained perhaps, by a comparison of Goldwin Smith Hall of Humanities and Rockefeller Hall of Physics.

On a slight rise behind, and some two blocks beyond Rockefeller Hall, are the new buildings of the College of Agriculture. The architecture of these is at once simple and impressive, and their location, overlooking a broad sweep of fair fields and farm checkered hillsides, is typical of the overlordship that science, as embodied in the college, is gaining over agricultural pursuits.

The various departments in this college are of especial interest, intimately connected as they are with our daily economy. Here is also found the station, for the Ithaca region, of the United States

Weather Bureau. A half hour spent in it means an intelligent appreciation of the problem with which the forecasters of the weather are daily wrestling.

In the far eastern wing of the college, on the ground floor, are located the Dairy and Cheese-making departments, and in these the various processes of the manufacture of such products is illustrated in an especially interesting and instructive way, so that every rural visitor may see how a dairy can be conducted with a care for cleanliness which is thoroughly scientific.

The entomological collections and the equipment of the department of Domestic Economy on the upper floors have a great interest for many, the latter especially for feminine visitors.

From the broad, terraced approach to the Agricultural College one looks over Alumni Field, with its tennis courts, base ball diamond and running track. This is the University's new athletic field, in whose construction an immense amount of grading was necessary, but which, completed, affords athletic facilities at once adequate and accessible from the Campus; thus eliminating the greatest drawback to a general participation in athletic sports, which the great amount of time consumed in going to and coming from Percy Field, down in the valley, formerly offered.

Turning again toward the main part of the Campus we have yet to see the Veterinary College and the Fuertes Astronomical Observatory. Of the



Tiberty H. Bailey Director of the New York State College of Agriculture at Cornell University



latter we can see from this point the three bald-pated domes which shelter the telescopes. Visitors, except those especially interested, are not admitted to the Observatory because of the close quarters. In the Veterinary College is a museum which is of interest to animal lovers and owners; and before the college is one of the most beautiful lawns of the Campus. It may be appropos here to say that the Veterinary College, and also the College of Agriculture, are New York State institutions under the direction and management of Cornell University, but are supported entirely by annual state appropriations.

We find ourselves now again on East avenue and in the shade of the Ostrander Elms. These trees were the gift of John B. Ostrander, a poor man, who nevertheless wanted to contribute something to the new University; and therefore offered the trees with the sentiment, expressed to Henry W. Sage: "They will make a shade for somebody after you and I are gone." In our weariness we are grateful to him, and, our round completed, in our weariness again, we realize the magnificent proportions of the Campus, extending as it does over a half mile north and south, and almost a mile in the east and west directions.

As all but the laboratory classes are of one hour's duration, it is when the big bell in the tower of the Library strikes, "at the hour," that the Campus best reflects University activity. Then, at

once, the walks and cross paths are suddenly thronged with students and graduates, idling or hurrying, depending on whether they are "studes" or students, from one class to the next; which next class perchance meets in a building a quarter mile distant. It is an animated scene; freshmen patter back and forth, wearing their little gray caps, groups of upper-classmen gather in entrance hallways, and perhaps the chorus of the latest popular song is being shouted from some doorway. Threading their way through the throng are instructors and professors, with felt bags bulging of text books; edging their way past groups of students on the steps, who are, perhaps, comparing notes on the questions and answers of a preliminary examination of the previous hour. In that ten minutes "at the hour" acquaintance nods to acquaintance, and friend chats with friend; everybody on the Campus is in sight. Between the hours, however, the great quadrangle is as silent as a graveyard, and betrays no sign of the swarming life the gray walls contain. It is positively an eerie feeling that one has when the last student disappears, and one paces the walks again all alone.

One can not, however, by this mere enumeration of the buildings and cataloging of their contents, nor yet by chronicling the activities of undergraduate life, arrive at the real charm of the Campus. To attain that, one must live on the Campus until all the illuminating vistas, the subtle fascination of

little corners and points of view are indelibly stamped on the mind, so that they are an entity that we can carry with us in imagination. For there are days when the clouds hang low and all is gray; and others when there are fleeting lights and shadows; and again days of broad open lights, when snowy cumulus banks tower high above the buildings.

In former years the only approach to the quadrangle was up the length of Central avenue. Now, however, part of this traffic is diverted and swings up from South avenue over toward Sage College, and from thence along a new walk, parallel to Central avenue, to Goldwin Smith and Lincoln Halls, and to Sibley College. This highway affords many



The New Approach to the Quadrangle

new groupings and glimpses of the buildings; which vistas have to Cornellians now the charm of novelty, but are soon to become a cherished inheritance, and as typical of Cornell as Central avenue views. This new walk affords an especially impressive view of that great gray sentinel, the Library Tower, on guard always over the Campus. At this same view point we see, under the green of the trees, the gleaming white of the three newer buildings, Boardman, Stimson and Goldwin Smith Halls.

Morrill, McGraw and White are the oldest of the buildings on the Campus; and of these McGraw is ivv-mantled, has a tower and massive stone steps. The time is late afternoon in early spring; the last clouds from a warm shower have just passed over, and now the sun, still high in the west, makes a reflection of the cerulean blue sky and the flowing lines of the elms in the little pools which fill the hollows of the old, worn walks. last of the afternoon stragglers are forsaking the doorways, wherein they lurked during the rain, and wend their way down the hill. It is the idyllic time, when breathes the true, free spirit of the Cornell Campus, and holds full sway. Would that one might live in its enchantment always, for it engenders the optimistic glow of youth, and all things assume a roseate hue. And even though we must now quit its confines, the remembrance of this Campus magic will linger long with us; and with it the Cornell Spirit itself,—of which it is a part. Up and Down Central Avenue



Up and Down Central Avenue

N every great city there is an artery where its life pulses the most actively and most visibly. In that artery a human tide rises and ebbs with the day's coming and going. At Cornell there is also such an artery, Central avenue. There too, we see the influx and the outflow of a great human tide; but its periods do not conform in time to those of the city; moreover, there are, during the day, many minor rises of the human tide on Central avenue.

The freshman's first travels, over its winding course, extending from Cascadilla bridge to Sibley dome, are initiations into college life. The more so because in that first week of the college year, the avenue is a scene of feverish activity, for it leads to Davy Hoy's office, up in Morrill; and in that grim place (over whose door might well be posted the legend, "Who enter here, oft leave Cornell behind") all undergraduate interests of that first week focus; concerned as they are, with registration, arrangements about entrance conditions and petitions. Thus there is at that time a ceaseless

travel during the day's length over Central avenue's worn pavements.

Even now it is with anxiety that we measure the slope beyond Cascadilla bridge, for the question that is uppermost in our minds is: Will Davy let us register with conditions? But for the nonce we forget our anxiety, as our eyes are caught by the huge chalked signs which emblazon the walk at our feet. These are the fruits of the painful labor of the "ass" manager competitors, toiling in the wee, small hours of the night just passed. The first announces the n×++th exhumation of the "Widow", and assures us that that funny ancient is still to be had, every issue of the year, for two "simoleons." There follows next a bulletin, that he who runs may read, informing that:

FOOTBALL
FIRST GAME OF THE SEASON
HOBART VS. CORNELL
PERCY FIELD -- -- 3 P. M.
50c
SEASON TICKETS GOOD

By now we are under the long arch of the elms which extends from Sage Cottage to the Library tower; a vista which has been from "Cornell time immemorial" the delight of the kodak fiend. One can almost imagine those trees giving us a first inspection today; and imagine also, that, as we



"Signs of the Times"



Up and Down Central Avenue

hurry up and down the hill, under their boughs, in later days, they will hold whispered conferences over us, and adjudge us, whether we are worthy; so stately they seem, and so full of personality. Through their graceful, sweeping limbs one glimpses dimly the gray heights of Library tower, and we are of a sudden impressed by the something of grandeur and strength which the scene embodies, and then, as we would muse on in dreams—we find ourselves in the hands of the Philistines.

These are a doughty band of ass-managers, who hem off all escape, the while thrusting printed forms into our hands with threats of "Subscribe for the Sun?" "You can't get along without the Sun; all the college news every morning!" We subscribe. Then, "Got your season ticket yet?" "Don't shortskate; buy a season ticket, good for all the games!" We buy, and promise to have a 'dislikeness' of ourselves taken by a local photographer, to be affixed like a postage stamp to the ticket for identification purposes. Then we subscribe for the Era, the Widow, and even perchance, the Alumni News, and breathe more freely, for apparently the road is clear. Vain hope, we have yet to encounter the Pressing Contract, and the Laundry Agency man, and finally, crowning humiliation of all, out steps a haughty Junior and holds before our dazed eyes an "Official Courses of Instruction," twenty-five cents, please!" We eagerly secure



The Mightiest Surge of the Year

a copy of this—to find a few minutes later, oh chastening thought, that they are gratis at the office. "He saw that we were verdant freshmen;" that idea, and not the quarter gone, is what hurts.

At the noon hour of that first day of the college year the avenue is still, for Prexy is delivering his annual address in the Armory, reading to us excerpts from letters sent by infuriated mamas and papas who clamor against the treatment Willie has received at the hands of barbarian undergraduates at Cornell. Silence. Then we are solemnly forbidden to engage in unorganized rushes. Finally some talk about ideals—we glow with pride that we too are now college men—and then it is over, and there swells down the avenue the mightiest surge of the year,



"Upper Central Avenue"



Up and Down Central Avenue

as the crowd comes off the Campus for its midday meal.

Other, succeeding days, are more humdrum, but not, therefore, less interesting. At half after seven in the morning there begin to emerge, from the shadowy, subterranean portals of the boarding houses; the great cohort of "studes" with eight o'clocks; and, a little later, at the merry call of the chimes, a great black column moves up the hill. There are Sibley men with tin dinner pails, looking like mill hands; the grind with his armful of books; the frosh, with wistful eye, and wrinkled, cheap, gray cap; the jaunty senior, and the co-ed—all climbing, climbing, to the music of those sonorous bells. This is the rising tide at its height, and the great column, seen from the hilltop, looks like a monstrous centipede, advancing tortuously. At one, in the afternoon, we have the ebb tide rushing, regardless, past "Pinochle" on the bridge, solicitous for old clothes.

The aspect of the avenue is a true index to the change of the seasons. In autumn, the late October days are marked by the rustle and scurry of the falling leaves, as the breezes hurry them across the broad lawns. Then come the days of the early snowfalls when the trees drip in utter dejection, and the avenue is a sea of ooze. But these days are soon succeeded by the crisp cold of winter, when sharp winds bite cheerfully, and the snow packs hard and glassy underfoot. Then one

abandons tedious walking for a glorious slide down the hill.

A slender Junior Week girl was gliding daintily along, once upon such a time, while behind her came a great, husky, six foot "stude," a stranger to the girl. The slope at the point of this advance is long; faster and faster they go, the man is heavy and the force of gravity is working mightily. He gains on the maiden; now he has all but overtaken her; he can not stop without a fall (and perhaps at the same time upset femininity), so he siezes the dilemma by the horns, or more literally, grabs the girl about the waist, and, swaying rythmically, down the hill they go together, he bawling at intervals, horrified: "I beg your pardon," and she answering, as regularly and politely, over her shoulder, "Why certainly," until they reach the bottom of the slope and receive the plaudits of the crowd: he crimson, she smiling and collected.

With the approach of spring comes relaxation, and the elm trees become veils of gray mist—a part of the hazy languor which o'ertakes all organic life at this time. Even Jack Moakley's runners, in their mud-splashed white suits, seem to abate the winter vigor of their sprint from the Tower to the Armory. And by the time the summer breezes are whispering among the full developed leaves, we say goodbye to the avenue until next fall.



Phen the Elm Trees are Meils of Gray. Mist



Campus Walks and Paths



Campus Walks and Paths

NE can not be long on the Cornell Campus and escape the allurement of the many walks and paths which open invitingly at almost every turn, whenever one forsakes the confines of the quadrangle itself. From the early days of Cornell history the sylvan retreats which enclose the Campus have called for exploration; and hard, beaten paths now mark the trails of the first invaders of the gorge banks and the hill slopes.

The two most notable, of the walks which lead directly off from the Campus, are Goldwin Smith walk and the Forest Home path.

The former winds along both sides of Cascadilla stream; beginning on the east side of the stone arch bridge, and plunging at once into the evergreen of the tall hemlocks which overshadow stream, gorge, and walk completely. So long as he was at Cornell, this walk was the favorite retreat of Goldwin Smith, the Oxford professor, whom A. D. White persuaded to leave England to take a position on the faculty of the newly founded institution of Cornell.

The path is bordered on the one side by a limpid stream, like a meadow brook which has plunged into the forest; and on the other looks down into the dark gorge and the rushing white of the Cascadilla waters, as they leap, foamflecked, over ledge after ledge in their hurrying course. At the end of



Goldmin Smith Malk in Minter



A Waterfall Enscoured in Ferus and Shrubbery



Campus Walks and Paths

the gorge the moss-covered, picturesque dam of an old pond creates a waterfall, ensconced in ferns and shrubbery. Here the valley opens out, and the path turns where a footbridge crosses to the opposite side of the gorge. On the far side, the path again disappears among the trees, and this time skirts the very edge of the cleft, finally emerging into the open once more at the foot of East avenue. Not the least of the charms of Goldwin Smith walk is its accessibility, and the fact that its round can be completed in twenty minutes; it affords the woodland ramble for a leisure half hour.

The path to Forest Home is longer, continuing



The Cascadilla Stream

for about a mile, and leads from the Campus to the little village whose name it bears; following along the shores of Beebe Lake and the upper gorge of Fall creek. It also is overshadowed by evergreens, hemlocks and pines, with often a great chestnut and a clump of oaks or willows interspersed. Its aisles are an especial delight in the autumn when the loose-heaped, crisp, gav-colored leaves from the deciduous trees crackle underfoot, and one sees the opposite bank of the lake as a riotous mass of red and yellow; a great panel of color betwixt the blue of the sky and its repeated, deeper shade in the water. This again is the path which leads to the skating house and the toboggan slide; and in winter it is merry with the voices of those who daily court the exhilaration that only these sports can offer

At Forest Home the continuation of this path follows the open road; but one need only turn to the left, and go up the hill for a short distance on the branch road, to come upon another path, half hidden among the bushes, which offers a way of return on the opposite side of the stream. This is a wilder passage, and affords here and there the prospect of the rushing waters of the gorge, and, at the lake's head, a view of the prettiest waterfall near the Campus. No one can resist the charm of this little cascade, with its perfect setting and surroundings. Continuing, one comes close to the lake's edge among picturesque reeds and sedges,



Forest Home Path in Autumn



Campus Walks and Paths

which stand erect and slender as though they were sentinel guards of the water's expanse.

At the foot of the last climb in this path, and near where it ends on the road, is a side path, leading to the head of a stairs which afford a somewhat precarious access to the bottom of the gorge below Triphammer falls. Recently, money (subscribed by Brooklyn alumni) has been expended in constructing a number of other paths which lead directly to the bottom of the gorge. These start on the south bank, and at the end of East avenue. No doubt these paths will achieve a wide popularity in the future because of the more convenient access they furnish to the stream's edge. It is by looking up from the bottom of the gorges, that one comes to a best appreciation of their scenic beauties and romantic



The Prettiest Waterfall Near the Campus



The North Edge of Berbe Lake

wildness; features which have made the Cornell country famous.

Another quite secluded path winds down the south bank of the Fall creek gorge, beginning across the road from Morse Hall. and continuing, below the lower bridge, to a vantage point from whence one looks down on the giant staircase of the Ithaca falls, some one

hundred and sixty feet high. Generally, however, much of the water which should flow over these falls is diverted, for power purposes, into the tunnel which has been carved through the solid rock below us. This tunnel is itself one of the interesting features of the region to all Cornellians, linked as it is with the early activities of the Founder. Before his time the water had for years been carried in a flume along the cliff wall,

Cornell Walks and Paths

to the wheels of the mills below. This flume required almost continual and difficult repairing to keep it in working order. It remained for Ezra Cornell to note that a stratum of sandstone, occurring some



Ithaca Falls from Above

six feet above the level of the flume, would furnish a strong roof for a tunnel; while the tunnel itself could be very readily cut through the friable shales below the sandstone. His project was, after some opposition, carried out, and the tunnel, still in use today, is a monument to the Founder's resourcefulness and ability to turn to his purpose the natural advantages which the location afforded. One may traverse the dark passage of the tunnel by a plank walk which bridges the black waters gurgling over the tunnel bottom. The decay and crumbling of the soft shales on the sides of the passage, have removed all traces of its artificial origin; but the sandstone roof is still intact, and is as substantial as was the financial advantage which Ezra, as tunnel constructor, gained by its utilization.

The Founder—Ezra Cornell



The Founder—Ezra Cornell

ZRA CORNELL was born at Westchester Landing, Westchester County, New York, on January 11, 1807.

His father, Elijah Cornell, supported a family of eleven children, of whom Ezra was the oldest, by pottery making and farming. When Ezra was twelve years old the family located permanently near the village of DeRuyter, New York. To this place, in the far western part of New York State, the father was attracted by the fact that an extensive neighborhood of "Friends," or Quakers, were located there, of which religious faith both he and his wife were, and their ancestors had been for generations.

From his parents Ezra inherited a superb constitution, and from early youth he manifested the unusual activity, mental and physical, which lasted throughout his life. His aptitude for mechanical pursuits was extraordinary. At seventeen he had planned, framed and finished a two story house for the family, with no instruction, and with only the assistance of his brother, and of the astonished

neighbors who assisted at the raising—as was then customary.

Made ambitious by this success, Ezra left home in search of employment as carpenter. Failing to secure this kind of work, he spent two years in the vicinity of Syracuse in a lumber camp, and then a year in a machine shop at Homer. In that year he heard that the town of Ithaca, forty miles from his home, was thriving, and that its prospects were exceedingly bright, owing to the fact that the absence of railroads, at that time, made all the territory of the southern counties of New York and northern Pennsylvania tributary to Ithaca, because of its favorable position with respect to water routes. Ezra, therefore, after completing his engagement at Homer, set out to walk to Ithaca from his father's farm, taking with him only a few dollars and a spare suit of clothes. This was in April, 1828. Almost immediately on his arrival, he succeeded in securing employment as a carpenter. Not many weeks later his activities were transferred to the cotton mill operated by Mr. Otis Eddy, on what is now the site of Cascadilla Place. Here he held a position comparable to the modern one of maintenance superintendent; and a year later accepted a similar position in the more extensive mills owned by Jeremiah S. Beebe, where he remained for twelve years, becoming in time the confidential agent and manager of these interests for his employer.



The Founder - Ezra Cornell



The Founder-Ezra Cornell

This last position gave him full scope for the employment of his mechanical genius, and his devices, tending to economical operation, made the mills very prosperous. Characteristic of such improvements was his project of excavating a tunnel through the rock of Fall creek gorge, and thus obviating the necessity of maintaining the expensive, inefficient, and difficultly repaired flume along the south side of the gorge wall, which was then the means by which the water, used for power, was conveyed to the mills. This project was entirely successful, Mr. Cornell acting as chief engineer, and the tunnel, finished in 1831, is still in use today. Some years later he practically insured the constancy of this power supply by constructing the original of the present Beebe lake dam, and so creating Beebe lake as a storage reservoir.

In the second year of his employment under Colonel Beebe, Mr. Cornell married Mary Ann Wood, whose father had been a favorite pupil of Mr. Cornell's father, when the latter taught school during the winter months of his early residence in DeRuyter. It was while on a visit to Mr. Wood's home, with his father, that Mr. Cornell met Miss Wood who, like Ezra, was one of eleven children. Because of this marriage outside the Friend's Society, Mr. Cornell, who, up to that time, had been an active member of the Quaker Society, was formally excommunicated from the sect. Yet he held to their tenets faithfully throughout his life, though he

declined to accept the society's invitation to express regret for the offense and be reinstated. In the summer following their marriage, the couple began housekeeping in a dwelling which Mr. Cornell built just north of the mills, where they resided for twenty years, and their nine children were born, five of whom reached maturity.

In 1841. Colonel Beebe retired from active business, and Mr. Cornell was thrown out of employment. In this predicament he purchased the patent rights, for Maine and Georgia, of a new plow which had been invented by his neighbors, Messrs. Barnaby and Movers. While in Maine for the purpose of selling these rights, he made the acquaintance of Frances O. J. Smith, then editor and publisher of the Maine Farmer. Cornell's business was not completed on the first visit, and a year later, in 1843, he made a second visit to complete negotiations. Calling on his friend Smith, he found him engaged in attempting to explain an idea of his, Smith's, to a plow manufacturer, for a machine which was to dig a ditch two feet deep, and wide enough to lay a telegraph pipe in the ground, and leave the excavated earth conveniently near for filling the ditch, by means of another machine. Mr. Smith had taken the contract for laying the test line of Professor Morse's new invention, the telegraph, from Washington to Baltimore, with compensation at the rate of one hundred dollars per mile of pipe laid.

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The plow manufacturer was skeptical of Mr. Smith's ideas, and Mr. Cornell's arrival was opportune, for Mr. Smith immediately took him into confidence. Mr. Cornell's description of what ensued, as follows, is taken essentially from a memorandum book, in which he later wrote it down:

"An examination of the pipe to be laid, and a little reflection convinced me that he did not want two machines, one to excavate and the other to fill. I therefore, sketched a rough diagram of a machine which provided that the pipe, with wires enclosed, be coiled around a drum or reel, from whence it was to pass through a hollow standard, protected by shives, directly to the rear of a coulter or cutter, which was so arranged as to cut a furrow two feet deep and one and one-fourth inches wide. Arranged something like a plow, it was to be drawn by a powerful team, and deposit the pipe as it moved along. The furrow being so narrow, would soon close itself, and conceal the pipe from view."

At this proposal, Mr. Smith was almost as skeptical as the plow man had been, but he employed Mr. Cornell to build the machine, and indeed became so enthusiastic as it neared completion, that he invited Professor Morse to witness its trial. This trial was entirely successful, and here occurred the first meeting of the two men to whom the telegraph business owes its present day magnitude. Mr. Cornell's conviction that the

telegraph would become a grand enterprise, induced him to accept Mr. Smith's proposal that he superintend the laying of the pipe from Baltimore to Washington.

The underground pipe proved defective in insulation, as was first convincingly demonstrated



The Crest of Ithaca Falls

The Founder—Ezra Cornell

by Mr. Cornell, and on hearing of this, Professor Morse became anxious, and coming out to the work, asked a word in private with Mr. Cornell, and said: "Mr. Cornell, can you not contrive to stop this work for a few days so that the papers will not know it has been purposely interrupted? I want to make some experiments before any more pipe is laid." Replying to Professor Morse that he would comply with his request, Mr. Cornell stepped back to the machine and said: "Hurrah, boys; whip up your mules, we must lay another length of pipe before we quit for night." The plow was started at a lively pace, Mr. Cornell grasped the handles, and, watching his opportunity, he suddenly canted it over so as to catch its blade on a point of rock, breaking the machine into a complete wreck. Next morning the papers gave a graphic account of the "accident," and stated that there would be a delay incident to necessary repairs.

It became apparent that the wires must be placed on poles, and here again Mr. Cornell's genius devised the insulators to which the wires were fastened, after another device was shown to be unsatisfactory.

The Baltimore-Washington line was successfully completed; but with this the introduction of the telegraph was hardly begun. Notwithstanding the fact that its practicability had been proven, the public remained disinterested, because of the

belief that the business would not be sufficient in quantity to pay operating and installation expenses. Mr. Cornell, however, remained firm in his faith, and from that time on devoted all his efforts to the establishing and operation of telegraph lines in different parts of the country. After a struggle, which would have disheartened even the hardy, against mechanical and scientific mistakes and difficulties, bitter and relentless rivalry between competing lines on the one hand, and law suits over title and possession in other cases - in prosecution of all which business Mr. Cornell suffered all kinds of exposure and a painful railroad accident; there was finally accomplished by Mr. Cornell and those associated with him, the consolidation, in 1855, of all the telegraph interests in the Northwestern States, known thereafter as the Western Union Telegraph Company, and from this time on the prosperity of the telegraph business was assured and the foundations of Mr. Cornell's fortune laid

After the successful establishment of the telegraph enterprise, Mr. Cornell turned his attention to pursuits which had always held a great attraction for him; spending his time in travel with his wife, and in the creation of Forest Farm, a model country property of three hundred acres on what is now the site of Cornell University. Here he established extensive orchards and bred fine cattle from imported stock, so that the Farm

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soon enjoyed a great and enviable reputation throughout the country.

Mr. Cornell had always been active politically, and was greatly interested in public affairs. In 1861 he was elected member of the Assembly of New York State, held this office for two terms, and then, in 1865, was elected to the State Senate, which office he also held for two terms. While a member of this body the founding of Cornell University, as is related elsewhere, was accomplished.

