

Reed and Hyde Families Papers.

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THE THIRTIETH ANNIVERSARY DINNER

OF

# The Class of 1885

SCHOOL OF MINES COLUMBIA COLLEGE



MR. A. S. DWIGHT

PALACE HOTEL - SAN FRANCISCO SEPTEMBER THE EIGHTEENTH NINETEEN HUNDRED FIFTEEN



# AUTOGRAPHS





# MENU +++

ZAKOUSKA

CALIFORNIA OYSTERS, BELL PEPPERS

MIXED SALTED NUTS

BORSTCH A LA RUSSE

FILLET OF SOLE, WELEWSKA

SWEETBREADS WITH FRESH MUSHROOMS, SOUS CLOCHE

MARQUISE, KUMMEL

NEW PEAS POTATO DAUPHINE

COLD CELERY, PALACE

FRESH PEACHES, ROMANOFF MIGNARDISES

LOUIS ROEDERER GRAND VIN SEC RUSSIAN CIGARETTES



A.

# COLUMBIA UNIVERSITY SCHOOL OF MINES CLASS OF '85



25th ANNIVERSARY CLASS BOOK

1885-1910

E.N. Van Corrlandt
p109

Arthur S. Dwisht
p.42

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# CLASS OF '85 SCHOOL OF MINES COLUMBIA COLLEGE

TWENTY-FIFTH ANNIVERSARY
REUNION

1885-1910

NEW YORK, N. Y. 1911

# PREFACE

In behalf of the Committee in Charge of the 25th Anniversary Jubilee Reunion of the Class of Eighty-Five, School of Mines, Columbia College, and by their direction, this class-book has been prepared, giving in prose and poetry the history of the Class from its organization in October, 1881, to the Jubilee Reunion in June, 1910.

A large part of the credit for this work is due to Wilbur E. Sanders, who, as Class Poet and Class Historian, has prepared the pleasing jingles for each sober-faced photograph, and has whipped into shape the multifarious and varied autobiographical sketches furnished by the individual members of the Class.

To Secretary R. V. Norris should be given much glory for his arduous efforts in extracting the aforesaid sketches from his classmates, who, by virtue of long inaction in Class matters, had become somewhat apathetic; also for the preparation of the history of the Class from graduation to jubilee anniversary.

To President Joseph Struthers, as a reward for his previous servitude in behalf of the Class interests as many-time Secretary, was given the task to decipher Sanders's chirography (or, better, chiropody, since the manuscript shows that Sanders must have wielded the pen with his foot), and to prepare the copy for publication.

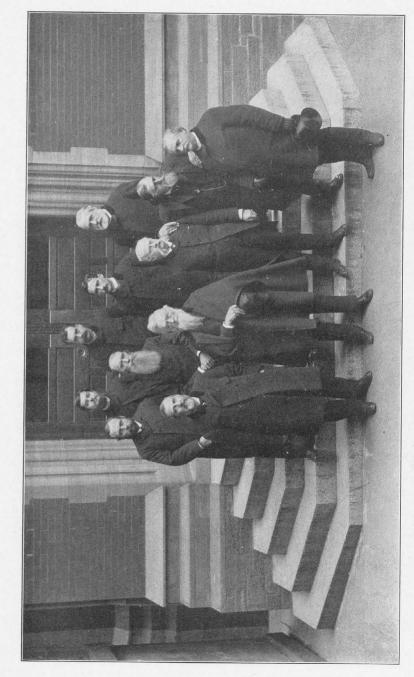
It is hoped that all the members of the Class will appreciate the labors of its present officers and welcome this work of love as a pleasing reminder of our affiliation with the "Grand Old Class of Eighty-Five."

J. S.

COMPLETE MEMBERSHIP, CLASS OF '85, SCHOOL OF MINES, COLUMBIA COLLEGE

	'81 '82	'82 '83	'83 '84	'84 '85	Degree		'81 '82	'82 '83	'83 '84	'84 '85	Degree
Allen, S. E Amy, E. J. H	M M	M M	M M	iii	 Е. М.	McWilliam, R Macy, W. A Mannheim, P. A. L	M M M	M 	 M	 M	 Е. М.
Baker, Geo. L Baldwin, C. B	M		::			Marié, L Matute, M. V	M M	M	M	M	E. M.
Bandman, C. J Barkley, H. F	M	M	ii	M	E. M.	Mayo, F. F Merrill, F. J. H Meyer, H. H. B	M M	M	M	'n	Ph. B.
Bemis, F. P	M	M	M	M	E. M. C. E.	Miller, C. L	M M	M M	M M	M M	E. M. E. M.
Briddon, C. F Brown, P. H	M	M				Middleton, J Moldenke, R. G. G	M M	M M	'n	M	E. M.
Buchbinder, J Burlingame, F. C	M		• •			Murray, E. A	M				
Bush, W. F	M	M	M	M	E. M.	Nash, T Nichols, T. G	M	M		••	
Carter, J. F Cary, Geo	M	M M	M M	M	Ph. B.	Noble, L. S Norris, R. V	M M	M M	M M	M	E. M. E. M.
Cassidy, E. R Champlain, D. C	M	'n	M						2/001.		17. 111.
Clark, F. S Clarke, J. T	M	M	M	M	E. M.	O'Connor, M. J		M			
Clements, W. H Condit, J. A	M		M			Page, G. S	M M	M	M	M	E M.
Cox, A. McJ Cozzens, H	M	M M	M M	M	E. M.		M M		• •		
Crosby, R. R Crowell, C. B	M	m	M	M	Ph. B.	Perry, R. F. Petty, J. P. Piedra, J. H.	M	M	M