In that account, credit has been given Mr. White for the arduous creative and administrative duties he performed. It remains here to tell of the business management of the establishing of Cornell University, which task fell entirely on Mr. Cornell's shoulders, and to the promotion of



The End of the Tunnel

which he devoted all his time during the latter vears of his life.

The land scrip, which came to New York State by the provisions of the Morrill Act, amounted to nine million, four hundred and twenty thousand acres, to be located in the state to which it was alloted, or, if no public lands existed in that state, to be sold; as no state could hold land within the boundries of another state. There were, at that time, no public lands in New York State, and, as a consequence of this fact and similar conditions in other states, the land scrip, nominally worth one dollar and twenty-five cents per acre, had fallen in value to fifty cents, due to the glutting of the market by the various state sales. Mr. Cornell realized that if the warrants could be located on well selected timber lands in the Western States, a much larger sum could be realized. Therefore he endeavored to persuade the trustees of the University to purchase the scrip from the State, and themselves locate the lands, offering on his part, to advance the necessary funds for this purpose. However, the trustees were unwilling to incur the additional burden of local taxes and expenses this would necessitate, and Mr. Cornell, seeing no other course available, to save for the cause the great intrinsic value of the grant, offered to purchase the scrip at sixty cents, locate the lands at his own expense, pay the local taxes, and obligate himself to pay into the State treasury, for the

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benefit of Cornell University, the entire profits to be realized later from their sale. This offer was accepted, and the contract executed in September, 1866.

The location of these lands in the pine country of Wisconsin, and in farm areas in Minnesota and Kansas, was a tremendous task. Into this arduous labor Mr. Cornell put all his efforts for eight years, finally succumbing, in 1874, to a serious illness incurred by overtaxation of his strength in this work. As a result of his efforts, the University realized not only the one million, six hundred thousand dollars over and above the sixty cent price which Mr. Cornell had figured might be obtained, but approaching double that amount, practically three millions of dollars.

The unselfishness of these efforts was wholly beyond the comprehension of a large part of the public, and during this time Ezra Cornell was libelled and misrepresented, called a land grabber and corruptionist. These charges became so open and bitter that the Legislature, in 1873, ordered an investigation; when Mr. Cornell was completely cleared and his slanderers effectually silenced. One must admit that if the equal of his task were undertaken today by some philanthropist, that philanthropist would have to undergo the same villification. Such disinterested devotion is far above the average of human nature, and the world can not believe in it until it is compelled. The

illness which constrained Mr. Cornell to relinquish this work in 1874, resulted in his death in October of that same year, and just a few weeks after the commissioners of the Land Office had approved the transfer of Mr. Cornell's contract to the University trustees, so that the full benefit of his labors, though unfinished, accrued to the University.

Ezra Cornell was six feet tall, somewhat spare in figure, rugged of feature, with high cheek bones and a prominent forehead. His muscular development was unique, and his love of activity is evidenced by his devotion to pedestrianism, a form of exercise he developed in vouth and never relinquished. He could, and often did walk forty miles, day after day, without effort. In manner he was austere and abrupt, though singularly free from harshness in his judgements. This manner detracted in some sense from his popularity. An anecdote, related by President White, is especially illustrative in this connection. A student once said to him: "If Mr. Cornell would simply stand on his pedestal as our 'Honored Founder,' and let us hurrah for him, that would please us mightily; but when he comes into the laboratory, and asks us gruffly: 'What are you wasting your time at now?' we don't like him so well." The fact, on which the remark was based, was that Mr. Cornell liked greatly to walk quietly through the laboratories and drafting rooms, to note the work. Now and then, when he saw a student doing something which especially

The Founder -- Ezra Cornell

interested him, he was anxious, as he was wont to say, "to see what the fellow was made of," and he would frequently put some provoking question, liking nothing better than to receive a fitting answer.

Another story may be appropos here, as it also throws light on Ezra Cornell's character. During the Civil war the young women of the village held large sewing circles for the purpose of doing work for the soldiers. Mr. Cornell was asked to contribute to their funds, and, to the great surprise of those present, he declined, saying dryly: "Of course these women don't really come together to sew for the soldiers; they come together to gossip." On the young ladies protesting the injustice of this, he answered: "If you can prove that I am wrong, I will gladly contribute; if you only sew together all one afternoon, and no one of you speak a word, I will give you a hundred dollars." The society met and complete silence reigned. The young men of the community, hearing of this, and seeing an admirable chance to tease their fair friends, came in large numbers to the sewing circle, and tried to engage the women in conversation. At first their attempts were in vain, but finally a skillfully put question evoked a reply from one of the young women. This broke the spell. Of course the whole assembly was very unhappy; but, when all was told to Mr. Cornell, he said: "They shall have their hundred dollars, for they have done better than any

other women ever did." It must not be understood from this that he was cynical toward womankind. His espousal of the cause of co-education, if nothing else, would dispel any such opinion.

His tenacity of purpose was his most distinguishing characteristic. One reads it in all his life, and it continued to the day of his death. When friends remonstrated with him, and urged him to free himself from the cares which beset his last days, he declared that he was planning to make "yet another million dollars for the University endowment." Was there ever such another Founder?



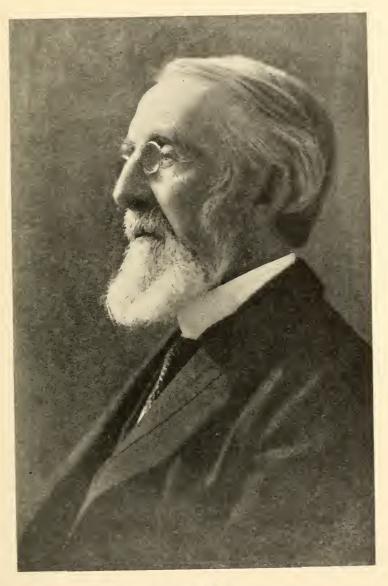
The Approach of Night — Cascadilla Gorge



HE material for the following pages has been gained almost entirely from President White's Autobiography; a book for which all Cornellians owe him a profound debt of gratitude—a debt altogether distinct from that greater reverence which we accord him for his services to Cornell. To this book we may turn for the story of Cornell's founding, told with the fullness of personal reminiscence which is so rare; and which for every Cornellian has, in this case, all the charm of romance. In its pages, the great names, which we of a younger generation associate in a vague way with the period of the University's beginning, become real men and women; and thus we are, even at this later date, permitted to breathe of, and profit by the enthusiasm with which those men and women entered upon the heroic task of creating the great University we know today. That its ideals and policies were conceived in large measure by President White, and that his genius, intimately linked with that of Ezra Cornell, furnished the new institution with the formative and foundation ideas whose enduring qualities have

insured its continuous growth and development, invests the volume with no little added interest.

Mr. Cornell and Mr. White first met in 1864. in the senate at Albany, both men being at the time state senators, and both holding the chairmanship of important committees in that assembly; Mr. Cornell that of Agriculture, and Mr. White that on Education. Although ordinarily these committees would seldom have common interests, it so happened that it was this apparent very separation of activities which brought the two men into the most intimate relations; for one of the first bills referred to Mr. White's committee was one providing for the incorporation of a public library which Mr. Cornell proposed to found at Ithaca, his home town. As a consequence of this, Mr. White and Mr. Cornell became acquainted; since projects of an educational nature, such as embodied in this bill for the incorporation of a public library, had long possessed a great interest for Mr. White. And then, a short time after, there was referred to their joint committees the matter of the disposition of the New York State allotment of the Federal Land Grant, accruing to the state according to the provisions of a bill introduced in the United States Congress by Mr. Morrill of Vermont. By the passage of this act, in 1862, each state of the Union was to receive a certain amount of 'land scrip'—claims on the public lands of the United States—the proceeds from the sale of which were to be devoted to the advancement of



Andrew D. White First President of the University



industrial, technical and agricultural education in that community.

Over the portion due New York, a great controversy had sprung up. In a previous session the whole grant had been turned over to the People's College in Schuyler County, under certain conditions; conditions which that institution was eventually unable to fulfill. At this juncture Mr. Cornell asked for half the grant for the Agricultural College of New York State, of which institution he was a trustee. Mr. White vigorously opposed such a division of the fund arguing that it should be kept intact: and the resulting contention led to the matter being referred to the joint committees on Agriculture and Education. No agreement as to the disposition of the grant was reached during that session; nor did Mr. White accede to the proposition Mr. Cornell made at some time in the following summer, namely, that if Mr. White would agree to the division, he, Mr. Cornell, would give to the Agricultural College a sum equal to that it would secure from the grant, some three hundred thousand dollars. Instead Mr. White urged the founding of a new institution, which should receive the full amount of the grant, and to this Mr. Cornell should add his three hundred thousand dollars.

In the meantime a number of sectarian institutions had put in claims for a portion of the grant, and it was only after a strenuous fight that a bill, embodying Mr. White's proposal for a new institu-

tion, was finally passed. By the terms of this bill Mr. Cornell pledged himself to do even more than he had originally planned; he offered five hundred thousand dollars and a site for the new University. Moreover, he agreed to contribute twenty-five thousand dollars to Genesee College, a rival claimant for the land grant scrip, to insure the passing of the bill. The legislature in after years realized the meanness of its action in compelling Mr. Cornell to give this money to the Genesee foundation, and voted a restitution of the sum. This Mr. Cornell refused to accept, but suggested that he had no objection to its being given to Cornell, and accordingly Cornell eventually received the money which her founder had been made to pay for the privilege of being allowed to found his own institution.

While the Ithaca site, near his home town, was proposed and given by Mr. Cornell, he himself never suggested that the University bear his name, and only consented to its use after the precedents of Harvard, Yale and others were pointed out.

With funds and a site secured, and building operations begun, there yet remained the real task of founding the University; namely, the assembling of a faculty, and the obtaining of a complete equipment including furnishings, books and apparatus, for so comprehensive an institution. Shortly after the granting of the charter, Mr. White, on Mr. Cornell's nomination, had been elected President by the



Goldwin Smith Professor of English History, Emeritus



trustees; and on the first president of the new university, now devolved the initiative in this enormous task. For such a task Mr. White was preeminently fitted, as he had for many years been building air castle universities, and his mind had thus been long imbued with ideas of what was good in the older institutions, and what changes for improvement could be made in an institution which could be condition and tradition free, as this new Cornell now promised to offer.

Realizing the impossibility, in general, of securing the leading professors to accept positions in the new school; and yet feeling the need of their enthusiasm and prestige, he asked their interest and confidence for the new institution—asked a number to themselves accept non-resident professorships and lectureships, and also invited their confidential and particular cooperation in securing for Cornell the best of the young men they were training, to be Cornell's future professors.

The successful outcome of this plan enabled Cornell students to enjoy the privilege of hearing Agassiz, Lowell, Curtis, Froude, Freeman and others of the contemporary notables in the early days of the institution.

The purchase of books and apparatus occupied months of President White's time in Europe; and here, again, the University's funds were eked out in many cases, by gifts from both Mr. Cornell and President White himself.

Finally, on September 7, 1868, came the formal opening of the University. Mr. Cornell had been in the West, placing the land scrip of the grant and enduring many hardships; while Mr. White, after his return from Europe, had toiled to the utmost of his strength to get things in shape for the day. The contractors were found behind in their work: tons of scientific material had accumulated, while, on the other hand, needed material was delayed in shipment; and everything needed to be unpacked and assorted by men who understood its nature and Students, moreover, came earlier and in greater numbers than had been expected, and in consequence of the attendant hurry and worry, which all this occasioned, both Mr. Cornell and President White were ill on the opening day of the University, and had to be taken in carriages to the hall where the exercises were held.

Mr. Cornell, seated in a chair, read his address in a low tone; his physical condition being such as to forbid his speaking, standing. In his closing remarks he said: "We have not invited you to see a university finished, but to see one begun;" and thus gave an answer which should endure for all critics who, on opening days, cavil because the walls of a new institution are not yet ivy-covered. President White then followed with a speech outlining the plan of organization, and alluded to Mr. Cornell's efforts in behalf of the new university. The reaction of these efforts on the man was so plainly evidenced

by his physical condition that, with a proper understanding of the reason for it, the audience was greatly affected.

These addresses were given in the morning, and downtown in Ithaca. Exercises were held on the Campus in the afternoon. Of these the notable feature was the speech by George William Curtis. Mr. Curtis ended his speech with a peroration which



From the First Cornell Stunt Book

splendidly awoke in all those present that same enthusiasm for Cornell which had swayed, absolutely, the activity of its founder and first president during the past years.

Mr. Curtis compared the new University to a newly launched ship—"all its sails set, its rigging full and complete from stem to stern, its crew embarked, its passengers on board; and," he added, "even while I speak to you, even while the autumn sun sets in the west, the ship begins to glide over the waves, it goes forth rejoicing, every stitch of canvas spread, all its colors flying, its bells ringing, its heartstrings beating with hope and joy, and I say, 'God bless the ship, God bless the builder, God bless the chosen captain, God bless the crew, and, gentlemen undergraduates, may God bless all the passengers!" Then in the midst of the cheering there burst forth for the first time, and right merrily, the chimes; Miss Jennie McGraw's gift of sentiment to the new University. What a moment that must have been, what a glorious time—felt even more strongly now, as we look back upon that first day from the present, in its achievement, and embody those opening scenes in the light of our imagination!

From that time on, date student days. These were indeed strenuous in the beginning of things, and this was due in part to the announcement of Mr. Cornell, always in sympathy with needy and meritorious young men, that such could support themselves by working one-half day, while pursuing their studies



President Iacob Could Schurman



in the University during the other half. Many came in response to this offer; some who were skilled mechanics were profitably employed; but it was found in the case of many, that it was cheaper to support them at the hotels and employ day laborers than to keep them at work. Where Barnes Hall and Sage College now stand was then a corn field, and typical of this student labor, says President White, was the husking of corn by the students; the husking was found to cost more than the resultant corn could be sold for in the market! Again, Mr. Cornell's expression: "I would found an institution where any person can find instruction in any study" (which was adopted as the University motto), brought many applicants who insisted that they be taught reading and writing!

From the first, in accordance with President White's ideas, the students were treated as responsible citizens, and the members of the faculty relieved of policemen's duties. This did not cover all cases, however, and one, where faculty discipline had to be invoked, has a humor which the President's account makes irresistable.

"Various complaints had been made against a stalwart New Englander, somewhat above the usual student age, and finally he was summoned before the faculty for a very singular breach of good taste, if not of honesty. The culprit stood solemnly before the entire instructing body, gathered about the long table in the faculty room. Various questions were

asked him which he parried with great ingenuity. At last one was asked of a very peculiar sort, as follows: "Mr. ---, did you, last month, in the village of Dundee, Yates County, pass yourself off as Professor ——, of this University, announcing a lecture and delivering it in his name?" answered blandly: "Sir, I did go to Dundee, in Yates County; I did deliver a lecture there; I did not announce myself as Professor ——— of Cornell University; what others may have done I do not know; all I know is that at the close of my lecture, several leading men of the town came forward and said that they had heard a good many lectures given by college professors, from all parts of the State, and that they had never had one as good as mine." I think of all the strains upon my risible faculties, during my life, this answer provoked the greatest, and the remainder of the faculty were clearly in the same condition. I dismissed the vouth at once, and hardly was he outside the door when a burst of titanic laughter shook the court, and the youth was troubled no more."

The lecture system, developed now perhaps too generally, was typical of Cornell instruction from the first; and that at a time when other institutions commonly gave instruction by recitation from books, "weary plodding and gerund grinding." The lecture system in its ideal phase makes it incumbent upon the eminent professor who holds the chair, to give of his best, brightest, original thoughts directly



Hiram Corson Professor of English, Emeritus



to the student andience. In the other system, the weary grind of the book recitation destroyed all the natural enthusiasm which the teacher possessed for his subject, and, as a result, he had hardly a word of comment to add to the text. Thus all the inspiration which should come from a University instructor was lost. Therefore, a mighty impulse was given the young Cornell by the lectures of the non-resident professors, as for example, the twenty delivered by Agassiz, who declared that the region about Cornell afforded the finest field laboratory for all branches of natural science of which he had knowledge.

Again, the elective system, which also has its widest scope at Cornell, had its inception in the idea that, regardless of the disciplinary value which the study may have for the general student, those students who love it ought not be held back by perhaps a majority in a class, who dislike it.

The college man of today has practically overcome the prejudice which, in the past, his purely theoretical training aroused among practical men. Especially was this prejudice felt in the case of the engineer. It was a need therefore, of manual training, which led Mr. Hiram Sibley, Ezra Cornell's associate in the telegraph enterprise, to build and equip a college of mechanic arts, the beginning of the Sibley College of today; and today certainly one of the most successful departments of its kind in the world. In 1876, an exhibit was made at the Centennial Exhibition, of work done by Sibley

students, including a steam engine and power lathes; but Sibley College of Cornell, had to await a later time for the recognition which the excellence of this exhibit merited. For, as President White says, the New England authorities paid no especial attention to it, her wise men being prevented from recognizing that any good could come from the Nazareth of western New York. In Cornell too, in connection with Sibley, was established the first department of electrical engineering that the world has known.

From the very outset of the University's organization the word man was avoided in all documents where the student was mentioned, and the term 'person' substituted. This was done deliberately, with the thought in mind of, in time, admitting women. Probably encouraged by this, a young woman in the second year of the University's career applied for, and was granted admission, but was compelled, later in the winter, to give up her college work because the difficulty and toil involved in climbing up the slope from her lodgings in town was too great for her strength. This incident led to the proposal, founding and endowing by Mr. Henry Sage of Sage College, as a dormitory for women students, and quarters for the Botanical department, which was then felt to be a science in which women had an especial interest and possessed a special aptitude.

Today, two general ideas are felt to underlie the opposition of the male students of the University



Sage College Terrace

to co-education. The first is that the presence of the women affects unfavorably the prestige of the school among college men of the older schools in the east, where the women are segregated in separate colleges. The second, which, while somewhat diverting, appears none the less, is that many of the men have sweethearts at home or in women's colleges, who twit them about the co-eds. On the other hand, both Mr. Cornell and Mr. White favored the idea, and it, of all others, had the approval of Mr. White's mother. The faculty is reported as finding, 'that it tends to lessen disorder and roughness in classroom and campus and to promote neatness among the students of both sexes.' Some opposition to the presence of the women comes from the

faculty, however, when themes tabooed in society must be discussed freely in the classroom, and, at an early date, from the fear that it would lead to much "spooning," or as the Cornellian of today has it, of "fussing." This has hardly been the case; on the other hand, such attachments as have resulted, indicate a possibility which is much more characteristic of western schools, where social lines are not so artifically marked. This possibility is a function which may, perhaps, belong more properly, in general, to the churches of a community, but which, until now, the division of creeds has made difficult. It is to promote an acquaintance among young people of moderate circumstances outside of the often narrow circle of the family, or single church associations, in which they have been brought up. That such acquaintances are often fostered by other social opportunities as, for example, the semi-public dances of various fraternal associations, is true, but these are often of an unfortunate character, and thus the contact of the sexes, the meeting of young men and women of character and intelligence, though perhaps in moderate circumstances, from widely different sections of the country, may not be regarded altogether as a calamity, but rather as an alleviator of a social poverty which tends to the formation of class and caste.

This broadening influence is felt even more strongly in the establishment of Sage Chapel, which was closely connected with the founding of Sage

College, for with the building of Sage Chapel, came the founding of an unsectarian pulpit. Whether as a result of the early policy of choosing the promising young graduates of the recognized masters in any field, for places in the Cornell faculty, instead of attempting to induce the masters to come permanently themselves; whether this is the reason or no, certain it is that we have at Cornell, teachers and workers, rather than the world's torch bearers. And yet the partial departure from this plan, in endowing an unsectarian preachership, and inviting, on succeeding Sundays, the leading divines of all denominations, to fill the pulpit, called forth the most adverse criticism. The religious belief of the public, no matter how varied, stands unified in



The Library — Sunset

opposition to any proposal which tends to put Christianity above all creeds, in the same manner that Goldwin Smith thinks of Humanity above all nations. Nevertheless, the plan has proven most successful, and the inspiration which comes from listening to some of the world's greatest religious teachers, is a factor large in the future of Cornellians who throng the Chapel at each service.

The building of the present Library was the final outcome of the "Great Will Case," which contest will be remembered always as a tempestuous and dramatic time in the history of Cornell. Miss Jennie McGraw, whose gift of the Chimes, at the time of the opening of the University, has been mentioned, later married a Cornell professor, Willard Fiske. Her married life was very happy, but her death, occurring before the second anniversary of her wedding, made it very brief. On opening her will, it was found that, after making ample provision for those near and dear to her, she had left nearly two million dollars to Cornell, of which by far the greater part was to be used for a University Library. Into this purpose her husband entered heartily at first, but following on the discovery that the limitations as to the amount of its endowment, embodied in the University's charter, would not admit the acceptance of the gift, there came difficulties also, between Professor Fiske and the members of the trustee board, and a reconcilement proved impossible. Although the University contested through the

Cornell Historical Interests

Supreme Court, the setting aside of the will, the decisions were all adverse. Afterwards the charter was amended so that the University now has full power to accept such gifts, and the future growth and standing of Cornell will depend, almost entirely, on an increasing of her endowment by gifts and bequests from loyal alumni and benefactors.

In recent years, at the death of Professor Fiske, more than a half million dollars of this money came to the University as an endowment for the Library, but at the time, all seemed lost. But at that time, Henry W. Sage came forward with a gift of six hundred thousand dollars, one-half of which was for a library building, and the other half for an endowment; and with this sum the Library was built and many of its volumes have been purchased. Therefore, the inscription, on bronze, in the doorway:

[&]quot;The good she tried to do shall stand as if 'twere done; God finishes the work by noble souls begun."



The Fiske-AcGraw Mansion and the Chi Psi Fire



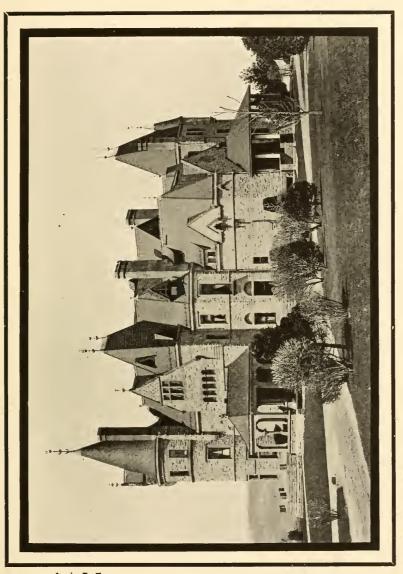
The Fiske-McGraw Mansion and the Chi Psi Fire

HE burning of the old McGraw-Fiske mansion, and its attendant tragedy, must forever remain memorable in the annals of Cornell. For years the mansion had been celebrated for its beauty and its commanding position, and when it was destroyed by fire on the seventh of December, in 1906, the calamity was marked by a tragedy so appalling, and deeds of heroism so bright, that those who witnessed the fire, or know the story, can never quite separate the feeling of pain and sorrow which the memory of the event evokes, from the feeling of joy and pride of the Cornell men who there showed the mettle of heroes.

All the history of the mansion was eventful. It was originally built for Mrs. Jennie McGraw-Fiske, wife of Professor Willard Fiske. Mrs. Fiske was Miss Jennie McGraw, the donor of the original Cornell Chimes, and, at the time when the building was started, in 1879, was traveling abroad and left the plans for the mansion almost entirely in the hands of the architect, Mr. William H. Miller, of

Ithaca. After her marriage, Mrs. Fiske returned to this country, but died in Ithaca, in 1881, before she was able to occupy the house. Thus from the time of its completion until 1896 the building remained untenanted. On the death of Mrs. Fiske, the property came under the supervision of the McGraw estate, who bought it in at auction. In 1896 it was sold to Mr. E. G. Wyckoff, who, in the same year, disposed of it to the Chi Psi fraternity; and it was occupied by the chapter from that time on until its destruction by fire.

Although the mansion cost the fraternity only fifty thousand dollars, the approximate valuation of the structure and the site was in the neighborhood of two hundred and fifty thousand dollars. The mansion had for its model a famous French chateau near Blois, and was constructed of Indiana limestone and yellow brick. Upon the walls of its large fover were medallions, set by the most skillful mosaic workers of Rome and Venice—men brought to this country for the purpose. This central foyer extended to the height of two stories, and the sleeping apartments were distributed around an ornate balcony that gave access to them. A circular tower, with an apex of slate-covered steel, gave a decidedly medieval aspect to the structure. it was not less noteworthy. Its beautiful woodwork and the designs of the fixtures were imported from Europe. The decoration of the library and hall attracted especial attention. Here was wood-



The Fisher-McGraw Mansion



The Fiske-McGraw Mansion and the Chi Psi Fire

work imported from Italy, and fitted together by the best cabinet-makers that could be found in this country.

The Fiske-McGraw mansion occupied an ideal site. Town, lake and hillside; and a sky unbounded, except in the east, were in the wide panorama which its windows commanded. To it many classes of Cornellians have led their visiting friends; and to native Ithaca the mansion was always a wonderplace, and it had long become a landmark. Then, on December seventh, 1906, in the early morning hours, the historic mansion flashed into flames; and had crumbled into ruins before even a glint of the dawn showed in the east.

It was icy cold and black dark that December night. The wind blew a gale whose velocity was forty miles an hour. Fitful snow-flurries, blinding while they lasted, came at intervals. No warning of the impending disaster had come to the inmates of the doomed mansion when they retired at midnight. But even then, perhaps, the flames were creeping out unseen, and, not long after, must have been blazing freely in the lower part of the building; their ominous crackle drowned in the roar of the storm raging outside. No one was abroad at that hour, leastways in such a storm; no one saw the flames as they spread from room to room, below, and from floor to floor, above, and so through the fated mansion. Then only, and at almost the same instant, most of the sleepers awoke, and there began

the series of encounters with Death, which, whether they ended in victory or defeat, were all marked by a calm heroism beautiful in its unanimity.

The first alarm was telephoned downtown by a professor's wife, whose residence was across the gorge on Cornell Heights, and who was aroused by the screams of the students who had escaped to the roof of the burning building. At that time, forty minutes past three, the mansion was already enveloped in flames. But it was an hour later before a stream of water had been directed at the flames, due to a confusion in giving alarms, such as must often be attendant in a volunteer fire department on the occasion of a crisis. In the meantime the cries had also awakened the men in other fraternity houses nearby, and thus, long before the arrival of the fire department, the drama of escape and death had been enacted. Before any of the men were awakened, all egress by the stairways had been cut off.

Twenty-six members of the fraternity were asleep in the building. There were no rope fire-escapes, so that the only hope of rescue lay in getting out on a window sill, and from there to the ground; or else climbing to the roof, and either climbing or jumping from it. The sleeping rooms were, in every case, filled with smoke when the men awoke; in some the flames were already gaining entrance; there was no time to secure any clothing.

Grelle, Pope, Uihlein and DeCamp first climbed to the roof. Their cries gave the alarm. On the



Interior of the Mansion



The Fiske-McGraw Mansion and the Chi Psi Fire

roof they separated. DeCamp and Uihlein escaped by climbing down the vines along the outside wall for some distance, and then jumping to the ground. Pope and Grelle determined to try other means of escape. Pope led the way and they reached a place on the roof directly over the window of McCutcheon's room. Here Pope swung over and down, and kicked in the window. Immediately the flames shot out and enveloped him. He let go his hold and fell to the ground. Then, recovering, he ran across the lawns to the Phi Kappa Psi house, about two hundred yards away, and aroused its occupants by his screams. Almost crazed by the pain of his burns, he collapsed as soon as the doors were opened. He was taken to the hospital later, and, although his life was despaired of for days, he eventually recovered

It is impossible to tell the events of those minutes coherently and connectedly, because they occurred simultaneously. While Pope and Grelle were climbing over the roof toward McCutcheon's rooms, McCutcheon himself was being rescued by his room-mate, Curry. Curry awoke to find the room filled with a dense smoke. Half unconscious, he broke out upon a balcony through a window, and after being revived there by the fresh air, returned to McCutcheon, who was unconscious. He attempted to carry McCutcheon out, but failed, and barely succeeded in reaching the balcony again. Once more he tried, and this time managed to drag McCutcheon,

whose night clothes were now in flames, to the window. Here he found himself exhausted by his efforts, and could not take the body to the balcony. But help had arrived. Halliday, Gibson and Goodspeed, men from the Alpha Delta Phi house, who had also been aroused by the cries of the men on the roof, had brought two ladders with them, and, climbing from these over the snow-covered slating, they secured McCutcheon at the window, and carried him to the ground. His burns were, however, fatal; he died in the afternoon of the same day, after only a few minutes of consciousness. Curry, after McCutcheon's rescue, reentered the house for a third time. in a vain effort to find Nichols and Grelle, but, baffled by the flames and smoke, was compelled to give up, and, covered with cuts and burns, had to be assisted to the Infirmary.

We return now to Grelle, who was left behind on the roof after Pope had fallen to the ground. The flames from the window which Pope had kicked in, swept toward the roof and Grelle stepped back to escape their heat, only to fall into a skylight, from whence he dropped into a closet near McCutcheon's room. He was seen to come into the room from which Curry and McCutcheon had been rescued, and make for a window. Just as he reached it, the floor gave way and he disappeared from view. Death had claimed two victims.

Six freshmen, String, Matchner, Lamb, Matthai, and two Williams boys, brothers, slept in one large

The Fiske-McGraw Mansion and the Chi Psi Fire

room on the third floor. They got out through a window, and crept for twenty feet along a three-inch ledge, about sixty feet from the ground. After successive jumps to a balcony, and from thence to a porch roof, they finally dropped safely to the ground.

O. L. Schmuck, a senior, had made his way to the gutter of the upper roof, through a gable window, when he remembered that his room-mate, W. H. Nichols, also a senior, was yet in the house. With the greatest fortitude, he reentered the room, then a mass of flames, to save him. The task was hopeless, and with clothing in flames, Schmuck regained the window and dove through it to the ground, three stories below. His fall was broken by a bush, but he received injuries which caused his death in the Infirmary a few hours afterward. "He died indeed, but his work lives, very truly lives."

Requardt was another of those who gained the roof. From thence he jumped, and landed astride, on a gable ten feet below, injuring himself so painfully as to become all but unconscious. While he clung there, he heard a scream and turned just in time to see Schmuck dive through the window and fall to the ground. Then he leaped himself and put out the flames which were enveloping Schmuck's body.

Bamberger and Turner were in a room on the second floor, directly under that of McCutcheon. They aroused Pew, who was in the next room, and

he joined them. With a rope made of bedclothes, Bamberger lowered Pew and Turner to the ground, and then slid down himself. Andrews and Goetz made a rope of sheets which reached halfway from the third story to the ground. Andrews descended first, and the rope gave way when he reached the second story. Goetz's only recourse was to jump, which he did, escaping with some severe muscular strains.

But the roll of death was not yet complete. The furious north wind, unabated, fanned the flames so that no amount of water could quench them. Only ruined walls, on the exterior, and a flaming mass inside, remained at six o'clock. At seven, most of the firemen and spectators had left the scene. But at that time three firemen were still directing a stream through a window on the north side of the ruin, when, without warning, the massive stone wall fell outwards, directly in the face of the wind, and crushed the three, Messrs. Rumsey, Robinson and Landon. Seven had now given up their lives and Death was appeased.

Such, in brief, is the story of the Chi Psi fire. It seems as though one should add some comment on this story of extraordinary rescue and escape; and death most heroic. Yet, what can one say? The deeds speak for themselves more adequately than any phrase. Today another structure occupies the site of the historic mansion, but the memory of the latter, its tragic end, and of the actors in that

The Fiske-McGraw Mansion and the Chi Psi Fire

drama, can not be effaced. "The pride of the deed will remain after the bitterness of grief has passed, and every man with the stamp of Cornell upon him, will stand straighter at the thought: They had tasted the flames, but they went back."





States, one reads that: "The romantic gorges, near Ithaca, contain, perhaps, a greater number of pretty waterfalls and cascades, than can be found in any equal area elsewhere." Coming from Baedeker, this is "praise from Sir Hubert." As regards this region again, Professor Tarr, Cornell's physiographer, is certainly no lesser authority than Baedeker, and he also has written: "Waterfalls and gorges in Europe, which can not be compared, in beauty or interest, with a score of glens in the Finger Lake region, are far better known to the traveling American than Watkins Glen." Thus as a prophet is not without honor, except in his own country, so, in some degree, it is the case with the natural features of the region about Cornell.

There can be no doubt but that this is due in part, as is lack of appreciation of many natural features of great interest, to the want of knowledge, on part of the general public, as to their significance; how they came to be so, and how they are changing. And while, as yet, no man can read all the book of

Nature with understanding, still some leaves, even chapters, have been quite accurately deciphered, and he who would enjoy his out-of-doors to its extent, should needs have an intelligent comprehension of these pages. Again, there are phenomena, as Niagara, which are so grand that they command the attention, and, if such a thing is possible, the tribute of wonder from mankind. Yet, on a second visit, even Niagara palls, unless the first has roused the latent 'why' of human curiosity: The query, how comes there here, a waterfall so tremendous, without parallel in other great streams? If this be true of the world-wonder, Niagara, one can readily appreciate why more unobtrusive, though perhaps tenfold more interesting natural features should fail to attain their due. There follows, therefore, in these pages an attempt to put before the reader the story of the hills, the valleys, the streams and the lakes of Central New York, which, fascinating in themselves, are many times more so, once their historic relations are known. If the story is inadequately told, or flags in its interest at places, the fault is with the writer—and he craves your indulgence.

As with the history of the human race, so also here, the earliest, and which indeed includes the major portion of the story, measured by duration of time, is the most imperfect, and lacking of details.

We know that in the days when life on the earth was young (mind, I say, when life was young,

and not when the earth was young); in those days much of the interior portion of North America was occupied by a great shallow sea. There was land to the north, where now are the Highlands of Canada; what we now term the Adirondacks, was land; and a range of mountains, the prototypes of the Appalachians, raised their summits to the east of the present ridges. In the far west, there were also other areas projecting above the surface of the sea; none of the present mountains, however, for they are much more recent. In many places, the great Interior Paleozoic Sea (as the ancient sea is known to geologists), was connected by arms and embayments with the deep oceans, so that it was all salt.

The rains fell then, as now, and we are inclined to believe, with about the same intensity, but in this we may be wrong; day and night made alternate heat and cold, as did also the succession of seasons. By these agents the rocks of the exposed lands were broken down—the rain dissolving some of the minerals of which they were composed, and enlarging the microscopic cracks existing in their structure, cracks which the unequal expansion of the various minerals, with alternate heatings and coolings, had perhaps started. In some regions, no doubt, frost lent its great force to still farther rend and crumble the rock.

The material so loosened, was carried away by the streams, the little rain-rills bringing it to the greater courses. That which the rain had dissolved,

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various common salts, for the most part, was carried along invisibly, while the insoluble particles were carried along in suspension, or rolled along the bottom; their method of transportation depending on their size and on the velocity of the transporting stream. From the little streams to the big streams the material was constantly carried, but ever onward, until eventually it all found its way into the great Interior Paleozoic Sea; or, if the stream flowed outwards, into the surrounding oceans. But in either case, at the still water, the currents of the streams were checked, no longer was there any force to hurry the turbid sediments onward, and so they settled down quietly on the sea bottom.

Not all in one confused mass, however, but with a definite arrangement. When the flow of the streams was first checked, on mingling with the quiet waters, the coarsest materials were naturally the first to be deposited, whereas the sand could be carried a little further, and the clay particles quite far out, by the decreasing current. The material in solution, on the other hand, was mixed quite thoroughly with the sea waters, and was then extracted from these, perhaps far from the shore, by little shell fish and corals, who used it in building their casings and stems; and, when these creatures died, their hard structures also found their way to the bottom. Thus, from the shoreline to the greater depths, the deposits were successively, gravel, sand, clay, and then limy and flinty organic remains.



The Mork of Frost in Destroying Rock - Six Mile Creek

For long ages, certainly during all Silurian and Devonian time, comprising, without doubt, millions of years, these lands were being worn down, and the major portion of their matter poured into, and literally rained down on this interior sea bottom. This sea, we have said, was shallow, therefore, in order to accommodate all this material, its bottom sunk about as fast as the material piled up.

But you ask: "How do we know all this? Who found it out, and when?" An answer to the last question would be long, and its interest, though great, has no place here. The first, however, admits itself, nor is it so difficult as it might seem. But let us continue a little farther with the facts, and

then come back to the evidence which proves their truth.

Whatever inequalities may have existed on the sea-bottom were soon filled up, since the slimy clays naturally slumped off and slid down wherever they were deposited on elevations, and thus, after a geologically short time, the material was being deposited in layers or strata on a level surface. In varying seasons, and at different periods, the deposits varied in character, and again the rate of the bottom's sinking was not uniform. Thus the strata, as they were superimposed, one on the other, were differentiated; and perchance a layer of clay was succeeded by a layer of sand. The layers were piled up until accumulations thousands of feet thick had been formed. The lowest layers being under the greatest pressure, became indurated and consolidated into stone; conglomerates being formed from the gravel, sandstones from the sand, shales from the clays, while by resolution and cementation, the organic deposits were changed to limestone, and in rarer instances, to flints,

At the end of Carboniferous or Coal Time, which succeeded the Devonian, or, perhaps, even earlier in the Carboniferous Period, a new movement of the earth's crust made itself apparent, and the bottom of the Paleozoic Sea, which had all along been accommodatingly sinking to receive the sediments which the streams from the surrounding mountains and lands were pouring into it, began to

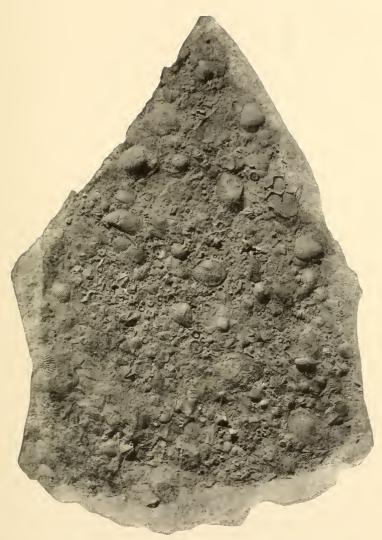
rebel, as it were, and instead of sinking, began to slowly wrinkle up in the east, thrusting the shore line sediments high into the air in distinct parallel folds, and bending, in the process, the solid rock as though it were plastic. Thus were formed our present Appalachian ridges. Farther away from the shore, the upward movement was not so intense, but the force applied was more nearly vertical, and so the lavers around Ithaca were thrust upward intact, and in their original horizontal position. I say intact, but that does not mean they escaped all change, for there were some strains and twistings developed in this elevation of so great a mass, and these had the effect of causing the rock to break up into a countless number of square prisms, or blocks, with planes at right angles to each other, separating them. These planes are known as joint planes, and their influence on the subsequent changes was very potent as shall be seen.

We have now traced the origin of the rocks on which the Ithaca and Cornell of today are founded, from their formation in the sea, to their uplift into dry land. But that was by no means the end. As soon as the first mud-layer appeared above the water's surface, the forces of weathering and erosion, the rain, the heat and cold, the expanding force of the frost, the transporting power of the streams, all attacked the new land; and, just as they had in the past ages worn down the mountains and built them into these sediment layers beneath the sea, so

now, with equal alacrity, they entered upon the task of redistributing this material once more over another sea bottom. Although limited in extent, very shallow areas of sea still existed for a time near by; yet from this period on, the land waste was carried far from Central New York, and most of it was probably transported westward to the lower Mississippi river region, where the sea remained for a long time after the uplift.

Naturally the agents of denudation were, at first, able to work very rapidly on the new land, for the upper layers were probably composed of unconsolidated muds and sands, and in such material valleys could be carved rapidly, and the fragments easily removed. Nevertheless, the forces of the interior earth, the terrestial forces, gained the ascendency over the extra terrestial forces; and so, in time, the region of the Finger Lakes was lifted up to the dignity of a plateau; at least two thousand feet above the level of the sea. But although the elevating forces gained the victory, it was not without losses, for the plateau was not unbroken, but in the contest had been gashed by deep and wide valleys, through which the waters from the rains and the snows found their way to the sea.

Now we may pause for a moment in this relation, and answer the question propounded in a previous paragraph: How do we know all this? Well, the streams, by cutting these deep valleys, have unsealed the rock book in which the chapters



A Fossiliferous Kock-Fragment from the Bed Rock Anderlying the Cornell Campus



of this region's history are written, and the pages have been found legible.

We postulated, at the beginning, that there were land areas to the north and east, the wearing down of whose rocks had furnished the material for the sedimentary rock layers of the present plateau. This we know to be true because in every case it is found, that, although the layers are in some instances, disturbed from their original sequence by doubling when folded, the order of the rocks is: first and lowest, the crystalline igneous rocks of the early land areas; and on these, in successive lavers, the conglomerates, sandstones, shales, and limestones formed in the Paleozoic Sea. The early rocks are very different from these latter, being of the granite type, formed from a molten magma, and cooled very slowly, so that the various substances which had been melted together had time to crystallize out (just as salt and sugar will separate when a solution of the two is slowly evaporated), and thus we can readily distinguish these igneous rocks from the sedimentary strata later deposited upon them.

That the streams carried the material to the shallow Paleozoic Sea we know to be true, because they are doing the same things today. No one can doubt the reality of the denudation of the land who has seen the spongy earth in the spring, when the frost comes out of the ground, and the particles its expansive force has separated, are left uncompacted; or who has observed the muddy, sediment-laden

waters of a spring flood. That the rain fell in those early days, as it does now, is shown by the rain prints that the drops made in the soft ooze along the shoreline of the ancient sea, which are preserved for us now in the hardened mud, by being buried later under hundreds of feet of other sediments, and solidified by percolating cement solutions, and the pressure resulting from the superincumbent masses.

The presence of these rain prints is itself one evidence that the Paleozoic Sea was shallow, and that its shoreline was constantly changing, as its bottom was depressed or raised. Other evidence of its shallowness is the presence of ripple marks in the solid sandstones, and again, the material of which the alternating layers are composed. For in this region the rocks are mostly sandstones and shales, that is, collections of sand and clay particles; material which could not have been carried far from shore, because, as the velocity of streams is almost immediately checked when they empty into still water, and they are thus robbed of their transporting power, they must, perforce, drop these coarser portions of their loads. Again the movement of the ocean bottom, though subject to minor fluctuations, must have been in general one of depression, else how could these hundreds, even thousands of feet of thickness of shallow water sediments have been piled in layers, one above the other, without an apparent break? That the rate of depression was not uniform,

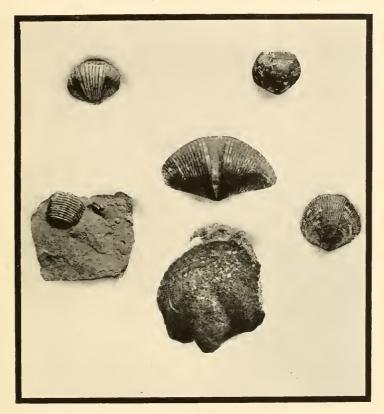
is abundantly shown by the fact that the layers are alternately shale, then sandstone; or perhaps, when a marked sinking occurred, and only organic remains could accumulate, the shore line being distant, a layer of limestone was laid down, and we see it now, mixed with the others.

All this last we may see when we examine the rock walls of the valleys, where the streams have cut through the layers. That the streams did cut through layers which were once continuous and unbroken, can be easily determined by observing first the elevation of some conspicuous, readily recognized layer on one side of the valley, and then crossing to the opposite side, and noting whether the same layer occurs there also, and at the same elevation.

You are no doubt willing to admit the reasonableness of all this, but you recall a statement about the millions of years that had elapsed while these rocks were formed. True, the very thickness of the strata is some proof that they could not have been laid down in a few years, yet to assign millions of years to their accumulation on that account seems unnecessary. Good enough, but there is another and a weightier reason.

We began this history with a sentence wherein was the phrase: "in the days when life was young" on the earth, the first of these sedimentary layers were deposited in the great Interior Paleozoic sea. That is the clue. For the various strata have each

fossils, traces of plant and animal life, shells, and casts of them, imprints of leaves and stems, molds of whole animals. And, as one goes from the older strata to the higher, later ones, the species of these organisms show always a more highly organized type, more specialized parts to fit them to compete more successfully in the struggle for existence which was then, as it is now, the condition for all life. In the early, igneous, crystalline rocks, no remains of life are found; in the lowest, sedimentary layers, it is of a very low type. The earliest types are no doubt lost to us, as they were probably very elementary, consisting simply of a single cell, or aggregation of cells, without any protective, or binding, hard parts, and, in the piling up of later masses, any remains of this sort would be literally crushed beyond recognition. It was only when the organisms had developed so far as to have hard, protective shells, that the remains become clearly defined and abundant; and it is these already somewhat advanced types that we find in the lowest strata from which we can trace the life development with accuracy. Then, as we go upward from horizon to horizon, we find that these organisms change, the different species of a genus becoming more and more sharply defined, or again, a whole genus will flourish, and come to a maximum point in regard to abundance and development; and then decline, and finally become extinct. Again at later periods, altogether new forms appear, as the fishes, which



Some Fossils from the Rocks Around Cornell

in the youth of their existence had hard, bony coverings, and only later developed scales. Some types again have maintained a continuous life chain through all the ages, and modern representatives of their classes are to be found in our seas.

But when one thinks of the length of time which must have been required for life to develop

from the lowest shellfish type to the highly specialized forms which already existed at the time when the bottom of the Interior Paleozoic sea was uplifted; one can readily conceive that the years must be numbered by the million for this evolution to take place. If, on the other hand, one conceives that evolution may have worked more swiftly at that time, one is confronted with the fact that the remains which are today being buried in the same manner, will leave a record, in every way similar to that of these early accumulations, and why then, apply any different interpretation?

This brings us to another time consideration. Since the uplift of the strata, the streams have cut deep valleys into them; the hilltops themselves have been worn down; around Ithaca only a few reach the elevation of two thousand feet, and, while at one time all the plateau must have reached this elevation, the average height of the land is now only eight to nine hundred feet above sea level. This will indicate something of the enormous amount of material that has been returned to the sea. True. there has been another important and very capable agent assisting in this wearing down, the story of which yet remains to be told; nevertheless, by far the greater amount of this degrading has been done by the streams. How long were they at work? The best answer we can find to this is the estimate (based on an actual computation of the amount transported), that the Mississippi river removes

Earth History of the Cornell Country

sufficient material in one year to lower the surface of its entire drainage area, one three hundredth of an inch; or, in other words, it would require three thousand five hundred years to lower it one foot. Of course we can not apply any such unit to measure the absolute amount of time it has taken to carve out these valleys about Ithaca, but it does afford some basis for a relative comparison.

Beyond showing, by this digression, that there was a very secure reason for assigning millions of years as a time period for the scope of our history up to this point, we have also brought into relief the great time interval, great, even geologically speaking, which intervened between the uplifting of the plateau from the ocean, and the next great epoch in the history of the region—the advance of the Continental glacier.

The cause of this frigid visitation is an unsolved problem. It seems that no one simple condition is adequate, or if so, that condition, as for example, a change of climate, is as difficult to account for as the existence of the glacier. Suffice then to say that for a long period of time, the snow-fall over that part of North America which we know as the Labrador peninsula, was each year far in excess of the amount melted during the warm season. Thus, an ice-cap accumulated there; practically a mountain of ice. Now ice, though from a scientific standpoint it is as much a rock as is quartz, possesses however, under pressure, at ordinary temperatures, a qual-

ity similar to plasticity. Therefore, when the icecap had grown so that it covered all Labrador with a solid mass, thousands of feet thick, the lavers at the bottom were unable to stand the pressure, and a viscous-like flow started at the edges, as these moved out from beneath the load. Although it is held by some scientists that the flow of the ice was not truly viscous, yet we may cite, as an analagous case, the flow of thick molasses when poured out upon a level surface; as it exhibits the same heaping up at the center, and a circular outflow at the edges, as did the ice on a larger scale. That this was the nature of the movement, and that Labrador was the center for that part of the mass which invaded New York state, we know, for all of northern Canada, to the pole, was not glaciated, as is popularly thought; moreover, the scratches, which the ice made in the bedrock over which it passed, all radiate thus from a center in Labrador.

As the ice moved southward from Labrador, it did not gently cover the land, but, on the contrary, its action was most destructive. We have no reason to believe that the climate of New York was much different then than now, in fact, in Alaska, at the present time, green trees flourish within a hundred yards of a glacier's front; so we may imagine the great ice cliff of the Continental glacier ruthlessly engulfing the green land. Nor was this all. As it moved along, it gathered up the loose rock fragments it encountered; others it broke loose

Earth History of the Cornell Country



A Clarial Boulder Deposited near Cornell by the Continental Clarier. Shows Clarial Scratches

from projecting spurs, and all these were eventually imbedded in its base; those which originally fell on its surface, as it passed by mountain slopes, tumbling through crevasses until they reached the bottom of the moving flood of ice. Furnished with such tools, and moving forward always, urged by the resistless pressure from behind, the glacier literally scoured the land over which it passed, scraping off first the soil, and then graving and grinding the rock beneath. We have no means of estimating how long this continued, but one thing we do know, and that is, that the erosion which it accomplished was prodigous. Even today we find the bed rock polished, striated, and grooved, where the ice passed over it.

In the north and south valleys the ice was deepest, and moved with the greatest velocity, but

its mass was sufficient to cover the highest hills, as is shown by the presence on their summits of foreign rock fragments, granites, sandstones, and quartzites; rocks which only outcrop far to the north. Again, its mass formed a mighty dam which prevented the north flowing streams from reaching their natural outlets, and thus ponded back their waters until lakes were created, whose levels rose until they overflowed the southern divides. This lake condition was a feature both of the advance and the retreat of the ice. To the water which filled these lakes, the glacier, moreover, contributed tons of sediment, the debris of the land destruction to the north, and also the water of its own constant melting. Sediment-laden floods poured over the southern divides, and spread the rock flour of the glacier's grinding in a great sheet over the land to the south. Eventually, however, just after it had crossed over the north Pennsylvania line, the progress of the ice was checked, for here its melting became so active that the forward movement was only sufficient to keep up an equilibrium, and enable the ice to maintain the southerly position it had already attained.

But after a time a change in conditions took place, and the glacier did not receive the reinforcements from the north, which were a necessity, if it was to hold its own, so that it gradually gave way, receding to the north. Perchance it subsequently advanced again, but that is a technical point



A Suggestion of the Conditions in Lake Cayuga at The Close of the Clarial Period



Earth History of the Cornell Country

which is still in dispute. Sufficient it is for us to know that its retreat was not a continuous, uniform one, but of a character marked by many minor halts and meltings, varying in rate. Moreover, this retreat was a passive one, no actual movement of the mass, as the advance had been, but simply a shrinking, due to the transformation of its solid cliffs of ice into water. Thus each halt was the time of an equilibrium between the rate of melting and the existing forward thrust of the ice; and its place was marked by the dumping there of all the material which the ice mass had transported so far. Thus veritable hills of debris were built up, the "terminal and recessional moraines" of the physiographer, which seem tremendously large to us now, but which in reality are small in proportion to the glacier which accumulated the material.

As the southern divides of the preglacial drainage were passed, there existed once more the ice-dammed lake stage; for as soon as they were released from the glacier's icy clutch, the waters of the streams again purled merrily northward. Not always in their old courses, however, as we shall see. Finally all the ice had melted away, and the country was once more clothed in vegetation, but its topography had been remarkably altered.

We have noted above that the deepest ice, and the most rapid movement of the glacier, was along the axes of the north and south valleys. Where the ice flood overtopped a ridge, and poured into

an east and west depression, the action was to fill it with a wedge of ice, and then the succeeding movement was over a plain, formed by this icefilling between the two banks of the valley. Not so in the case of the north and south valleys. There the ice literally gouged out the bottom with its powerful tools, and as a result of this, we have the tremendously deep lakes of the Finger Lake region of Central New York, with their bottoms often below sea level; and of these, our Lake Cayuga is one.

The east and west tributaries of the preglacial Cayuga river (for in the valley of Cayuga lake a river flowed in preglacial time; the present lake basin being the result, in part, of the gouging out of the



Where Fall Creek Leaves its Old Halley to Cut a Rock Gorge

Earth History of the Cornell Country

river's valley bottom, by the ice, and in part by the piling up of a moraine dam at its northern end), were left practically unaltered as to the level of their valley bottoms, but found themselves confronted with a tumble of some four hundred feet, when they reached the main valley, into which they had formerly entered at grade. This, in a sentence, explains the origin of a large number of the many waterfalls and gorges which make the Finger Lake region famous.

There was another effect due to the ice filling being deeper in the valleys than on the hilltops, and this affected both the north and south, and the east and west valleys, and in this way: In the valleys, the ice lingered longest, and also deposited the greatest amount of morainic material. As a consequence, the former stream courses were, in many cases, choked with glacial drift, and this was apt to be highest in the center of the old valley. Then the streams, recommencing their flow, were backed up until they reached the level of the lowest point in the dam, where they rebegan their flow, but very often across the banks of their former channels. Cutting down in such new courses very soon brought them to bed rock, into which they then rapidly cut narrow canyons, and this was the origin of those gorges which are not the result of the tumble of the tributary streams into the Cayuga valley. The gorge above Beebe lake, on Fall creek, is a notable example of this kind of cutting. When,



The Kolling Moraine Gills in the Inlet Halley

after thus cutting across its former banks in a rock gorge, a stream once more encountered its drift-filled valley, it swept out this loose material and thus formed a broad, shallow trough, locally known as an amphitheatre, of which the site of Beebe lake is an illustration. Six Mile creek has a series of rock gorges and amphitheatres alternating, in one of which latter a big reservoir for the city water supply has been created, by damming the narrow gorge below it.

The succession of level terraces, one above the other, and with steep fronts, composed of loose gravels, which are the site of Cornell Heights, and which have a counterpart at the mouth of Coy glen, across the valley (a counterpart which can be seen in its entirety from the Campus), are a record of the different levels of the lake during the ponding up

Earth History of the Cornell Country

of the waters while the ice was receding. They are, in a word, deltas of the streams tributary to the Cayuga valley, deltas composed of the gravels which these streams brought down and dumped into the still waters of the lake; each level terrace marking the altitude of a new, lower outlet of the lake, to the north, as the ice receded. Similar deltas are being formed in the lake today; in fact, the flats, on which the major part of Ithaca is built, are of this origin. As one goes beyond the level area of these flats, up the Inlet valley, one encounters rolling, irregular hills, the typical moraine filling in the valleys.

Today the country is much the same as the glacier left it. Verdure has clothed the erst barren moraine piles, the streams have cut gorges in the rocks, but in the main features of the topography no great changes have occurred. The bed rocks have not yet crumbled enough for weathering to efface the glacial scratches, and the foreign boulders brought by the glacier are still as smooth and polished as when they were the tools of the ice giant. It has been, geologically speaking, only yesterday that the ice retreat occurred, and, who knows, perhaps tomorrow, geologically, we may have another advance. However this may be, you must agree, that, although the manner of the telling of this earth story may be tedious, its interest is intense, and its plot well worth the knowing; if one would wander afield in the region of Cornell.





HE BLUE expanse of Cayuga, stretching away to the northward, is an everyday eye-feast to the Cornellian. It greets him each morning, as he climbs the Campus slope, and even in the classroom, as work grows irksome and he looks up and out the western window, its flashing color-enchantment entices him to forsake the weary grind and come ride on its waves. Indeed, even in winter the spell continues, for when the hills are frosty white, and so pure in their cold garb that they repel, the lake below suggests warmth and invitation.

Nor, having yielded to its lure, is the reality disappointing. The little waves flash in the light and lap-lap, ever against the sides of your boat; while overhead the clouds tumble across the whole heavens in one tumultuous pageant, making a multitude of shadows to flit across the waters and the field and forest checkered hills. Crowning the southeastern summits of these hills one sees the University, with the gray outlines of her stone structures sharply etched against the sky, like so many citadels. Ave, that is certainly an environ-

ment which spells inspiration; one that arouses big thoughts and ambitions.

One must become versed in the lore of the lake, however, to enjoy all its many phases. For it has an interest which goes beyond its outward beauty; an interest having a starting point so early as the reason for its existence, and continuing in its human associations, connected first with the Indian domination, then with the romantic period of early settlement, and extending even to the commerce and civilization of today.

Cayuga, and Seneca next westward, are the two largest of the Finger lakes of Central New York, and ten would perhaps number those whose size is appreciable. The parallel arrangement of these



The Tunultuous Pageant of Clouds

lakes, and their long, narrow and straight extension, uniformly north and south, early attracted attention; the forms of the larger ones, like an extended finger, suggesting the comparison which has given a name to the group.

It is natural that one should ask why these lakes exist and what is the meaning of their peculiar arrangement. And even greater curiosity is aroused when one learns that their bottoms are below sea level, and hears the stories of the "lake guns" and their mysterious thundering. And these questions have been answered, in part, quite satisfactorily.

To understand fully, one must go back to the beginning of things, when the solid rocks, which now form the foundations of the region, were being strewn as fine sediments, by streams coming from the north and east, over the bottom of a shallow sea, which occupied the region.

In the earliest period of which we have a record at Ithaca, this sea had a connection, probably to the south, with the open ocean, but this connection was so narrow and shallow that there could have been no active circulation between the waters of the ocean and the sea, and only as the interior sea waters evaporated did more ocean water enter. But evaporation could not remove the salt which the water held in solution, and, as a consequence, when once it became saturated, the salt was precipitated, and fell to the bottom to form the thick salt layers which are now found two thousand feet

below Ithaca. These layers of rock salt are nearly pure, and there can not, therefore, have been much sediment brought in by streams at this time; moreover, if there had been many streams, their waters would have sweetened and freshened the sea waters sufficiently to prevent precipitation of the salt. It is logical, then, to conclude that the climate of that period for this region was arid, so that little water found its way from the land into the sea.

But this condition, though of long duration, for there are lavers of solid salt, two hundred and fiftyeight feet in thickness, underlying Ithaca, eventually changed; a more humid climate followed, and, at the same time, the bottom of the inland sea began a slow subsidence, the rate of which seems to have kept pace very nearly with the rate at which the enlarged streams now supplied sediment and spread this sediment in layers over the bottom. This process continued with slight variations, until more than two thousand five hundred feet in thickness (the depth from the level of the Cornell campus to the salt), of shales, sandstones and limestones had accumulated. Indeed, probably as much as two thousand feet more were laid down and are now removed, but of this we can not be sure.

However, the period of deposit and sinking of the sea bottom was followed by its opposite, a time of uplift and wearing down. The accumulated horizontal strata, all over the Central New York region, and far to the west, were slowly thrust



Cayer after Cayer of Kock Emerges from the Water

upward, so that what had formerly been a sea bottom, became, in time, a great plateau. To the north, however, the uplift started earlier, or perhaps, continued longer, for the rock beds in general have a gentle inclination to the south. Thus, as one paddles northward along the western shore of Cayuga one can see layer after layer of rock emerge from the water, each older than the last. There is a fascination in following this succession of strata, for it is like going backward down the halls of time, perhaps millions of years, through the ages when these rocks were formed. In the time which has intervened, pressure and heat, and mineral cements have hardened and consolidated the loose sediments, and made of the animal remains

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entombed in them, fossils as hard as the rocks themselves.

As soon as the strata were lifted above sea level, the rains fell on them, and, in consequence, streams flowed over them, and, after a long period of cutting, a drainage system, probably sloping to the north, developed. The streams carved out valleys in the strata, and thus were formed the parallel valleys of the Finger lakes, for these seem to have been the trunk valleys to which the east and west streams were tributary.

But it is manifestly impossible for flowing water to cut its channels deeper than the level of the ocean into which it empties. Yet that is the condition in the Finger lake valleys today. To account for this deepening, one must look then for another cause. As a matter of fact, the streams at the end of their cutting, had bottoms at least seven hundred feet above sea level, while now they are, in places, fifty feet below. What has removed the intervening seven hundred and fifty feet of solid rock, and removed it only from the north and south valleys, leaving the east and west tributaries with bottoms which, even today, are eight hundred feet above the sea?

The answer is found in the results of another climatic change, whose conditions brought about the great Ice Age of Continental Glaciation over almost the whole of the northern hemisphere. In eastern North America this climatic change caused

the accumulation of mountains of ice in Labrador, which grew to such a bulk that they could not sustain their own mass, and so spread out at the edges and started a great ice sheet flowing in all directions, from their center, engulfing the land to the south and east like a great tidal wave. At first this ice-flood was not deep enough to cover the hill summits, so that when it came from the level Ontario plain into the Finger lake region, its advance tongues were crowded into the comparatively narrow north and south valleys.

It is hard to conceive of ice as being in any sense a plastic mass, it seems so brittle, but once you imagine this, you can readily perceive what a terrific grinding agent such a mass, pushed irresistibly up the drainage slope of the country, must have been. It picked up the loose fragments of rocks which it encountered, and used them as tools to scour the underlying strata; projecting and isolated masses it tore off bodily. Then, when it was crowded into the valleys of the upland region, all its force was localized and centralized, and its movement through the valleys might be likened to the forcing of water through a nozzle. Thus, literally squeezed between the hills, its velocity was tremendously increased and its erosive power in even greater proportion. Moreover, as it was moving upstream, its digging was greatest along the bottom of the valleys, and thus it rapidly (as compared to the work of water streams), cut the deep Finger lake valleys

we know today, of which Cayuga is the type. Eventually the ice covered all the hilltops, its depth must have been over two thousand feet, but during all this time the north and south valleys were the main channels of movement, and in these highways the greatest erosive force of the ice expended itself throughout glacial time. Moreover, the tributary valleys were protected somewhat, perhaps, by the fact that the ice filling them acted as a wedge, whose upper surface afforded a gliding plane, over which the succeeding flow moved southward, and thus these east-west valleys remain practically unchanged, while the north and south valleys are so tremendously overdeepened along their axes. The nature of this overdeepening accounts at once, also, for the abrupt change of slope which the Cayuga valley



End of a Balley Glacier

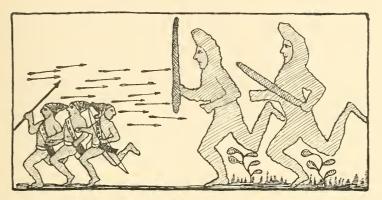
shows at the level of eight hundred feet above the sea; above that elevation the slope is gentle; below it descends abruptly, and almost cliff-like, to the lake bottom.

But the story of the lake's basin is not complete with the history of the gouging out of the valleys. For, as the glacial period came to a close, the southward motion of the great mass became ever less active, and the melting at its front progressed more rapidly. Thus the great sheet wasted away northward, not at a uniform rate, but by spurts Where it halted for a time, because of a sort of equilibrium between the forces which still pushed feebly from the north, and the ravages on its mass which were made by melting; there accumulated great heaps of the debris which the ice always enclosed in its mass, and dragged along at its bottom; debris heaps called moraines. During a period when the agencies of ablation prevailed, and the front was melted back steadily, there was left behind only a nearly uniform sheet of this debris, the till sheet of all the glaciated areas.

These alternate stands and retreats of the ice front have a particular significance when they occurred after the ice lobes had melted back to the north side of the Susquehanna-Ontario divide. For as soon as this point was passed, the north flowing streams were again free to flow—as far as the glacier front—where their waters were ponded by the great dam which the ice-sheet stretched from

east to west across the country. Thus small lakes were formed, one at the head of each of the north-sloping valleys. As the glacier took stands ever farther to the north, these lakes coalesced, forming broader and broader sheets of water, so that at one time the water from the Ithaca region outflowed from this glacial dammed lake and reached the sea through the Hudson river. This stage existed when the ice had uncovered the Mohawk river divide and the outflow was over it, and then the waters were greatest in expanse. After that, Lake Ontario was freed from ice and the present drainage was established.

Each new outflow meant, necessarily, a lower level for the ponded waters. And the records of these varying levels of Cayuga remain today in the shape of deltas which the tributary streams, such as Fall creek and Coy Glen Stream, formed in these higher level lakes with the sediment load they carried. Thus Cornell Heights are built on the successive delta terraces of Fall creek, while opposite, on the western side of the Cayuga valley, one can count, at Coy Glen, four distinct flat-topped, delta terraces of that stream, each marking a different level of the glacial lake. These deltas contain the coarse material which the streams brought down, the fine clay was distributed widely over the whole lake bottom, and is now found spread over all the slopes. Icebergs broke off from the glacier front and floated out into the lake, carrying angular, glacially-



The "Stone Giants" as Pictured by an Iroquois Artist

scratched boulders, which melted out and were dropped far from shore in the midst of the fine clay deposits forming on the bottom.

There remains one more point in this glacial story, as it relates to Cayuga. When the retreat of the ice had been accomplished, to what is now the outlet of the lake, a long halt occurred, and a great moraine accumulated. This forms the dam which keeps Cayuga at its present level. It does not account for all its depth however, for the maximum of this is due to the fact that the gouging of the glacier was unequal, and greatest near the southern end of the lake, where the depth is four hundred and twenty-five feet. The east and west tributaries of the former Cayuga stream, whose valleys the ice did not erode so deeply, now pour their waters into the lake valley in the numerous waterfalls which make its slopes so picturesque.

It is a disputed question whether man existed in North America during, or at the close of the glacial time. That must have been at least five thousand years ago. Certainly no records or relics have been found in the Cayuga region which indicate his presence. Only with the coming of historic times can we once more find a legible page of the Cayuga story. Then the Iroquois Indians, of the Six Nations, dwelt in the region. Of these, the Cayugan tribe dwelt on the east side of the lake, while the Senecas had their villages on the other. From the myths of the loves and wars of these proud redmen, we have the pretty legend of the origin of Frontenac island.

In the early days there dwelt, in a village on the east side of the lake, near the modern Union Springs, a Cayuga chieftain, who loved, and was loved by a Seneca maiden, whose home was situated at a point on the lake nearly opposite. Their courtship had begun in days when the tribes were friendly, but after that time the Cayugas and Senecas had become bitter enemies, and the lovers were denied their former meetings. This state of affairs had continued some months, and the breach between the tribes grew, it seemed, ever greater. Becoming impatient of a tribal peace, the Cayuga chieftain resolved to act for himself.

On the west bank of the lake, to the north, was situated the Seneca village Ganoga, on the site of the modern Canoga. Toward it the Cayugan



Moonlight on Cayuga Lake



chieftain dispatched, one morning, two of his great war canoes, loaded with braves, who had orders to proceed as if intent on attacking the town. Immediately, on noting these, the warriors of the girl's family and relatives, hurried northward along the shore, to give assistance to the threatened Ganogans, precisely as the Cayugan chieftain, now embarked in a light canoe and paddling directly across the lake, with might and main, had anticipated. The maiden, on her part, had early discovered the solitary canoeman; had discerned his identity, and was in waiting when his canoe grated on the shore. A joyful, instant's greeting, and in the next moment they were off for the Cayugan shore.

Then, when the lovers were but a little ways out, the northward-hurrying Senecas again perceived the small canoe; which had made them apprehensive by its course, even when occupied only by a lone paddler. Now, with a double load, they divined the ruse, and, with cries of rage, hurried back and launched their war canoe in pursuit. Thus began a stern chase, in which the pursued, from the start, lost advantage. Although the maiden lent heroic aid, she had not the strength, and her lover was already tired from his previous trip; thus they two could not cope with the fresh and furious braves who impelled the pursuing craft with swift and terrible strokes.

By now they were nearing the eastern shore, but the distance between the elopers and their pursuers

had narrowed, so that the former, not daring to stop to look back, could yet hear the rush of the water against the prow of the avengers' canoe. Once ashore, on the eastern side, and they were safe, for the Senecas would not dare land on Cayugan territory in such small force, but all chance of reaching this seemed lost.

Then suddenly came a mighty roar, and a great ring wave carried the lovers, with a rush, high up on the beach, while its opposite hurled back the pursuers, almost to their destruction; and behold, in the space between there arose the rock sides of Frontenac island. The Great Spirit, who looks with favor on all lovers, had interceded, and had raised this island from the lake bottom to save the chieftain and his sweetheart. But that was not the only outcome. For the Indians perceived this manifestation with great awe, and their medicine men declared that it signified the Great Spirit's displeasure at the enmity of the tribes. Therefore a council was convened and peace declared between the Cayugas and Senecas.

With the completion of the Erie canal in 1825, Cayuga lake first loomed large in the annals of the white settlers of Central New York. Its presence meant to them that Ithaca, at its southern end, should become a future metropolis. For all the region of southern New York and northern Pennsylvania contributed its produce for shipment, over the lake waters, to the lake's northern end, where

a branch canal connected it with the Erie highway. And indeed those were busy days for Ithaca. Later a railroad was built from Ithaca over the Ontario-Susquehanna divide, a few miles south of Ithaca, to the Susquehanna's shores, whence shipments could once more be transported eastward by water. Here, then, was an eastward outlet also, for fast travel from the west. Wheat, and coal from Pennsylvania fields, were the early heavy freight in the region, as they remain today, but no more do the shipments go over Cayuga's waves, for the railroads have eliminated that route. But as the Inlet at Ithaca is now being deepened, and a deep water canal connection at the northern end of the lake. between it and the new Erie barge canal, is promised, transportation and commercial activities will, no doubt, in some measure again enliven this route in the near future.

Today the shores of Cayuga lake are dotted with summer cottages and hotels, and it has become the summer pleasure retreat of all those who reside in the cities located on or near its confines; and, indeed, it attracts many visitors from the larger cities of the east. For the lake acts as a gigantic balance wheel to the climate of its basin, moderating its otherwise oft recurring extremes. Thus on hot days there is always a cool breeze from the lake, to take the place of the light heated air which rises from the land, and on cool days the lake acts as a great warming pan, giving off a grateful



Starting for a Sail on Caginga

warmth, when areas nearby are chilly and uncomfortable.

Though the fishing is not what it might be, due perhaps, to the introduction of the German earp, and to seining in the past, yet many fine catches of pickerel and bass are reported, and an enthusiastic group of Isaac Waltons make it their especial domain. More numerous, however, are the motor boat devotees, for the summer evenings are punctuated, these times, with the unceasing chatter of their engines, and swell after swell races musically along the shores, sent out by the speeding boats. The lights which these boats carry dot the water as though numerous fireflies were flitting over its

expanse. Only less in numbers to these motor boat speeders, are the canoeists and vachtsmen, to whom the lake seems wholly alloted in the late afternoon hours. The latter, especially, take advantage of the land breeze, which springs up almost unfailingly towards evening, to spread their snowy sails. long, straight reach of the lake, unbroken by islands, is especially favorable for their sport; although islands, and the accompanying sheltered nooks they create, would be an appreciated change of conditions, from the viewpoint of the canoeists who idly paddle over the lapping waves, with summer girls in white, picturesquely ensconced in the bows of their craft.

And we, who are onlookers only, wonder if ours is not, perhaps, the best sport, this having the ever-changing picture before us. Leastways we feel that to be at, or on Cayuga's water, is compensation for many hours of toil, in the city or on the hill; and the days spent on Cayuga are always cherished memories.



In Indian Times



"On the bosom of Cayuga,
In the time of long ago,
There were races well contested
Where the Indian came to row."

Which the above lines portray, there is born into consciousness a thrill from out of the past. Bark canoes, naked redmen and barbaric shouts of encouragement to the contestants; all this one sees in the imagination as the setting for the primitive race. And then the picture fades, for how little more do we know of these pristine Cornellians and their trials and triumphs; either on the course over which we now so inevitably row to victory, or of their larger battles,—of their traditions and their lives?

And this ignorance is the more strange, in the light of the general popular interest all things Indian possess today; especially so as the Iroquois Indians of the Five Nations were our forerunners in this region, and they, among the redmen of their time, held a place second to none; were considered first,

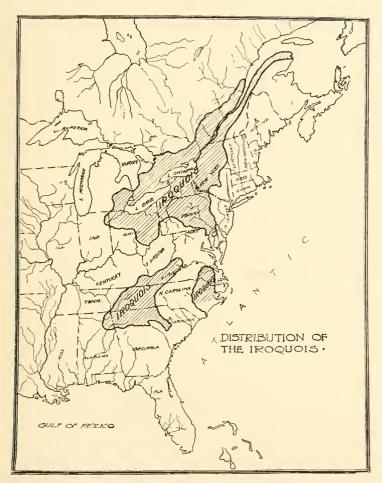
among the tribes north of Mexico, in political organization, statecraft and military prowess. Indeed, we almost owe it to ourselves, to become acquainted with this splendid, primitive nation of the past who dwelt where now our Alma Mater has her place. And the more so because their story* would possess abundant interest even though shorn of these associations.

The stock from which the Iroquois trace their descent had its original home to the north and east of this region, along the St. Lawrence. From thence they seem to have spread to the west, north and south, and, in this time of migration, those tribes, the Cayuga, Mohawk, Oneida and Onondaga, which were later to form the confederation of the Five Nations, came to central New York, to the region of the Finger Lakes.

And it was Hiawatha who brought about their union. This surprises you, for Longfellow's poem, which has made Hiawatha's name familiar the world over, associates the great law-giver and reformer with the northern Chippewas of the Great Lakes a mistake for which we may blame Schoolcraft, the Indian historian, who confused Hiawatha with Manabozho, a Chippewa deity. As a result of this mistake the poem contains no single fact or fiction regarding the real Hiawatha.

It was probably near the year 1570 A. D. that

^{*} The publications of the Bureau of American Ethnology, of the Smithsonian Institution, are authority for many of the facts presented in this sketch.

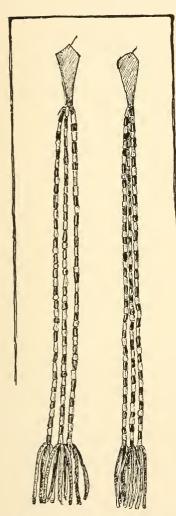


The Territory of the Iroquois

Hiawatha achieved his lifework. He was it seems a Mohawk, by birth, but began his great work of reform among the Onondagas, associated with Deka-

nawida, another Indian reformer. These two sought to bring about a new order of things, a program which had for its object the ending of all strife, murder and war, and the promotion of universal peace and wellbeing. Thus, for example, among his propositions was one that twenty strings of wampum were to be paid to the bereaved for the murder of a co-tribesman, ten for the murdered one's life and ten for the life of the murderer, which, by his act, was otherwise forfeited. The chief of the Onondagas however, bitterly opposed these reforms, and murdered Hiawatha's daughters during the progress of the propaganda. Then Hiawatha exiled himself from the Onondagas, sought and was also refused help by the Mohawks, and came then, finally, to the Oneidas and the Cayugas, which latter had their domain about Cayuga Lake. tribes readily assented to his plans, on condition that the Mohawks also join the confederation, and, as it proved, after the others had taken the initiative, the Mohawks quickly consented; and then the three tribes brought their combined influence to bear on the Onondagas, who, on their part, made it a condition that the Senecas enter the union. portion of the Seneca finally agreed, and then the Onondaga came in, and thus was formed the confederation of the Five Nations.

Their own name for this organization was "Ongwanonsionni," we are of the extended lodge,' and its scheme of government was patterned after



Strings of Iroquois Wampum

that of the Cayuga tribe. Wars were carried on, it is true, by the confederation, to secure and perpetuate its political life, and the tribes practised a ferocious cruelty on their prisoners, burning even their unadopted women prisoners, but in their social and political life they were really a kind and affectionate people, full of keen sympathy for kin and friends in distress, exceedingly fond of their children, anxiously striving peace among men, and profoundly endowed with a just reverence for the constitution of their commonwealth and its founders.

Curiously enough, their kinship was traced through the blood of the women only. The simplest union of the con-

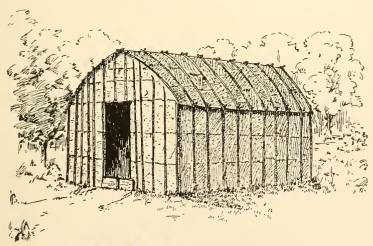
federation was what might be termed a brood fami-

ly, composed of the progeny of a woman and her female descendants, counting through the female line only. This simple unit surrendered part of its autonomy to the next higher unit, and so on. Kinship meant membership in a family, and this, in turn, constituted citizenship, and conferred certain social, political, and religious privileges, duties and rights, which were denied persons of alien blood, who might, however, be adopted into a family. The three functions of government were exercised by one and same class of persons, the chiefs, who were of three grades and organized into councils; chiefship, however, was dependent on the suffrages of the matrons. Iroquois marriages, again, were arranged by the mothers, without the consent or knowledge of the couple.

Once organized, the confederation soon made its power felt. After the coming of the Dutch, from whom they obtained fire-arms, the Iroquois were able to extend their conquests over all the neighboring tribes until their dominion was acknowledged from the Ottawa river to the Tenessee and from the Kennebec to the Illinois river and Lake Michigan. The Chippewas checked their westward advance; the Cherokees and Catawba barred their way in the south, while in the north the operations of the French ultimately hindered their further progress. And yet, when they had reached the height of their power, in 1677, they numbered only 16,000 souls. Certainly this was an enterprising nation, when one

considers the vastness of the territory they ruled, as compared to the probable number of their warriors. In fortification their skill was great. Their so-called castles were solid log structures, with platforms running along the top, on the inside, from which stones and other missiles could be hurled down on the besiegers.

On the outbreak of the American Revolution, the League of the Iroquois decided not to take part in the conflict, as a nation, but to allow each tribe to take action for itself. Yet all the original Five Nations allied themselves with the English. This alliance was of far greater import for the coming struggle than the mere statement implies. For the Iroquois tribes were sedentary and agricultural, depending on the chase for only a small part of



Typical Bark House of the Iroquois

their subsistence. At the beginning of the war they had already under cultivation an immense "acreage" of the great Central New York region, and they possessed live stock in great numbers. On the farms were raised the maize or Indian corn, beans, pumpkins; and orchards of peach, apple and pear blossomed annually, making bright, in the springtime, all the interlake country between Cayuga and Seneca. Few white men had ever seen this region of the Iroquois home, before the war, but the British quickly appreciated its possibilities, for immediately thousands more acres were cleared and tilled under their direction, and thus Central New York became a great storehouse and granary for the British armies.

That their enemies should thus easily gain subsistence from the land while they themselves often suffered need was, of course, a sore thorn in the sides of the Continentals. Therefore, in 1779, Washington commissioned General Sullivan, with an army of five thousand men, practically one-third the whole Continental army, to advance from three directions into the Iroquois country, and ravage it utterly, so that it could not, for a long time, be a base of supplies. And this commission was carried out to the letter, the Indian towns, with their great, long, bark houses, plunder-filled, were burned, the maize in the fields destroyed, and the live stock scattered and killed. Among the towns which suffered this fate were two on Cayuga lake, Ganoga,

the site of the modern Canoga, and Coreorgonel, a village in the Inlet valley, just south of the present Ithaca. A detailed record of this march into the wilderness, of the trials and the struggles endured in the dragging of cannon through the swamps and marshes of the flat-topped divides, is contained in the diaries of the army officers, and to these, of which the University Library possesses copies, the interested reader is referred.

It seems a great pity that there was no photography in those days to preserve for us the conditions and the intimacies of this Indian life. As it is. we can do little more than conjecture its circumstances. Where words suffice, a few details have come down to us. Money is today a word to conjure with, and even now its Indian equivalent, wampum, still has clinging to it enough of its old association to make it a sort of fetish, demanding introduction into the Indian poetry of our authors. Yet one may question whether many readers know of what a string of wampum consisted. It is, therefore, interesting to know that this wampum, which existed as currency, even among the white people in the early Colonial period, and in New York as late as 1693, was simply strings of white and black beads, carved from the valves of the quahog and other molluskan shells. The darker ones had a greater value than the white; according to Holm, "a white bead is of the value of a piece of copper money, but a brown is worth a piece of silver." This wam-

pum could be carried much more conveniently than skins for trading purposes, and it was readily measured out in payment, by the length of the thumb, "from the end of the nail to the first joint makes six beads."

Of the Iroquois mythical and legendary lore, more is preserved. David Cusick, one of their number who received an English education, wrote out a number of these myths in his 'History of the Iroquois.' The myths are all concerned with the creatures of their religious beliefs; to whose activities they ascribe the origin of the many striking natural phenomena of the region. The Taughannock Falls story is perhaps the most interesting of these, and runs substantially as follows:

In the long-ago days, when the stone-clothed giants roamed the earth, the spirit of the waters and the spirit of the rocks had a disagreement. It seems that the spirit of the rocks was a lazy fellow, who, as are lazy characters among men today, was marked most definitely as such, by the fact that he hated to see industry in others. The water-spirit particularly vexed him because of his constant, every hour, activity; and the evidence of his activity, which one encountered everywhere. There were the chafing waves of the lake, the driving rains and the riving frosts, and all the streams, little and big, flowing over the land. Moreover, between these two there was a rivalry of strength, and, as is generally the case with lazy beings, the

rock-spirit was a boastful fellow, and inclined to sudden spurts of tremendous energy, alternating with much longer periods of idle lolling. At length, one day, unable to contain his spleen at the waterspirit's activity longer, he taunted this gentler deity with its constant laborious toil in so many different forms, and recited the large proportions of the works he accomplished almost in an instant, how he sent great rock slides crashing down the slopes, sprung loose the cliffs into the lake and so creating great waves; and yes, making the whole earth tremble in earthquakes when he stirred his underground forces. Moreover, he insinuated that the water-spirit needed the co-operation of the wind-spirit and others in his accomplishments, while he worked independently.

Aroused by these insults, uttered in the presence of the thunder-spirit, the lightning, the wind and the tree-spirits, and many others, the gentler waterspirit proposed a trial by combat, to determine their relative standing, and to settle the aggravation as to dominance, once and for all time.

The rock-spirit readily enough, and even mockingly, agreed to the conditions the water-spirit proposed, and a time was set when all the spirits and the stone-clothed giants were to come and witness the contest. The water-spirit had chosen to fight with the Taughannock stream, which then flowed quietly down an even slope into the lake; while the rock-spirit was to inhabit an immense rock, great as a pine tree in height and many times

as wide and long, which lay in the course of the same stream. The terms of the battle were that neither was to give up until one or the other had been utterly vanquished.

At the agreed time, all the witnesses assembled, and the combat began. The rock-spirit made a tremendous fuss pushing back the waters and lashing them into foam, but, even when it seemed that the water-spirit had been all but subdued, it would recover fresh energy from its unceasing upstream supply, and so burst the barrier of the rock-spirit, and the battle would then begin anew.

While to the spirits all this contest seemed short, in reality it occupied years. And in their struggles, the combatants tore a great hole in the earth, a half mile long and a third as wide, and three hundred feet deep. Finally the water-spirit, by its persistence and ever renewed small-strength, so battered into fragments, what had erst been a great rock, that the rock-spirit could no longer find lodging place sufficient to fight from, and was forced to abandon the conflict, and the water-spirit, fresh as ever, was unanimously approved the victor.

Then the water-spirit took its beautiful white cloud form, thanked the stream which had served it so faithfully, and ordained that it flow for seven ages, with a great roar, into the abyss that had been wrought during the struggle, and thus serve as a warning to any who presume to think that bluster must intimidate those who are quietly doing. And

so we have the record of the water-spirit's victory, preserved even until now, in the form of the Taughannock Falls.

Today the descendents of the Cayugas are scattered far and wide. After the Revolution, some had already moved to Ohio and Canada. In the former place, they joined other Iroquois and became known as the Seneca of Sandusky. These are now in Indian Territory; others are with the Oneida in Wisconsin; one hundred and seventy-five are with the Iroquois in New York, on the Indian reservation, while the majority of the surviving descendants of the Cayugas, some seven or eight hundred, are on the Grand river reservation in Ontario.





HERE are several routes which one may follow in going from Ithaca to Taughannock, and of these the railway trip is the most direct, and is, at the same time, very interesting as it overlooks Cayuga lake, from the cliffs of its western shore. Alighting at the Taughannock Falls station, one finds a pleasant roadway leading down to the Falls hotel, which has a most romantic setting among tall pines, some of the few of these conifers yet remaining of what were once whole forests, and of which the gnarled roots, in the shape of field fences, now constitute the only remaining evidence of their former existence.

But at Taughannock great pines still border the edge of the gorge; and, starting from the hotel veranda, we follow a precipitous path, overhung by their boughs, to the various prospects of the falls, which the path affords. And these are, perhaps, the most picturesque views that can he had, for from these points one sees the water plunging from the smooth platform of its upper channel, over the brink, and straight down in one leap, to the green-

shadowed pool below. We are over three hundred feet above, and a greater distance removed from where the concussion of the waters occurs, and the noise of their meeting reaches us but faintly. But the glamour of the scene is enticing. One instinctively speculates on the possibility of staving, for a time, at this quiet retreat where the pulse of the working world beats but feebly. Here, with a book and a pipe, on the veranda, looking out across the deep gash in the hills, on the swaying trees of the opposite rim, and with a peep, perhaps, in the cool of each morning and evening, from the prospect point near by, at the mystery of the water in its endless cyclic course, to kindle in the brain the dream fire of world thoughts remote from our petty daily routine—here we feel we could pass time, aye for a fortnight, in simple, big contentment. 'Twould be as Shakespeare has King Henry yearn:

"Oh God! methinks it were a happy life,
To be no better than a homely swain:
To sit upon a hill, as I do now,
To carve out dials quaintly, point by point,
Thereby to see the minutes, how they run.

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Ah, what a life were this! how sweet! how lovely!"

The inn is in large part responsible for this atmosphere; one feels that in it one has made a discovery. Here is one of those fabled hostelries, where everything is idyllic, possessing the charm of being known and appreciated only by the elect.

Perchance painted deceit lurks beneath the mask, but had one the time—it were well worth while to make the try.

Following downstream, there are other points where overhanging ledges offer a prospect into the deeps below; down on the swaying crowns of the tall trees which root in the valley bottom, and over at the buttressed rocks of the opposite wall, all weatherworn and crumbly in the hollows, but often with bold, sharp fronts and sides, where a newly exposed joint plane cleavage reveals the unaltered strata. Through a little doorway in a log shelter, a little farther on, one comes to the pathway which affords a precarious descent into the gorge itself.

University excursions often visit this locality, and very amusing are the unexpected traits of human character which often crop out when such a party, which pure chance has brought together for an experience, attempts the descent into the gorge. Those held most timid, often prove least nervous; on the other hand, the traditionally stoical Oriental (for the classes are often of the most cosmopolitan composition), very frequently crawls up a treacherous slope on hands and knees. The path which we are now essaying is not without its thrills for those who have had no experience in climbing, and its turns and crooks have a charm even for the initiated.

No one has "improved" Taughannock gorge with sordid wooden walks and hand rails, so that

we see it in its pristine charm. For which the Gods be praised! What matters a wet foot, or a soiled skirt, occasioned by a slip from a stepping stone, or an uncautious step along a moist green ledge, compared to the joy of pushing into the wild, unregulated by the hand of man! A faint trail of former explorers, gives the confidence of human precursors, and that is all the encouragement we need.

But let us note what interests are about us. In the lower end of the gorge the rock bed of the stream's course is the Tully limestone, and from a mixture of this with the Hamilton shales, which lie directly below its twelve feet of thickness, is made the cement which is calcined and ground at Portland Point, on the east shore of the lake near Ithaca. The rocks above the Tully are the crumbly Genesee shales, and all over their surface one sees white deposits of alum and lime carbonate, where the water is leaching the cements from the fissile layers. From this point upward it is an easy ramble along ledges and through woods to the Falls; and along the way one is even more impressed than by the view from above, with the height and the verticality of the beetling cliffs through which the water has cut.

The falls themselves, which come suddenly into view as one rounds the last bend, seem to belie their reputed height. This is due to the distance yet intervening between us and their base; to the fact that the cliffs on each side are much higher



Taughannock Falls



than the falls themselves, and most to the fact that our sense of scale seems to have deserted us. However, a nearer approach to where the spray keeps



Taughannock Falls before the Change in the Form of the Crest

the black-brown, jointed cliffs constantly moist, and then craning the neck to gaze upward, we are enabled to regain the lost sense of proportion, and the true magnitude of the plunge the waters make bursts upon us, and the falls become indeed impressive. And they deserve the tribute which we then unconsciously bestow, for their two hundred and fifteen feet of fall is greater than that of Niagara by fifty-five feet; moreover, Taughannock is said to be the highest waterfall east of the Rocky mountains.

In former years there was no break in the falls, at the brink; the water plunged straight down from a projecting ledge, whereas the lip of the falls is now a reentrant angle. This change in form is a clue to the origin of the cataract, for it points out the influence of the many joints, intersecting at right angles, which here cut the rocks in rectangular blocks. Taughannock creek, like the other streams with gorge valleys, about Ithaca, is probably the result of post-glacial erosion by the stream. former vears, geologically speaking, the gorge was probably similar in character to the other gorges of the region and consisted, as these latter have continued since, of a series of cascades and sloping reaches. But in Taughannock it happened eventually that the edge of a hard layer, a little above the present height of the falls, having been worn back upstream to a point where the joint planes were very closely spaced, the water was enabled to work faster than it had in the less broken strata, with the result



Buttermilk Gorge

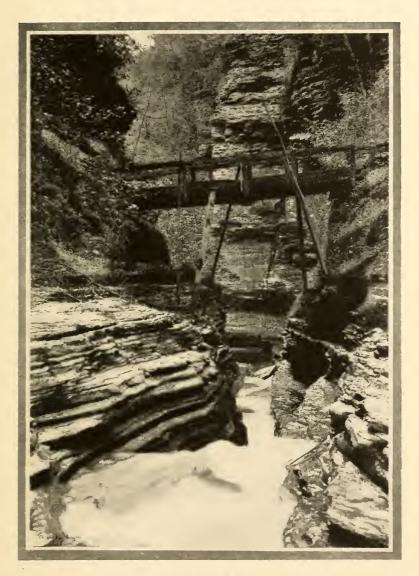


that it swept out the underlying softer shales very rapidly, and probably developed a vertical fall of considerable magnitude, limited in height only by the horizon of the next hard layer. At the downstream edge of this lower resistant layer, a fall was also working, and presently it too had reached the jointed area; and then coming almost immediately within the influence of the greater fall above, it increased its height and thus probably doubled the effectiveness of the latter. In time all the minor hard layers were worn back, and the falls they had developed were combined with the big fall, and we had approximately the present Taughannock falls, with its height of two hundred and fifteen feet. This is, however, about the limit in height, for the stream is cutting down its bed in the small gorge above, while below its excavating power is practically limited by the presence of the durable Tully limestone, ten to fifteen feet in thickness, only a few feet below the present base of the falls.

This explanation of the falls may seem plausible enough to the observer who stands at the cataract's foot, but there remains the puzzle of accounting for the semi-circular amphitheatre at which he gazes; and which is far too wide to have ever been directly under the influence of the falling water. Yet one has only to note how constantly the walls are wet with spray, and consider how the freezing of this in the crevices, and the consequent expansion, as the water solidifies into ice, would pry off the blocks

on both sides of and behind the fall, with the same resistless force which it employs on our water pipes in winter. In summer this spray, which trickles from the cliffs in little runlets of silver, simulating, in the most fascinating manner, the presence of living springs in the rock; does a lesser work of destruction by its power of solution, and by acting as a promoter of oxidation, and the consequent disintegration of the rock.

Projecting from these spray-moist rocks, are scattered rounded masses about the size of a man's head, and in form resembling most an exaggerated red peppermint drop. These are what geologists call concretions, and owe their origin to the accumulation of a greater amount of cement around a central foreign substance, as, say, a small pebble, while the rocks were being solidified. They project out from the rest of the wall in which they are imbedded, in part because they are more resistant to the weathering agents, and in part because the joint planes do not ordinarily cut through them. Of like geological interest are the "dikes" which cut vertically through the rock, and can best be seen on the left hand wall, as one faces the falls, and near the end of the circular arc of rock which curves out on each side from behind the falls, and about half way up the cliff. They look like yellow-brown tree roots, penetrating the strata, except that they are tabular in form. An examination of a fragment, of which many will be found in the talus heap below the



In Enfield Glen



cliff, shows them to be of igneous character, with flakes of mica crystals in the central core, and on each side an iron-stained oxidized shell. This proves that at some period in its history, and after the formation of the sedimentary layers, volcanic activity was present in this region, manifesting itself by the forcing of hot, molten rock magma far upward toward the earth's surface from the interior, so that it penetrated the solid rock, and on cooling, formed these dikes.

Turning our eyes again to the falls themselves, we may spend these last moments before quitting the spot most pleasurably in watching the fall of the water. As we look upward we appreciate the true height of the plunge it makes, and note how the at first unbroken sheet, before many feet of its descent have been accomplished, breaks, and then descends as a myriad of meteors, each with its solid shooting head, and a glowing trail of white foam flecks behind. And, indeed, the comparison is apt, for in both cases it is the friction of the atmosphere which causes this phenomenon. "Taghkanick," the Iroquois called the falls, signifying 'there-is-waterenough,' and in this we will agree; wishing at the same time, that all these poetic Indian names had been retained, as here, where it is truly in keeping, for the white man has, at Taughannock, for once, appreciated enough, or so little, as to leave the gorge in its primitive beauty.

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Watkins Glen



Watkins Glen.

ATKINS GLEN is located on the western side of the Seneca lake valley, at the southern end of the lake, and cuts up through the steep hillside which hems in the town of Watkins. The glen may properly enough be considered an adjunct of the Cornell country, for a majority, perhaps, of those who visit it are Cornellians, since these have had a desire for gorge exploration kindled by their climbs in the many rock canyons which neighbor the University campus. Watkins, however, offers little opportunity for climbing, as it has been made thoroughly accessible to the "tourist in a hurry," by means of metal and concrete stairways, and carefully constructed paths. It is partly on this account that the glen is best known of all the gorges of the Central New York region, and partly, because Watkins is of these, at once, the longest and the most varied in its component features. The "improvement" of this gorge, by means of stairs and paths, can not well be complained of, as it affords many an opportunity to see the glen who would be physically unable to scramble from ledge to ledge,

as one must do in the other gorges of the region. Nor can one complain of the style of this improvement, as carried out by the State Commissioners, who now have the park in charge, since everything garish has been excluded and only neat and substantial bridges and stairways erected.

It will not be amiss here to review briefly, something of the physiographic history of the Central New York region, a subject which has been outlined more fully in the preceding pages, but which will bear several repetitions, as it is the key and clue to all the scenic features which make the region attractive. Central New York is a plateau region, greatly dissected and eroded by the scouring of glacier and stream; but with summits which still rise to an elevation of two thousand feet above the level of the sea. At one time the region was the bed of a shallow sea whose bottom was slowly subsiding, and into whose waters many streams were pouring clay and sand sediments, which, falling to the bottom, in time built up an enormous thickness of shale and sandstone rock in alternating layers and beds. Then, at the time when the Appalachian mountains had their ridges uplifted, this region was also slowly raised until it attained an elevation of perhaps three thousand feet above the sea level. But this uplifting was no sudden movement, rather, a very slow process, and while it was going on the rains gathered into rills and streams on the newly exposed land, and finally into rivers, and, with the

years, these cut themselves great wide valleys into the horizontal rocks.

The main valleys that were developed in this manner extended in a north and south direction. and this was a fact most significant to the effects of the next great epoch in the history of the region the period of continental glaciation; a period when all the northeastern United States was engulfed in a great ice sheet. For when the ice, from its northern center, began to flow and spread southward, it moved most vigorously in the troughs of the north and south stream valleys, since these were along the line of the direction of its most active general motion. Only later, and more sluggishly, did the ice envelop the hilltops, and the east and west valleys which lay transverse to its course. Now if the streams had been able to cut wide valleys for themselves, the ice was many-fold more effective: it literally scoured and gouged out a course for itself, moreover, it was not limited in the depth to which it could cut, as streams are, by an ocean level. Consequently, before the climate changed and the ice melted away, the glacier had scoured out the bottoms of the old north and south stream valleys over a thousand feet deeper than they had been, and in places, one hundred and more feet below the level of the sea. Thus came into being the basins of the Finger lakes, and as the ice melted away, these were water filled. The Italian lakes of the south side of the Alps are of an identical origin

to these, and resemble them remarkably. Thus Central New York has come to be called the Switzerland of America. The English lake district, which inspired the poetry of Wordsworth, owns the same origin and charm.

But the east and west valleys, as the result of this glacial erosion of the north and south main valleys, had suffered a curious fate. They were deepened only slightly by the ice, if at all, and, consequently, when their streams were again free to flow, they found their mouths, which had formerly joined the main streams at grade, to now hang from four hundred to a thousand feet above the trunk valley, so that their waters must needs plunge in a great waterfall to the lower level. Nothing daunted, they immediately began the work of readjusting things, of cutting their mouths down to the main streams' grades once more; and it is this down-cutting which has given us the gorges and waterfalls which are typified by Watkins Glen.

Watkins Glen is only in minor respects different from those about Ithaca; it has the same origin, is cut into the same kind of rocks (shales and sandstones of the Devonian period, horizontally bedded), and its waters are tributary to the larger lake valley. Its distinctive features are that it is longer and narrower, and that its characteristic waterfalls are neither straight falls, like that of Taughannock, nor distinct step falls, like the Ithaca falls and those in Cascadilla; they resemble most the lower falls



Where the Water Makes Long Slides



of Buttermilk, places where the water makes long steep slides, as through a flume. This is due to several peculiarities of the rock structure in Watkins, the first being that the east and west set of joint planes (vertical cracks which are present in almost all rocks and cut them into blocks), are only very obscurely developed in the rock at Watkins Glen, whereas those running north and south are present there as distinctly as in the gorges around Cayuga lake. As the Watkins' stream flows almost directly east, joint planes have lent little if any guidance to its course, for as it cuts directly across the north and south cracks, and the east and west ones are absent, the erosion has been simply that of a continuous grinding, and not removal in blocks, as is the case where both sets of planes are present. comparison of pictures will make this clear.

This simple erosion, by grinding, accounts for the fact that Watkins Glen is narrower than the other gorges, for since the erosion in Watkins was only that due to the grinding by the stream with its rock fragment tools, the cut made was but little wider than the average width of the ribbon of water to which it owes its origin; and this again, accounts for the fact that Watkins Glen is narrower than the gorges near Ithaca. No blocks are removed bodily, as is so notably the case in the gorges about Cayuga lake, and especially apparent in Enfield gorge. The widening at the upper slopes of Watkins Glen is due to the weathering agents, operative with the same

effectiveness here as in other parts of the region, but perhaps also impeded here by the absence of the east and west joints, though in less degree than are the agents of erosion. The smoothness, in places, of the cuts that the water has made, leads one to believe that the rocks at Watkins are more uniformly resistant to wear than those in other gorges; (they are rocks of a higher horizon and can well have different characteristics than those around the south end of Cayuga lake, for instance) but these appearances may be deceptive, and the conclusion unwarranted.

One enters the gorge almost directly from the main street of Watkins town, and comes first to the Alpha glen and the Entrance cascade. All the features of the Watkins Glen have had names given them, and are marked by unobtrusive sign boards; these latter, a reform effected by the state commissioners. Here, at the entrance, the commission has also constructed a tunnel through the solid rock, by the passage of which one comes into the characteristic portion of the glen.

Some distance up the gorge the Labyrinth and Cavern cascade are encountered. The Labyrinth is the name applied to the series of abnormally steep stairs, hung back and forth across the gorge, by which one climbs some one hundred feet, almost straight up, and in front of the fall of the Cavern cascade and its circular pothole, to a higher path along the side of the upper reaches of the gorge.

The Cavern cascade is notable in that it is the one perpendicular descent in the gorge of any magnitude. But its interest is in the huge and cylindrical pothole which the waters have ground out in the rocks at the base of the falls, and which is even now being deepened by the pebbles and boulders, its tools, which the water is swirling about on the bottom, and so grinding and scouring the rock. How perfectly this is done, the sides of the pothole



The Cavern Cascade

testify. The rocks are almost uniform in resistance, vet every little harder layer stands out as a rounded ridge, and the soft layers are marked by concave hollows. Thus the side of the pothole presents a remarkable series of ringed corrugations which are so regular as to seem artificial in origin. It is curious that these flutings should not have been destroyed, at least

in the upper portions of the cylinder, by the weathering action of frost splitting off fragments of the shale rock, and the fact that they remain intact over the whole surface, probably illustrates the comparative rapidity with which such pothole cutting is done in shale, and under a perpendicular fall.

Having ascended the Labyrinth stairs and stopped to rest and regain breath on the lookout platform at the top, one is next offered the choice of three paths through the Sylvan gorge, just beyond, above. These paths are respectively high above, half way down, and at the bottom of the gorge; and the middle one affords perhaps the best vantage ground for seeing the beauties of this, the prettiest of the series of gorges which make up the glen. Here the cut is narrow and is overhung and embowered by the evergreen of tall hemlocks; green moss clothes the black rock, and delicate fronds of fern, of a yellower hue, relieve here and there the monotony of the dark green of the moss carpet. gorge ends in the Sylvan rapids, one of the flumelike waterways which distinguish Watkins, and of which still better examples occur higher up in its course.

Beyond the Sylvan rapids the gorge widens out into the Glen Cathedral, resultant, probably, from the close spacing of the north and south joints at this point, and the consequent more rapid weathering of the walls, causing this enlargement. The Cathedral walls are almost perpendicular, and may



The Sylvian Gorge



be estimated as one hundred and twenty-five feet high. On their sides is a persistent, yellow-green stain, probably sulphur, released by the weathering of crystals of iron pyrites (iron sulphide), which occur in the shale rock.

In general, the names that the commission has given to the features in the glen, are rather apt, and much more pleasing than those commonly applied to unusual natural phenomena. In many localities there seems to exist an irresistable impulse to couple the name of the Satanic majesty and his abode, to such objects, and we have, in consequence, innumerable Devil's Punch Bowls, Devil's Slides, Hell Gulches, and the like, scattered through the country. Yet the closely following, three features next in order, in Watkins, also have names which present anomalies. First there is an old pothole, worn down at the rim until it has been made quite shallow, but yet retaining its original width; this is called the Baptismal Font. Then comes the trite in names, a Central cascade, to be followed, just above, by a little corner which is glorified by the title, Poet's Dream.

The Central cascade best exemplifies what has been termed, in a previous paragraph, the "slides," which the water makes in descending the gorge. At this point, it rushes down a corkscrew like, smooth passage, twisting around until every water particle must, perforce, accomplish complete spirals in its descent, and then help hollow out, at the bottom, a pothole which is at least twelve feet deep.

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Above the Poet's Dream there follow, first, the Emerald Pool, a name justified by the beautiful green of the deep water, and then the Glen of Pools, where the path comes close to the water's edge and one can observe, close at hand, and even feel of the smooth carvings the water with its pebble and sand



The Central Cascade — A Flinne Falls

tools, has effected in its rock bed. One also notes how the larger rounded stones in the bottoms of the pools, potholes again, are cast up at the lower side of the pool, away from the rush of the water, to lie there quiescent, until the turbulent current of a next flood period shall have power to again wield these heavier tools, and, whirling them round and round, grind the pools yet deeper.

The Glen of Pools ends with the pretty Triple Cascades, and up a stairs past these the path passes directly behind the screen of the water threads of the Rainbow Falls. These are formed by a small tributary stream which pours its slender contribution of clear water, from nearby springs, over the sides of the main gorge, here narrow and steep-walled. This little stream could not cut down into the rock as fast as the main stream, both because its volume was deficient, and, flowing south, it lacked the grade to give it sufficient velocity to carry cutting tools. Thus this little stream remains hanging, instead of coming in at grade, as normal tributaries should, and forms a duplication of the conditions which have given rise to the main gorge, but here shown in the first stage of the process. For just as the main gorge has been cut back from a first waterfall, tumbling directly into the larger, overdeepened Seneca valley; so this little stream now tumbles, by a first fall, into the younger Watkins gorge, and will, in time, as surely etch its own smaller gorge in the side of the main glen. But for all the years

that we, of this and many generations to come, shall know it, there will be little appreciable change; it will stay a moss-lipped falls, raining its threads of silver directly into the larger cleft.

In the next feature one may fear that the commission has been a little amiss in the name it has given: Pillar of Beauty. But, as there is a somewhat tame stretch here, they would probably plead that it was interpolated to beguile the tourist visitor, whose interest might otherwise flag until he came to the Elfin Gorge, where all the gorge features we have thus far seen, are done over again in miniature. Then one comes out into the long, wide, open stretch, called felicitously, Glen Facility,—from the ease with which one may walk along a natural pathway, formed by a ledge of sandstone outcropping along the gorge side. This ledge has been cleared of the overlying shales, and so affords a perfectly level and smooth pathway to the head of the glen, at which point it is crossed by a railroad bridge. Along this stretch the irrepressible American tourist finds opportunity to express his personality, and one notes innumerable flat stone tablets set up, with scratched inscriptions, which proclaim, for example, that "Sile, the Colorado cowboy" has been here, and that he wishes to exchange picture post cards with "handsome girls." Nor are the handsome girls backward, they too, have scratched "Lorna Thompson, Fairville, Maine, R.F.D. No. 3," and invited a like courtesy. There is a naive curiosity

within us, all about the unknown human, and a desire to come in contact with him, which here, and elsewhere similarly, finds in this way, a crude expression.

And now, having clambered, by proxy, through this and other gorges, you ask perhaps, 'why these



The Silver Threads of Kainhow Falls

guide-booky articles?' Well, most of us are partners in the campaign which is being waged against the spoilation of our American scenic resources, but how few of us know what and where these are, excepting those several grand features which have been advertised from time immemorial. And not knowing, can we have a great interest in their preservation? That a region so near, geographically, to the centers of our population as this central part of New York state, should, with its great scenic interest and beauty, be, to most readers, literally as foreign to ken as the Rockies or the Alps, is certainly a condition which one ought to strive to overcome. And when persons who are travelers and nature-lovers, and thus keenly alive to the charms of the European landscape, declare this region to excel in beauty and wildness, many regions in Europe which are perennially celebrated by the American tourist; is it not time that we point, even somewhat vehemently, to our own "nearby" attractions?

Wild Flowers Haunts and the Seekers of Them



Wild Flowers Haunts and the Seekers of Them

OR the Cornellian botanist and wildflower lover, the year begins with the blossoming of the arbutus in the early April weeks. Sometimes, indeed, this flower peeps out from under snow hollows, but more often hides under thefragrant still—autumn leaves, on the sunny, southfacing slopes of the hills. And, indeed, the flower lover prizes this first comer, perhaps, the more highly because the Cayuga region is very near the western limit of its habitat. That it is not abundant near Cornell, and is growing scarcer, helps to make it precious. The threatened extinction is feared from the ruthlessness of those who pull up the whole plant when collecting the fragrant pink and white blossoms. Whether, however, any check is put upon such persons by urging, as do all the flower loving essayists, that they cease their vandalism, I question, nor am I in accord with them in their belief that its localities should not be revealed to others, by those who know, for the worst vandals are those who profit by hawking the arbutus in



The Sunny Slopes of the Hills

the city streets, and the uninitiated and unscientific searcher, who would delight in its finding, is often disappointed in his hunt, for lack of some simple directions. Look, then, you newcomers, to whom the historic May-flower of the Pilgrims possesses romantic interest, on the warm south slopes of the hills, near the shelter of some pine woods, and if you would be sure of success, go far afield, for the nearby places are all but barren.

The arbutus, firstling though it be, does not far precede the hepaticas, who, protected by their fuzzy furs, have been nestling close to the ground, eagerly awaiting the first peeps of the warm spring sun.

There is a path on the north side of Beebe lake, where they flourish especially, and those who take the first opportunities for outdoor excursions, watch there for their appearance. Often the late spring frosts catch them, and then they are forced to retire to their furs again, but seldom are they completely vanguished. A "stunt" which affords their enjoyment, without fear of nipping frosts, is to lift a plant or two which is full of buds, and bring it into the house. Then you will have a succession of flowers for two weeks, each one perfect. This Beebe path is also a famous place for violets, later, when the sun has climbed so high in the heavens that the frosts can not come. Another place where violets are exceedingly abundant is on Violet Island in the Cascadilla gorge. This island is situated where the gorge widens out in an amphitheatre beyond the dam which marks the terminus of Goldwin Smith Walk.

One of the prettiest happenings in the Cornell flora is the blooming of the bluet colony on South hill. There are literally acres of the delicate little things, so fragile that one would think the fairest breeze would lay them low. But they are to their conditions sturdily resistant, and never fail of an appearance at their appointed time in May. In the thickets, nearby, fringing the pine grove remnants, there come in the early June weeks, the showy blossoms of the sheep laurel.

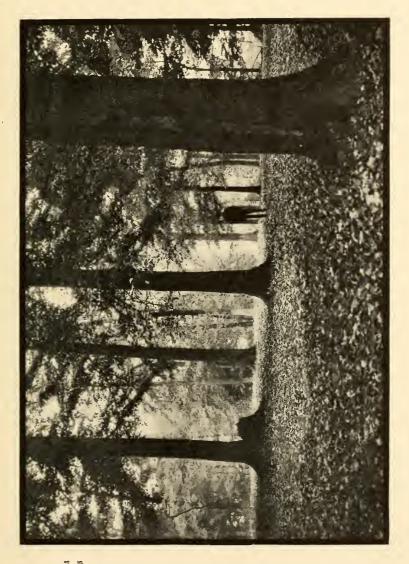
But it is in the gorges that the real display of

the May weeks takes place. Hiram Corson, it is related, once said to one of the unfit, "The gorges are gorgeous," and was nearly overcome by spleen because that good pun was unappreciated. It must have been during May that the gorges evoked his witticism. For then the trilliums are on their annual parade, mar-



Where the Hepaticas Flourish

shaled by the jacks-in-pulpits, and indeed, it is a splendid procession. One should go to the open places of Six Mile for the best view. There you will find wild flower gardens, planned and planted by Nature. Perhaps you have not realized that she is the original artist, and the best, in the grouping of flowers; that her charges are not scattered singly through the woods, but are disposed in gardens, most fascinating in outline, and situated where their



The Autumn Mands



occupants may thrive and appear at their best. So it is especially with the great, white trilliums, nodding their precise, dress parade salutes, from the tops of their smooth stalks.

There are also less flaunting inhabitants of the gorges; and some which are almost retiring. Such, is the little pink Primula Mitassinica. This primrose has its Mittassinica species name from a lake in northern Labrador, and the botanists know it as an Alpine flower, and say that it is a remnant of the flora of the glacial period, left behind on the retreat of the ice, and now found only in the coolest, south sides of the gorges, where the winter ice sometimes persists far into May, and whose crevices are ever laved by the coldest of spring water. Under the bridge, which spans Fall creek just below Beebe lake, is one of its retreats, and in Taughannock gorge another.

Griffis, in his Pathfinders of the Revolution, relates a pretty, sentimental story regarding this flower and its occurrence at the Fall creek locality, which is worth repeating. In the Revolutionary days, one Herman Clute, of Schenectady, then a frontier town, had a sweetheart, Mary Vrooman, who was taken captive by the Indians at the Cherry Valley massacre. The Indians carried her to Kendaia near the site of the modern town of the same name, and there she was adopted into the Seneca tribe. Later she found an opportunity to send a letter back to her white friends, by a captive negro, whom

the Indians regarded as a trusty. In this she described a hiding place she had discovered, near a great waterfall, in a gorge at the south end of Cayuga lake, and to this place she proposed to flee, if ever a punitive expedition should be sent into the lake country. The exact locality she described as being recognizable by the flowering there, on the gorge walls, of the little primrose, which she had noted only here, and in the letter she included pressed specimens.

Not long after, General Sullivan's expedition was sent out, and this expedition Herman Clute joined, with great hopes of rescuing his lost sweetheart. Eventually, on September 24, 1779, a detachment of the army, under Colonel Dearborn, reached the southern end of Cayuga lake, and destroyed the Indian town of Coreorgonel, with its twenty-five 'elegantly' built houses. The Indians had several days earlier fled the country. On the next day Herman Clute obtained permission to seek out, if possible, the hiding place of the captive girl, and, if indeed she had succeeded in escaping, to bring her back to the safety of the camp.

Once again that morning he examined carefully the pressed specimens in his pocket case, and then, with fast beating heart, hurried forward. Up and down Cascadilla he paced, and found no such leaf; the flowering time of the plant was now long past. Almost despairing, he crossed this stream and continued northward, until he found himself on



The Dress Parade of the Trilliums



the brink of a still greater ravine. Here he chanced, almost at once, on what we know as Triphammer Falls, and, peering eagerly along the gorge sides, discovered, to his joy, the anxiously sought leaf. But where was the captive maiden?

Nowhere on this side of the gorge was any hiding place that he could discover. Was she on the other side? He shouted, "Mary Vrooman! Mary Vrooman!" Then the bushes on the opposite cliff parted near the bottom of the gorge, and a girl's face appeared. It was a lover's haste and fortune that made the difficult crossing at this point safe, and almost in a moment Mary was pouring her story into Herman's willing ears. It had all turned out as she had planned, and the little pink primrose had played its part well.

As the summer grows, the flowers of the valleys become somewhat rank, and then one seeks the hills where the breezes seldom cease. Here are great meadows, decked in Queen Anne's lace, more commonly called wild carrot, but none the less beautiful, however termed. The summits themselves give an outlook over the green checkered fields of the long valley slopes, and one sees far away, the blue turquoise of Cayuga water.

Then comes a blank, continuing until the summer's ending, that is, vacation time, and, when Cornellians return, the country has donned the glorious panoply of Autumn, garments gay with yellows and reds. All too soon this fades away,

and then comes winter to hide under a snow cover, our erstwhile wild flower gardens. Only the graceful tall goldenrods, boneset and joe-pye-weeds, still wave brown plumes on long, slender stems, decked though they be, in winter caps. And with their beauty of form, we must content ourselves, until Spring once more paints the landscape in color.



The Golden Rods Decked with Snow

Student Life of Everyday



Student Life of Everyday

that it is the routine of everyday, and the trivial incidents which vary it, that constitute actual student life at Cornell. A stunt book may be cumbered with programs and Spring Day souvenirs, yet such mementos, are only representative of episodes. They do not tell of the hum-drum making of eight-o'clocks, of the times sent up to the board or called on for recitation in the class room quizzes, or of the evenings spent with the fellows in the house or downtown, or of the afternoons on the field. There is need of some other device than the stunt book, if we would carry away tangible records of this real, intimate life of the school.

Yet—when one does stop to consider, it is not so hum-drum after all. Probably there are more little excitements and experiences scattered through University, undergraduate existence than one will meet in any of the common walks of life wherein the student may find himself in after years. The undergraduate's days slip along, so full of variety,

that he scarcely notes their passing. Not one of them is just like that preceding; and in that fact, perhaps, is the charm of college life.

This life at Cornell begins with the moment that the freshman alights from his train at Ithaca. In waiting at the station, is a buzzing crowd of classmen, and his greeting comes either from the members of the particular fraternities to whom he has been recommended, or from home friends, or, if he comes a stranger, all unknown, he is seized upon by the room agency solicitors and hustled away up the hill, to be piloted through vacant room after room, until, in confusion and sheer desperation, he finally selects one, more on the basis of chance than design. In another year, he will look with more care after closet room, outlook, heating arrangement, and most of all, inquire about the character of the landlady—but all that needs the wisdom of experience. It must be confessed that the rooms which the room agency man shows the freshman do not afford much in choice, both as to convenience and management. There are good rooms and good landladies, but these seldom fall to the lot of the stranger freshman, for obvious reasons.

Thus the freshman probably finds himself under a roof which also shelters a number of other freshmen in the same plight as himself. Say that it is due to a like misery, if you will; at any rate, they soon find each other company, and discover com-

Student Life of Everyday



A Campus Hista

mon interests. As an accompaniment to these newly made friendships, rough-housing soon begins, tussling and wrestling in the rooms, singing of Cornell songs until all hours of the night. These happy times often end in the middle of the first term, with the expulsion by the landlady of the whole crowd from her house. Such expulsion is generally not such a calamity as it might seem, for, although there is seldom a contract to that effect, custom (as interpreted by the landladies, it is law), binds the student to keep for the year the room he engages at the beginning of the fall term. In other words, it is a lease which may be terminated without notice by the landlady, but is binding on the student.

Moreover, Ithaca justice has such strange kinks, that even an upperclassman would shrink from a legal conflict with native Ithaca. Therefore, an expulsion is often a blessing in disguise, for it means that the freshman may seek more congenial quarters. And very often the rough-housing is simply an expression of the student's distaste and chafing at his environment. When the landlady does not keep the rooms clean, when the heat is lacking, both in quantity and uniformity, when he finds that he is overpaying—what redress has the student?

Cornell needs dormitories for the men students. The first good these would confer would be this relief from the exactions of the owners and managers of private rooming houses. One of these owners, a woman, naively met a complaint about rather exhorbitant charges—for Ithaca even—by saying that "she had a debt on this house and intended to get it paid off as soon as possible." Then again, the landladies, in general, are anything but selfeffacing servants—they have a most interesting class of roomers, and, in consequence, their curiosity leads them to intrude, often and long, when the broadest hints will often not suffice to terminate their visits. Moreover, dormitories would promote good-fellowship and acquaintance among men who are not in fraternities. That this would follow, is evidenced by the fact that even the comparatively small number of fellows in a rooming house, thrown together by chance as they are, almost always find common

interests and form friendships. In the wider sphere of dormitory life, the good qualities of many men would win for them a much broader acquaintance and closer friends than is possible under present conditions, simply by bringing each student in contact with more men, and thus affording congenial spirits the possibility of finding each other out. Only a very small fraction of the student body can possibly be elected to fraternities, numerous though these are, because of the limitation in the possible number of members.

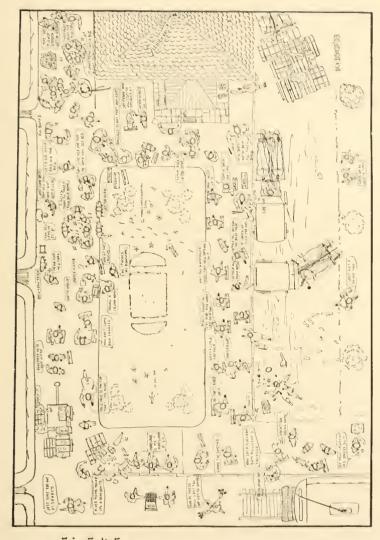
On the other hand, the freshmen who are met at the train by the fraternity delegates, are, in most cases, spared this contact with rooming house keepers, since they are very shortly housed in the chapter homes. Nevertheless, the tendency toward class distinction, which the fraternities promote, is to be deplored, both for the sake of their members, and the great majority of students who are not affiliated with them. Admitting, for the moment, something which may be far from true, that the fraternities get the best men, the result of this is that these 'best' fraternity men never get the point of view of the majority, and are out of sympathy with its ideals and ambitions. The majority again, are deprived of the stimulus which would come by contact with fellows who, by reason of birth, wealth, social accomplishments or athletic prowess, have some distinction. There are sharp enough lines drawn afterwards, in the social world; here at school

the acquaintance of man with man, regardless of his pedigree, social position, and wealth, would be saner, and encourage a better and greater solidarity of Cornell spirit.

As it is, the social functions of the University, occurring in Junior week and Senior week, are almost exclusively in the control of the fraternities. The non-fraternity student, in fact, has no place to



A Climpse of Goldmin Bmith Walk



A Page from
"The Midow"
on the Orasion
of an Easter
Paration

entertain guests. There is a growing opposition to this state of affairs, which is manifesting itself in the formation of numerous clubs and even Greek letter fraternities, which have, at present, no national existence. This movement is viewed with disfavor by the older fraternities, as it seems to them to detract from their former prestige. Yet many fellows outside the fraternities are able financially. and are accustomed to entertain, and are, in this manner, demanding a place in the social functions of the University which, independently, they could not do. It must not be inferred that the fraternities are narrow and extremely exclusive; even the tradition that a man who has waited table can never make a fraternity, does not hold, for several such men have been elected in recent years to good societies.

There are, of course, impossible people in college, as elsewhere, yet dormitories would undoubtedly promote Cornell spirit and make better all round men than the present system can produce. There would still be fraternities, but with their membership limited to the three upper classes.

Among the classmen of the professional colleges of the University, that is the colleges of engineering, law, medicine, architecture, agriculture and chemistry, a certain acquaintance and fellowship develops, irrespective of fraternity lines, due to the fact that all these follow a prescribed course, and therefore meet each other throughout the four years of their

University career, in the classes of the subjects which they must all study. This opportunity for getting acquainted is, however, denied the men in the college of Arts and Sciences, where the courses elected are almost wholly optional with the students, from year to year. Consequently, a student in the Arts college meets with a new group in each course he enters, moreover, each course may be composed of students from all the four classes. And, perhaps, it is this absolute lack of continued contact among Arts men which accounts for the comparative weakness of their college in the University. The existence of many societies, such as the English club, Jugatae, Deutcher Verein, and the like, composed of groups of Arts students who have common interests, is evidence that the need is felt: and that the undergraduates are making an effort to become acquainted with those who are working along similar lines. Membership in most of these is purely voluntary, and eligibility depends on a subject knowledge of, or interest in, the society's specific field. At this point also, may be mentioned the class honorary societies, Sphinx Head, Quill and Dagger, Aleph Samach and Dunstan, the first two being senior, and the latter, respectively, junior and sophomore societies. Membership in these is elective, and eligibility is based on achievement in college activities. There are, besides these, many other social organizations whose members meet more or less regularly, to smoke, to play cards, to read, and what not.



Entrance to the Neterinary College

The boarding houses and restaurants, which latter are known as "dog wagons," are meeting places wherein many non-fraternity students make friends, and enlarge their acquaintance circle in the University, and, if these dining halls were not so uniformly cheerless and depressing, they would afford a large measure of the relief one looks for from the dormitory plan. But as a great number of these dining rooms are the basements of houses, it requires little imagination to conceive what gloomy, damp and stuffy places they are. Yet a plan to be recommended for its value in becoming acquainted, and also because it secures for the student a greater variety of fare, is to change boarding houses every month or six weeks. This scheme

practically secured the election of one man to one of the best offices in the gift of his class.

Even the student who is following a prescribed course has a schedule of classes, which differ, in some detail at least, with that of every other fellow who is doing the same work. This is because the number registered for almost every course is so large as to necessitate the class being subdivided into many sections, meeting at different hours. Then, if a student is pursuing five or six studies, the number of permutations and combinations of these sections that can be made is great, and therefore the schedules vary in almost every case. In Arts, where the courses are wholly elective, no two schedules are alike except by design. The first great desideratum in arranging a schedule in any college of the University, is to avoid "eight o'clocks," that is, classes which meet at eight in the morning. The second is to keep as many afternoons as possible free, especially Saturday afternoon, because of the games. In consequence of this, the tardy ones on registration day, get more than their quota of these undesirable hours, as a waiting line forms on such occasions, which often extends over the length of a city block.

Evenings are supposed to be spent in study, but as a matter of fact it is wonderful what a small portion of time will suffice this purpose with many men, and yet enable them to get a mark of sixty or more. Cards, occasional feeds, and the theatre,

19

help to while away the time. Ithaca, though claiming only fifteen thousand inhabitants, is rated by theatrical managers as a one hundred thousand town. The students, therefore, make the theatre possible, and accordingly they feel that they have the ancient Roman privilege of showing clenched fists and hidden thumbs to any players who fail to gain their approval; only the "thumbing" often takes the form of a rough house of such proportions that it is impossible for the actors to proceed. The sprinkling of native Ithacans, who occupy seats at the theatre, resent this in the extreme, and numerous arrests are often a resultant of these student picnics. While it is difficult to defend mob rule, it would seem that this unruly spirit, on part of the students, is fostered by the attitude of the Ithaca police court, which imposes preposterously large fines on students, for very trivial offenses, whereas others escape with only a nominal punishment. The principle being, that students have money and can pay. It is said that an Ithaca lawyer, writing for a local paper, on the subject of the town's finances, stated that the revenue from fines, collected mostly from students, was practically sufficient to pay the running expenses of the court and the police force, and admitted that it was a shameful extortion. Probably this statement was no great exaggeration, for a characteristic fine would be the assessing of a student twenty-five dollars and costs for pitching a penny onto the stage at the



The Library Slope — Evening



Lyceum, in derision of the play or the acting. In a news report which has just come to my notice, a native Ithacan, "plain drunk," had his sentence suspended, while a "singing" student was fined thirty dollars.

Student activities, is a comprehensive phrase, which is in a sense descriptive of the major interests of college life—to many Cornell students. If a man is not physically qualified for winning atheltic distinction, he enters into competition for college honors, membership in the elective clubs, the class honorary societies, all of which are to be achieved, in part, by success in securing a managership or assistant managership for some athletic or other organization. The competitions for the position of assistant manager, "ass-managers," as they are popularly known, is only less strenuous than the pursuit of athletic distinction. The fraternities more or less require their sophomore members, who have not given promise of distinction along other lines, "to come out," as the phrase is, for these "assmanagerships." The menial character of the tasks which these candidates must perform, and do perform, is really surprising. Thus they must often, late at night, and in freezing weather, chalk notices on all the campus walks, announcing games, meetings and performances. They roll the tracks for the runners, and retrieve from the mud, the hammer and the shot, hurled by the field men at practice. At the club house they are handy with shoestrings

and the like. No doubt the training they get, in such a school, is of great value, but it certainly is a strenuous life.

Of course the man with musical ability tries for the Glee club, or the Mandolin and Guitar clubs, in both which aggregations the Cornell organization ranks preeminent among the colleges of the East. These clubs make "Christmas trips" each year, visiting a number of large cities, and enjoying royal entertainment by enthusiastic alumni and friends The same is true of the Masque, the dramatic club, in recent years. Membership in all these again, is dependent on competition and election.

Then there are the editorial boards and business managerships of the Sun, the University daily, morning paper; the Widow, the bi-monthly comic magazine; as well as of the Era, the literary monthly, to be competed for. The successful candidates are those who, in addition to doing the regular work divided among all the competitors for any one publication, tasks assigned by the board in office, bring in the greatest quantity, and best quality of acceptable material for the publication, or the greatest amount of new advertising.

In the past each class has supported a debating club; and in addition, there is a mock Congress, with a speaker and members from various districts, as in the national body. But debate is in distinctly less favor since the era of athleticism and business enterprises. The reason being that the rewards, neither

CORNELL UNIVERSITY WEEKLY CALENDAR

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No. 24.—Saturday, February 6, 1909

SUNDAY, February 7

SAGE CHAPEL—THE REV. HUGH BLACK, M.A. Presbyterian. Union Theological Seminary, New York City. Morning service at 11 o'clock. Vesper service at 213 o'clock.

MONDAY, February 8

ARTS AND SCIENCE LECTURE—"Reconstruction of Theology," by the Rev. Hugh Black of the Union Theological Seminary, New York City. Goldwin Smith Hall, Room B, 5 P. M.

TUESDAY, February 9

SANITARY SCIENCE AND PUBLIC HEALTH—"Food Adulterations and Their Detection," lecture by E. M. CHAMOT. Professor of Sanitary Chemistry, Cornell University. Morse Hall, Room 1, 12 M.

ARTS AND SCIENCE LECTURE—"Reconstruction of Theology," by the Rev. Hugh. Black of the Union Theological Seminary, New York City. Goldwin Smith Hall, Room B, 5 P. M.

BIOLOGICAL SOCIETY—Meeting "Review of Physical Expression," by Mr. W A. Hilton. McGraw Hall, Room 9, North Entrance, 8 P. M.

WEDNESDAY, February 10

ARTS AND SCIENCE LECTURE—"Reconstruction of Theology," by the Rev. Hugh Black of the Union Theological Seminary, New York City. Goldwin Smith Hall, Room B, 5 P M.

BARNES HALL-Mid-week meeting Y. W C. A , Trophy Room, 7 P. M.

Mid-week meeting C. U. C. A , West Dome, 7:15 P. M

CLASSICAL AND HISTORY CLUBS—Joiot meeting. Address by Professor C. E. Bennett, "An Aocient Schoolmaster's Message to Present-Day Teachers". Open to teachers and prospective teachers. Goldwin Smith Hall, Room 134, 8 P M

THURSDAY, February 11

SANITARY SCIENCE AND PUBLIC HEALTH—"Effect of Dairy Processes on Pathogenic Bacteria and Their Transmission to Human Beings," lecture by W. A STOCKING, Professor of Dairy Bacteriology, Cornell University. Goldwin Smith Hall, Room A, 12 M.

ARTS AND SCIENCE LECTURE—"Reconstruction of Theology," by the Rev. Hugh Black of the Union Theological Seminary, New York City. Goldwin Smith Hall, Room B, 5 P. M

ARTS AND SCIENCE LECTURE—"The Young Goethe as the Author of the Original Faust," by Propressor Eugene Kuehnemann of the University of Breslau, Germany. Goldwin Smith Hall, Room B, 8 p. m.

FRIDAY, February 12

ONE HUNDREDTH ANNIVERSARY OF THE BIRTH OF ABRAHAM LINCOLN—All University exercises suspended between the hours of 12 and 1. Address by the Honorable Frank S. Black of New York City, former Governor of the State of New York. Armory, 12 M.

UNIVERSITY FACULTY-Meeting. Boardman Hall, Room C, 4 P. M.

ARTS AND SCIENCE LECTURE—"Reconstruction of Theology," by the Rev. Hugh Black of the Union Theological Sem inary, New York City. Goldwin Smith Hall, Room B, 5 P. M.

AGASSIZ CLUB—Meeting. "Adaptation for Aquatic Respiration in Insects," talk by Mr. J. T. LLOVO. All interested are cordially invited. MiGraw Hall, Geological Lecture Room, 7:30 P. M.

SUNDAY, February 14

SAGE CHAPEL—THE REV. HUGH BLACK, M.A. Presbyteriao. Union Theological Seminary, New York City. Moroing service at 110 clock. Vesper service at 3:15 o'clock.

CONSULTATION HOURS BY THE REV. HUGH BLACK

The Rev. Hugh Black will occupy the Sage Chapet pulput on both February 7th and February tath. During the intervening week he will remain in Ithaca and will be at Barnes Hall from 12 to 1 daily for consultation with any students who may offerire to speak with him.

The Comil University Notice call be used every "seeded during tires line. It will be sent by main to any address for one year storage payment at the Treasurers
Office of one dollar. All solices for the Weekly Calcular about be sent to the Secretary's Office Morthl Hall, not leter than Thursday node of each week, they about he in
writing and aport.

A Week in the University Calendar

in fame or gain, are so great as in the other activities, moreover, the work is distinctly intellectual. This latter reason may also be assigned to explain the small interest displayed in the prizes offered by the University, both in oratory, and for literary essays. To excel, where the student body itself frames the conditions and awards the prizes, is the goal of the honor seeker's ambition.

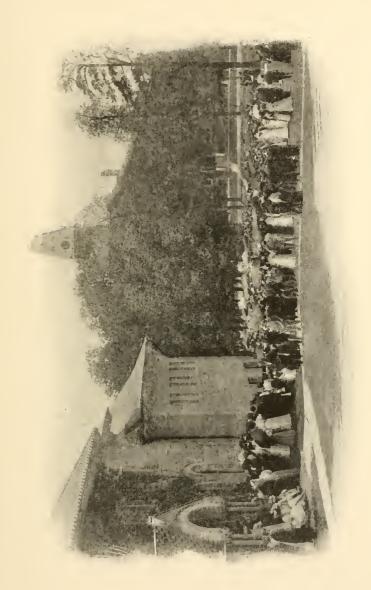
It would require much space, to enumerate even, all the ramifactions of the aggregate of student activities. What it may mean in the life of individuals is perhaps best illustrated by the following "statistics" of the two candidates for the presidency of a recent senior class, as published in the "Sun" before the election:

president C. U. C. A. (2); Glee club (1); Sun board (1), (2); managing editor Sun (3); editor-in-chief (4); class treasurer (2); class president (3); '86 Memorial Oratorical Stage (3); Sophomore banquet committee (2).

Perhaps it is the school of student activities, or definitely, its demands on the individual's time, that develops the marked inventive genius which the student body in general evidences in its numberless petitions to the faculty; petitions which, as a rule, ask that the petitioner may be permitted to evade some University requirement; that he may be allowed to omit this, or substitute that course, or what not, and always with the most plausible, and often original reasons, for its favorable consideration, appended. All these petitions come to the registrar, David F. Hoy, familiarly, "Davy," for approval and his signature before they go to the faculty. The reaction resultant from all this creative genius on part of the student, is found in the preternatural shrewdness of Mr. Hov in fathoming the motives which underlie the requests, and in discovering "the nigger in the woodpile." That shrewdness is Davy's first characteristic, his second is an ability to emphatically refuse to endorse most of these plausible schemes. Thus Davy has come to be the natural enemy, the bete noir of the undergraduate, and they invest him with all the panoply of power over student affairs. This feeling is accentuated by the fact that Davy passes on the sufficiency

of entrance credits. Moreover, his daily skirmishes with the students have not made him a soft mannered official and, in consequence, much of Cornell legend concerns itself with Davy's famous retorts courteous. Perhaps the most staple of these is the story of the co-ed, somewhat advanced in years, who interviewed him on the event of her entrance into Cornell. It seems that she asked question after question, all of which he patiently and dogmatically answered, until finally she had exhausted her list. Then, cheerfully, she concluded, "Well, Mr. Hoy, I thank you very much; now is there perhaps, something more I ought to know, that you can suggest?" "Yes, madam, there is; you ought to learn to read, and here is a copy of the current register of the University."

On another occasion a woman graduate, who possessed a mien which bespoke determination, was making the rounds of the professors with whom she wished to do graduate work; and one of the professors called up Mr. Hoy on the telephone, and asked whether she should be given credit for certain work done elsewhere. Hoy immediately queried, "Who is it?" and then, on hearing her name, replied, "Give her anything she wants; she'll get it anyway." When another student was refused part credit for work done in a certain institution, and thereupon protested vigorously saying, "he didn't see why he should not get full credit for all his work," Hoy demanded, "Did you expect us to



Class Bay— Planting the Ing



meet you at the station with a brass band when you came to Cornell?"

The entrance requirements in English are very rigorously insisted upon at Cornell and, knowing this, one can readily figure that student's chances who wrote the registrar as follows: "Dear Mr. Hoy, I am sorry to inform you that I have flunked on my entrance trig. and history, but I aint so bad on English——." Another, a girl again, wrote to know "what was the official costume of the Sage Gym. girls?"

Term examinations at Cornell come in what is known as "block week," a period of some ten days, at the end of January and in the first part of June, and those are times when probably more "grinding" is done than in all the rest of the term. Then, if a student fails to "pass up" the minimum number of hours, the registrar sends him a "bust notice;" a request to depart from the University's halls of learning, and the city, within five days; and he must remain absent for a term before he is permitted to return. If this happens several times in his career, he may be permanently excluded. Therefore, they are anxious times, those days immediately following the close of the examinations, for many then sit in trembling, relieved when any mail delivery fails to bring the fateful message.

The period of suspense, however, which marks the climax of anxiety in a University career, for probably the majority of students, is the waiting

for one's name to be "scratched" at the end of the senior year. Some days before the end of the last examination period a list of all those who can possibly be graduated is posted in the hallway outside the registrar's office, and there the anxious seniors foregather, almost hourly, to see if their names have been "scratched." When a name is crossed out or "scratched" on this list, it means that he or she has fulfilled all the requirements for graduation, and thereafter the world knows no cares until commencement days are over, and the ushering into the coldly-greeting world occurs.



The Graduation Procession



THERE is, perhaps, no other University which affords the working student so many opportunities for winning his way, as does Cornell. And, while only a few men succeed in paying all the expenses of a four-year course, by the activities carried on while in school, quite a few do accomplish this by supplementing their earnings during term time with the proceeds from work done in the summer vacations. As the University calendar is now arranged, Cornell summer vacations are longer than those scheduled by the other large institutions of the country, a fact which is often of importance in securing employment in the beginning of the summer, before the competition becomes strenuous, and again, in enabling the acceptance of many positions where the work continues until late in September. Thus, for example, in the coming year, instruction does not begin at Cornell until October the first; and most undergraduates find it possible to leave before June the tenth, and accordingly are afforded almost sixteen weeks free from school duties.

20

In the smaller institutions of collegiate rank, there is little opportunity for self help. Such colleges are located, as a rule, in small communities, whose business enterprises themselves are in many cases, in large part dependent on the custom of the students and of the institution. Moreover, the majority of their students are drawn from the immediate locality in which the institution is located, and in general from families whose fortunes are not great. The institution being small, its administration is not complex, and consequently is carried on almost wholly by its regularly employed faculty and officers. Thus, as neither the college nor the student body spends much money, there is little to be earned.



On a Minter Afternoon

In the other large eastern universities the working student, on the other hand, is at a much greater social disadvantage than at Cornell, and this is not an insignificant factor. For example, possibly as large a number of students find employment as table waiters as the sum of all those engaged in other ways. And this service carries with it no stigma. Men who have "waited table" are elected to class offices, make fraternities, and commonly are the good friends of those on whom they wait. For such service they get their board free, and the time required is about twenty-five hours per week. Each waiter has, on the average, twelve men to serve, and, as a rule, these diners will, because they are normal youths and hungry, or to accommodate the waiter, come promptly at meal times, enabling the waiter to do his work rapidly and be free.

Akin to the task of waiting on table, in that there is no money payment, is that of tending furnace in one of the numerous rooming houses on the hill. This task has the disadvantage of necessitating late hours at night, and getting up early in the morning. For such work a man is given a room free of rent, generally, it is true, one of the less desirable ones in the house. One marvels sometimes at the amount of work some fellows can perform and not suffer physically or mentally from the strain. Thus a man who was recently graduated with high marks and robust health, from the mechanical engineering college, Sibley, arose at

about four in the morning, replenished the furnace fires at his house, then went up on the hill, a half mile walk, and performed some light janitorial service in the class rooms of his college, then came back to the boarding house, had his breakfast and afterwards waited table, and then, finally, went to his classes. At noon and at night he also filled his positions at the table and in caring for the furnaces. Yet this man managed to find time for, and see, most of the intercollegiate games and contests which occurred at Ithaca, and there again, turned his presence to good account, by securing a position as ticket taker at the grandstand, which service entitled him to free admission and a money payment in addition. Of course, only a very few men could carry such a load and succeed in passing up their university work, especially in the engineering colleges, where the schedules are heavy and the courses difficult.

Nor is it necessary in most cases that they should. The great majority of the students who want work while at college, desire simply to supplement their resources, and a few dollars saved each week means quite a sum. Thus, free board, at the rate of four dollars and a half, represents a saving of some one hundred and fifty dollars each year. Rooms range in rent from one and a half, to ten dollars per week, the latter, of course, not available to the furnace tender. But when one considers that expenses can be pared down to, say four hundred

dollars for the college year, the sums saved in such ways are found to form no inconsiderable amount of this total.

There are many other fields for unskilled labor in the performance of a variety of tasks. Some are of an occasional nature, such as the care of the lawns surrounding professors' cottages; others afford steady employment. Typical of these latter, may be mentioned the delivery of packages for the various stores downtown. The pay for this approximates from three to four dollars per week, and requires about two hours each day, except Saturday, when considerably more time must be given. Collecting accounts comes also under this head. It would seem that the greater a man's allowance is, the less money he has for the payment of his bills. In consequence, many students must be dunned repeatedly before they will pay, so that the collector for a firm seldom lacks employment.

One of the partners of an Ithaca firm which sells student supplies, told me incidentally, in the course of a conversation, that they had always had a student in their employ whose business it was to visit all the bulletin boards in the University buildings, and copy the notices posted, that the firm might secure prompt information as to material which would be required by the various classes. On my way up the hill yesterday a student stopped me to ask when it would be convenient for him to call and collect my telephone bill for toll service.

Duties of the most diverse sorts are performed by. students; everywhere one meets with a new phase of this kind of service. Of a little different nature, and perhaps demanding the expenditure of more brain energy and requiring some ability, is the work done by students who act as clerks in the book and supply stores, particularly in the co-operative store, on the Campus, familiarly known as the "Co-op." Every student's schedule will show vacant hours between classes and these are profitably employed behind the counter. The University library also employs a number of students to replace books in the stacks, and similar tasks, which can be performed at odd hours. The remuneration is fifteen cents per hour, and higher pay for skilled assistants who are at the desk, evenings.

Elsewhere, mention has been made of the competitive systems by which men are secured to fill the various positions on the editorial and managing boards of the college publications. There are substantial money returns—"velvet," in student parlance—for those who secure places on at least two of these papers,—the Cornell Daily Sun, and the Widow, the comic bi-monthly. The following quotation, from the Sun, announcing such a competition for freshmen, is typical. It is preceded by the statement that at a meeting, at a given time and place, conditions and methods of the work of collecting and writing the news will be explained. Then: "The competition will be short, lasting but twelve weeks



Cornell Undergraduate Publications



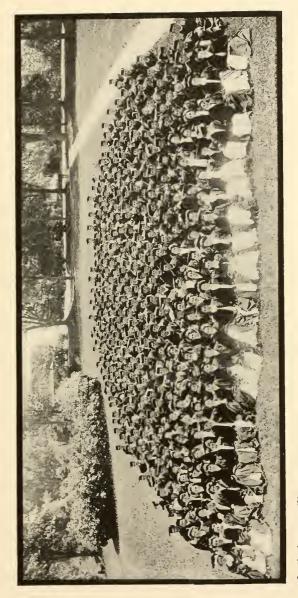
of publication, and at the end of that time, one man will be elected to the editorial board, and will have every opportunity to later secure the positions of managing editor and editor-in-chief. The work is of the most interesting character and for the successful competitor the position on the Sun board lasts throughout his college course."

The competitive system is characteristic also of other propositions, but has, perhaps, been nowhere more systematically developed than by the "Student Agencies." Under their control are a student dining hall, a student room renting agency, a student laundry agency, a transfer agency, and other agencies too numerous to mention. Their scheme of selection is as follows: From among the freshmen who apply for work, a dozen or more of the most likely are selected and given employment as waiters in the dining hall—for which service they receive free board. At the end of the freshman year, two men from this number, are chosen for dining hall collectors, and these make the weekly collection from the boarders. One of these two men is promoted to the position of head waiter, in his junior year, and becomes manager in his senior year. The renumeration increases with the increased responsibilities and duties of the position.

From among the ranks of the waiters who failed to secure the collector positions, are chosen four who are transferred to the laundry agency. Others are employed for the room agency. At the

beginning of the year, the duties of both these groups is to solicit business from the incoming freshman class, and from the returning undergraduates. After the term has started, the most successful and promising men in these groups are employed as collectors for the laundry. They collect the bags of laundry each Monday morning, and distribute the packages at the end of the week, and each month collect the amounts due the agency. For this service they each receive a percentage on the gross amount of laundry shipped that week, each man's earnings averaging between five and seven dollars a week. By a process of elimination again, there are selected, from the collectors of the sophomore year, the assistant managers of the laundry and the room agency, and these men become the managers-inchief in their senior year.

This scheme is comprehensive in its scope, and it works out admirably, I am told, in practice. Inexperience in any business or employment is the keynote of inefficiency of student labor in most cases, and this plan provides that there shall always be a trained man to initiate the newcomers. The competitors like it also, promotions are rapid, if they come at all, and those who fail in the final competitions have their eyes opened to many other opportunities outside, during their experience as collectors, and need not lack employment in the following year if they follow up promising openings.



A Graduating Class



The man who has had business experience or technical training of some kind before coming to the University has a distinct advantage. Thus, student stenographers are often employed by professors, and those who possess typewriters find profitable employment in copying lecture notes, and the like material, for other students. The average pay received for such work is ten cents per sheet. Previous training in military drill practically insures a position as commissioned officer in the University cadet corps, which means a salary from the University; while the chance of securing the position of University Master of the Chimes is open to those with musical talent. Mechanical and architectural draughtsmen secure from twenty-five to fifty cents an hour for their work, and men well versed in some subject, for example, a foreign language, secure from one to two dollars an hour for their time as tutors.

Most of the tutoring, however, comes to the men who, as juniors in exceptional cases, and as seniors quite often, secure positions as undergraduate assistants on the University faculty. For such service they are paid from one hundred to five hundred dollars per year with free tuition. Their duties consist in grading reports and examination papers and assisting in giving instruction in laboratory classes. The president's report for the current year shows that some one hundred and forty-four students were employed in this capacity.

The business career of the exceptional man is often remarkable. One student, now graduated, and owner of a manufacturing plant, came to Cornell with thirty dollars in his pocket, finished his course, and left the institution with over a thousand dollars capital, earned over and above his expenses while a student. Nor was this man older than the average undergraduate. Another man invented a new style note book for student's use, secured a patent on it, and it made an immediate success. Today it is used almost exclusively by the student body. And so it goes. Many other special pursuits could be mentioned if space permitted citing them. Noteworthy it is, however, as the foregoing pages will bear witness, that the "willing to work" have offered to them many avenues of employment, if they enter Cornell.

Winter Sports



Winter Sports

ORNELLIANS are wont to fully appreciate the balmy days of spring, when fresh green leaves again peep forth from the swelling buds on the elms which arch over the Campus avenues; and they also respond to the mad invigoration of the Indian Summer time, when reds and yellows paint the landscape with warmth, and the rustling leaves underfoot invite to gayety. For there is small quality of mildness in winter, as one notes that phenomenon on the Cornell Campus. Fiercely buffeting winds, whistling around the corners of buildings and bringing with them blinding flurries of snow, which piles in drifts on the walks, constitute typical winter at Cornell; and one realizes, as seldom in other seasons, that the Campus is a hilltop, and gets the weather, all there is of it, and gets it while it is being made. At times it seems as though the weather man were, indeed, experimenting on Cornellians, for the changes in temperature are particularly astonishing, one day mild and balmy, the next, bitter, biting cold. And cloudy—if it snows anywhere in the country around, Cornell is sure to get her share.

But, after all, these little tempers of the winter weather are only minor considerations. something to talk about in fact, and only bother when one has to get up unpleasantly early and make an eight o'clock. As for the rest, they only add zest to the days, give them spice and variety; moreover, they furnish the snow and the ice which in winter



Central Avenue - Winter

are the main incentives to participation in outdoor sports, by all the undergraduates and the faculty as well.

These winter sports center mainly around Beebe lake. This little sheet of water, measuring, perhaps, a quarter-mile in each dimension, lies just off the Campus, and in a hollow, with high slopes on three

Winter Sports

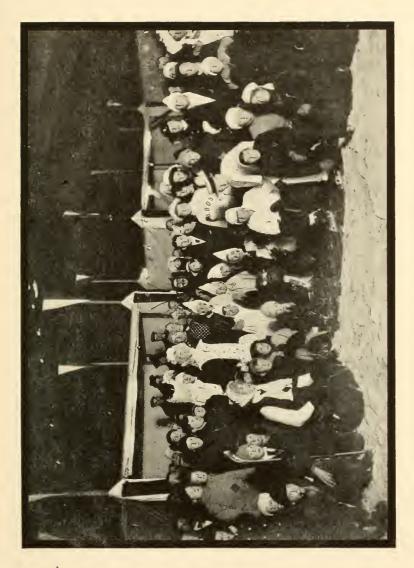
sides. Its situation protects it from the wind, moreover, its shallowness permits it to be frozen over quickly, ideal conditions both to promote all skating possibilities.

The ice first forms early in December, and generally persists until mid February; but there are many partial thaws during the winter.

The Minor Sports association has charge of the lake, and with the funds secured by selling skating and toboganning tickets, maintains an area, equal to perhaps half that of the whole lake, free from snow. A portion of this cleared area is reserved for a hockey rink, for the use of the teams, the rest is available to the University community in general. On Saturday afternoons, if the skating is good, and the weather just a wee bit mild and sunshiny, one is always sure of finding a great crowd assembled at Beebe, and on other afternoons of equal favorableness the numbers are diminished but a little. It is a pretty sight, and one that invites even the most sluggish soul to participation. During Junior Week, when the undergraduates entertain their feminine friends with house parties and dances, there is one night set aside, always, for the Ice Carnival. This is a gala occasion on Beebe, for the ice is specially lighted, and a canvas walled enclosure is decorated with festoons of colors and evergreens. A band is secured, and no one knows of such a thing as fatigue while skating to its strains.

But first and foremost of the winter joys at Beebe is the toboggan slide. A merry throng always assembles there on pleasant afternoons and moonlight nights; and, although every few seconds a toboggan load of shouting coasters goes crashing down the ice trough of the slide, yet the waiting line at the head often lengthens interminably. The slide at Cornell differs from those in many other places, in that it is not banked for the length of the course. On leaving the incline, the toboggans shoot out upon the level expanse of the lake ice, and, if the conditions are favorable, have momentum enough to carry them to the far shore. It is, therefore incumbent on the steersman, who clings to the rear end, to keep the flying machine headed true and straight during the passage, else an upset is certain. His whole body often extends at arm's length from the rear, like a rudder on an airship, only his shoe tips scrape along the ice as he swings from side to side. The steering is an art, not learned on a first experience, consequently, there is often a veer from the straight course—the toboggan swings sideways over into the snow, and a grand spill occurs, when man and maid, indiscriminately, turn summersaults; a sight which affords unlimited amusement to an ever present crowd of spectators.

Skeeing on the hills affords the most exciting of all the winter sports, and, although the feats of the Cornellians who indulge in it do not rival those of the Norwegians, yet the ski runners who come



An "Ire Carnival" Group



Winter Sports

hurtling down the hill behind the University farm, take some interesting leaps -and tumbles—in their course down the long, sunlit slopes.

Finally, there are the sleigh and bob-sled parties, which have the hotels and country clubs of the neighboring villages for a goal, with hot suppers and merry dances appended—but, as the roads they traverse are often dark, one can only surmise the details of these winter frolics.



At the Tologgan Blide - The Waiting Line



Phases of the Athletic Cife



Phases of the Athletic Life

be an exhuberant reaction, physical, where the action is of the impelled intellectual character, such as the pursuit of prescribed University work imposes on every student. Thus, there has been built up a world within a world in University life, and the inner world is athletics; and around this inner world undergraduate interest centers most intensely. Yet it has been said, that despite this interest, too many students take their athletics as spectators instead of getting into the game; but, while there is room for improvement, in general this is untrue of Cornell athletic life, for one need only cross the Campus to come in touch with the breadth of its scope, and the general participation.

Several years ago push ball seemed to show possibilities of affording opportunity to the great mass of students to take part in a game which afforded actual strife, and physical contact with the opponents; and in the desire to overcome by brute force the man with whom he is matched, may be understood the keen appetite of the male being for

athletics. And when one sees the huge ball which is the "bone" of contention, urged and worried about the drill green by a score of husky youth, of an evening, after a day of confinement in lecture room and laboratory, ones limbs fairly tingle to get in and help.



"Jack" Moakley at the Board Track

Phases of the Athletic Life

Lacrosse, with all its dash and vim, also finds its numerous devotees practising on the Campus lawns near the Armory; but probably the most familiar phase of athletic life, and the one most apt to greet the visitor's eye, are Jack Moakley's white clad runners. Especially picturesque (or perhaps unique would be a better adjective), are these, when one meets them, clad in sleeveless, low necked shirts, and knee length linen running "pants," sprinting around the board track, regardless of the snow and cold of a bitter winter's day. To the uninitiated, especially to the feminine eye, this is compellingly novel and wondrous fortitude. And the governing center of this activity is "Jack," as he paces from point to point, about the track, seeing everything; those who come in and who go out, advising, commenting, admonishing, as may be needed. Without his figure, the scene would be incomplete—nor would the Intercollegiate championship in Track come to Cornell with such regularity, to say nothing of her impregnable first place in cross country running.

Inside the Armory the base ball cage has been draped over the drill-floor, and ambitious competitors are already busily working for a place on the team. This indoor practice affords a novel spectacle to many "fans," and prepares for the visit upstairs, where the crew men swing rhythmically to their work at the rowing machines, under the watchful eye of the "Old Man" and his assistants, the cox-



A Happy Occasion

swains. "Courtney's stroke" has never been superseded or rivalled, either by the ingenious inventions or the muscle of Cornell's opponents on the water.

Basket ball, hockey, fencing, hand-ball, tennis, boxing and wrestling all have their adherents and all are represented in the activities of the Gymnasium and in the Armory. Truly these afford a most varied field from which to choose, and offer little excuse for non-participation by the student.

So much for the athletic life of the Campus. It is only secondary to the interest which, with the years, has centered at Percy field, "Percy Field

Phases of the Athletic Life

Days;" that is a phrase to conjure with when in converse with Cornell alumni; what picturesque recollections, even the mental picture of its environment suggests. The white arched entrance, and above it the forest covered slopes of Deadhead Hill, with the sand pit cut in its face, whose summit rim is always outlined in black by the crowding figures of the deadheads assembled to see the game. Then, looking ahead, there was the field, and the thronged stands opposite, while in the distance the greenery of willows hemmed in the scene.

But before the game there was the march to the field, a rollicking, cheering, snake-dancing horde of studes, and withal an impressive sight, with the preponderant mass of gray-capped frosh closing in



Courtney and the Coxswains

the rear, all going down to cheer the team, and help Cornell to victory by their enthusiasm and devotion to clean sport, her ideal. Nor were the thunderous rolls of Cornell cheers "long ones," and "now three short ones" anything

but success compelling, as the sections responded singly or together, to the art of the cheer leaders.

Supremacy in track and on the water have become, in a sense, an accepted and expected fact at Cornell. In baseball, too, while not champions, her men are always to be considered in the forefront when making up the standings. Thus, while there is a zest always for new victories and fresh



Courtney at Poughkeepsie

Phases of the Athletic Life

laurels in these domains, it is for the premier position in football that the undergraduates have yearned for years. Classes have entered and been graduated without that coveted morsel, the winning of a big game at Ithaca, falling to their lot. But in nineteen hundred and seven the ban was lifted, and the consummation devoutly to be wished, a knot in the Tiger's tail, securely tied. That was a day!

Probably never before had such a crowd assembled at Percy field. Fifteen thousand spectators crowded the stands, and those who had no seats were packed three and four deep around the field inclosure. The ball was in Princeton's territory practically throughout the game, yet it was a hardfought battle. It was Cornell's day, and everybody seemed to realize the fact. From stand to stand the cheers rolled continuously, only offering an interlude occasionally for the Princeton supporters to make themselves heard. Again and again, bursts of song came almost spontaneously, and there the hoodoo, which seemed in the past to have been attached to the thrilling measures of the Big Red Team was lifted, and its chorus, full lunged and lusty, swelled; even until it aroused the distant echoes:

Cheer till the sound wakes the blue hills around, Makes the scream of the north wind yield To the strength of the yell, from the men of Cornell When the Big Red Team takes the field,

Yea, yea,

Three thousand strong we march, march along,

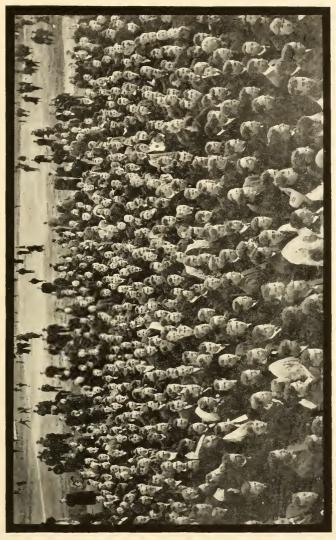
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From our home on the grey rock height, Oh! the victory is sealed when the team takes the field, And we cheer for the Red and White.

And finally time is called, the game is over, and victory ours, and then, most impressive scene of all, comes the singing of Alma Mater, with heads bared, by the whole throng of undergraduates, gathered to a center. Ah, then one feels the spirit of Cornell, and the embodiment of the ideal for which it stands. To those who scoff, and deny the existence of such intense devotion among the classmen of a university, one need but commend their being present at such a singing of Alma Mater.

There is another time when this large and living loyalty to Cornell finds expression; and that is at a "meeting of the team" at the railway station, when the team returns from a contest away from Ithaca. Whether they come conquerors or conquered, it matters not, there is always a crowd to welcome back those who fought for Cornell's fame abroad.

Perhaps the most animated scenes, of all those which mark these glimpses of Cornell's athletic being, are those which attend the event of a Memorial Day Regatta on Lake Cayuga. Long before the scheduled time of the races, a dozen fleets seem suddenly to have been born on the lake, as innumerable craft, row and motor boats, canoes, sail-boats and the excursion steamers all ply their way to the end of the course. Then the long moving grand-



Singing the Alma Mater — Cornell-Harvard

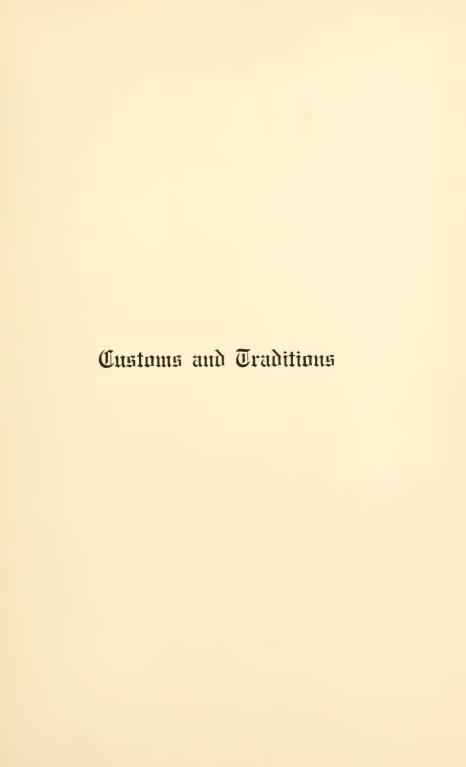


Phases of the Athletic Life

stand, the observation train, comes puffing along down the shore, a hydra-headed beast, with an engine at each end. Near evening patrol boats clear the course, but still the wind keeps up and the shells fail to appear. It comes to dusk, the wind-chopped sea persists. Spectators become restless. The more provident bring forth lunches, delectable bits of food, seemingly fit for the gods, at least that is the way these lunches appeal to those who have not been so foresighted. Soon little bonfires show beacon like flames all along the steep slope of the lake front, and cast a lurid light on the waters below. Finally, at eight o'clock, the wind abates, slow, oily swells replace the choppy sea, and the crews put in an appearance. They start; the observation train rolls along thunderously, with engine bells clanging, suiting its speed to that of the racing shells. Excursion boats careen dangerously, as the hoarse bellowing of the coxswains announces the approach of the flying racers from out of the gloom. They pass, thin black streaks filled with rhythmically-swaying figures, whose labored breathing one catches, mingled with the steady beat of the oars.

A faint cheer announces that the line has been crossed; but by now it is so dark that only those who are stationed at the very finish can see who is victorious. Yet everyone is happy when Cornell is announced the winner—and then ensues the final scene of a regatta on Cayuga, an almost ludicrous streaming back to Ithaca on part of all concerned;

on the shore the rumbling train, margined on both sides by a crawling line of pedestrians; on the lake, steamers, launches, motor-boats, sail-boats, row-boats and canoes all mingled in a great confusion.





<u>Unstoms</u> and *Traditions*

HE freshman at Cornell certainly has an easy time of it. Hazing is not known. There are simply a few "don'ts" for him to observe, and only a couple of "do's" for him to obey. In special cases, where he affiliates with some organization, he may be more sorely tried, but what follows is the sum total applying to the average first-year man.

He must wear a Frosh cap. This is a flimsy gray thing with a black button, and except that it singles him out from the rest of the classmen, has no more odious quality than the impression it gives of only in part serving one's need of a head covering. But lest the babe catch cold in winter, when icy blasts sweep across Cornell's hill-top campus, he is permitted, on cold days, to wear a toque, covering his ears, of the same gray shade, and with a black tassel. He must wear a coat at all times on the campus. His other duty is to go to the post-office, formerly at seven, on every evening of weekdays, but now only on Sunday morning, for the mail of the fraternity or rooming house where he lives. The "don'ts" are still more innocuous. He must

not smoke on the campus at all, nor may he smoke a pipe outside his house; he must not be seen at certain resorts unaccompanied by an upperclassman, and at some not at all, and he must not occupy a seat in the first three rows or in the boxes at the Lyceum. That is the substance of the law as it is revealed to him by those who have passed on ahead, and that he may not err, these commandments are printed for him, with other wisdom, in a "Bible" which the University Christian Association publishes.

There is, however, another hardship that the average freshman must suffer, unless he is excused for athletics, and that is "Drill." It comes thrice a week, and upperclassmen are the company officers;



Panorama of the

Customs and Traditions

but under the new regime some of the stings it formerly contained, seem to have been extracted and indeed the freshman comes often for his hay-foot, straw-foot, with a smiling face now-a-days. Cornell, as is mentioned elsewhere, owes part of its endowment to the Morrill Land Grant Act, and, under the provisions of this, compulsory military training is required. Thus Drill is indeed a custom, one which is never allowed to lapse.

In former years the great outburst of underclass rivalry was the occasion of the Freshman banquet. Unorganized rushes often occurred in the night preceding the President's annual address at the beginning of the term, but these were not recog-



Freshman Banquet Rush

nized and are now practically abolished. The Banquet rush, in a legalized form, is still preserved, but one must know its progenitor to appreciate its present status.

The original Freshman banquet and its concomitant activities, meant a practical suspension of University work for three days to the underclassmen. It was the ambition of every freshman to be at his class banquet, given in later years at the Armory, without being caught by sophomores previous to the hour of its occurrence. If caught, he was held in durance vile until the afternoon preceding the banquet, and then, with painted face and clad in a costume which was the sophomore conception of the height of the ridiculous, he was forced to march in a "peerade" through the downtown streets, then up the hill, around the campus, and finally thrust unceremoniously into the banquet hall.

Hostilities began three days before the time set for the feast. To venture from his room to go to a class, or for a meal, meant almost certain capture for the freshman. Consequently he kept inside during the day, sneaking out at night for food or else to escape to one of the neighboring hamlets, until the night preceding the banquet night, when, in some mysterious way, he learned of a trysting-place from whence all the yet uncaptured "frosh" were to make one grand rush for the shelter of the Armory, which was neutral ground during all this strenuous period.

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The sophomores, on the other hand, prowled around in little bands, especially at night, carrying ropes and capturing and tying up unfortunate or venturesome skulkers, or more commonly making raids on the rooming houses, hauling forth their victims, and conveying them down town to a guarded hall where they were kept prisoners. An especial effort was made to secure the freshmen class officers, and to prevent these and the speakers from getting to the banquet at all.

Incidents in this strife at times assumed an almost spectacular character, as may well be imagined. Three freshmen ensconced in an attic, on one such occasion, kept up a two-hours' fight, warding off, with poles thrust through the dormer windows and the trap door of the attic, the horde of sophomores, who, supplied with ladders, were bent on securing them at any cost. Two of the freshmen were finally caught, but at the cost of a hole chopped in the roof of the house; while the third escaped by breaking through the ceiling, dropping into a room below, and sneaking out of the rear of the house. On another occasion the rush of the freshmen for the Armory was repelled by streams of water from fire hose which the sophomores had coupled to the hydrants. Again, the freshmen president once succeeded in gaining the Armorv stowed away in a flour barrel on a farmer's wagon.

These contests, though rarely resulting in any injury to the participants, won the disapproval of



The Skirmish Line

the faculty because of the serious interference with University work, and drastic action on their part resulted in a total omission of the banquet for one year. In the next year, however, a scheme was concocted which eliminated this objection, and this plan proved successful enough to warrant its continuance.

According to the new arrangement, the whole matter is the affair of an afternoon. The freshmen, in squads of ten, six squads at a time, range themselves on the far side of the drill ground, opposite an equal number of squads of sophomores, and, at a given signal, the freshmen rush to get across the sophomore line. If they are successful in this, in three minutes' time, they are safe, and go to the banquet unmolested; if caught and held, they must

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submit to decoration, and march in the sophomore "peerade." The freshmen who escape have the privilege of going back within the lines to rescue classmates whom the sophomores have penned, or to capture and carry off to the Armory any sophomores who are within the enclosure. Once within the Armory, these unlucky sophomores endure the same fate as the captured freshmen, except the necessity of exposure to public view.

The incidents of such a rush are comical in the extreme. Interest centers on the efforts of the football stars who are, of course, expected to do big things, yet often fail ludicrously. Again the erratic in human character often crops out, as in the case of the freshman who clothed himself in overalls and then smeared himself from head to foot with crude petroleum. He expected to escape like a greased pig at a country fair, to literally slip through the hands of his opponents, or to be avoided as one flees from the unclean; but he misjudged the temper of the sophomores. Practically the whole opposing squad combined on him, and he had hardly a stitch of his oily clothing intact when they marched him away captive. It was restored, however, by other garments, smeared with tar and covered with feathers, and thus accoutred, he marched in the "peerade."

If Freshman banquet customs have been restricted and made more intensive, Spring Day festivities are every year becoming larger in scale.

Spring Day, originally May Day, exists as a means to secure funds for the Athletic Association's coffers. This appeals to the student body as being "worthy" in much the same manner that the slogan "clothes for the heathen" arouses the ladies aid society, in church circles, to undertake a fair. And indeed, the parallel runs farther, for on Spring Day "no



A Struggle

Customs and Traditions

change" is the rule, and the attractions are even greater fakes than at the fairs, if such a thing is possible.

Each year the nature of the revelry changes; the trend at present being to give a burlesque on a great circus, including all its attendant side shows and fakirs. There are toy ballons, and candy stands,



A Captive

$At \cdot Cornell$



"Bill Caft" Geading the 1909 "Frosh Peerade"

cane ringers, and pink lemonade,—the area under canvas compares favorably with that of many a show of national reputation. Where all the paraphernalia, tents, large and small, seats, barkers' stands, posters and paintings are secured, must always remain a mystery to the uninitiated, but the work of those in charge is certainly well executed.

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The shows themselves are screaming travesties. The Law College offers a mock court, and in its service are uniformed policemen who hale criminals from the crowd and bring them before his "Honor" for judgement. Registrar Hoy was once indicted for incompetency in office, but the jury disagreed. The Architects have shown Ithaca being destroyed by an earthquake, the freshmen made much of their Paris by night, for men only—a birdseye view of Paris under the soft rays of an electric moon. Stray dogs to whose tails a multitude of colored balloons have been attached furnish much amusement by



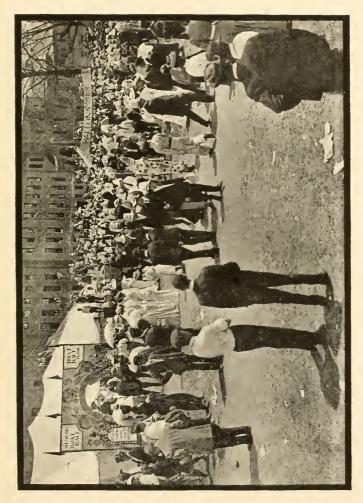
A "Peerade" of the Frosh

At Cornell

their frantic and puzzled efforts to make their hind legs connect with the solid earth. From ten in the morning until two in the afternoon, the crowd surges unabated; and then the show ceases and the Athletic association's funds have been increased by several thousand dollars.

Several athletic events, in which Cornell is participant, are generally on the program for Memorial Day, and, as success comes usually to Cornell, the evening of that day is marked by a celebration, consisting of a huge bonfire, with speech accompaniments; the library slope being the scene of these festivities. The one spectacular feature of the evening, however, is the emancipation of the freshmen.

All the year they have been dutifully wearing their gray "frosh" caps, and now, with only two weeks more of the school year remaining, their "froshdom" is declared at an end; and this great event they celebrate with boistrous hilarity in the "Burning of the Frosh Caps." Early in the evening the first-year men rally at an appointed place, the class fund provides fireworks, Roman candles, colored fire, and crackers in quantities, a column of fours is formed, and the class, numbering generally onethird the entire college enrollment, moves forward in its great "peerade." The line of march is a dizzy trail, keeping to no set path but wandering here and there over the campus, as fancy strikes the men in the lead. Coats are worn inside out, shirt tails flaunt the breeze, trousers are rolled high, revealing gor-



Spring Day as Celebrated on the Ouadrangle



Customs and Traditions



A Spring Day Side Show

geous hosiery, and the marchers break again and again into mad snake dance steps and runs.

Eventually the procession reaches the foot of the slope and then, with wild yells, they advance on each side of the fire and the air is literally filled with a shower of gray caps, tossed high into the leaping flames—and the "Frosh" are "Frosh" no longer.

The Senior singing is, perhaps, the custom which most eloquently bespeaks the love of Cornell as Alma Mater which lives in the bosom of every undergraduate. Some half-dozen or more times in the last weeks of their college life, when the soft balm of early June pervades all the hill-crowning campus,

At Cornell

the Seniors gather of an evening on the steps of Goldwin Smith Hall, and there, in the twilight, for an hour give voice to the Cornell songs, and to the popular airs, current in their time. At a distance, in a great semicircle, is the audience, to whom the voices of the singers come in space-softened chords.

The moods of audience and performers alike change with the songs, but through it all there runs an undercurrent of feeling that they are but spelling a portion of their farewell to student days, to life on the hill, to Cornell herself. With the Senior it is a sadness of regret, lightened, perhaps, by the anticipations of the future. The four years he has lived



Spring Day — The Barkers' Stands

Customs and Traditions



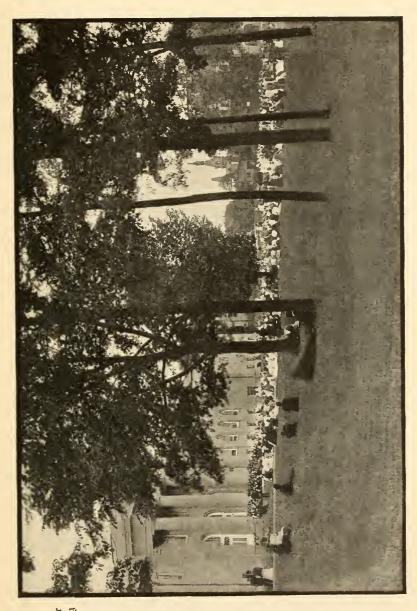
At the Foot of the Slide

among these scenes now seem but a fleeting instant, in time; in associations they are as though they dated from the beginning of things. It seems unnatural to be going away from Cornell, without any returning again to have a part in her affairs. True, he offers himself the doubtful comfort of a visit, but again, he thinks of alumni he has seen on the campus in his under-classman days, betraying the air of a stray cat with no business in those parts. And so he sings out his longing and yearning into the evening, taking a passionate leave of the familiar scenes of undergraduate days.

At Cornell

In the audience there stirs a note of pity for the singers that they must go, but rising always above that pity, a little voice sounds incessantly, carolling, rejoicing, repeating that the ego of the audience may remain and live in Cornell days. It is as though a reprieve had been offered this being present at these last impressive senior rites. And then, as, at the end, the sun hovers like a red ball on the ridge of the distant hill, and the words of the evening song come tensely but softly; there is registered in every undergraduate's breast a resolve to live in those yet-granted years the full, true life of a Cornellian. With throbbing heart beat he listens, and murmurs in unison with the singers:

When the sun fades far away
In the crimson of the west,
And the voices of the day
Murmer low and sink to rest,
Music with the twilight falls
O'er the gleaming lake and dell.
'Tis an echo from the walls
Of our own, our fair Cornell.
Welcome night and welcome rest
Fading music fare thee well,
Joy to all we love the best,
Love to thee, our fair Cornell.



The Senior Singing



THE END







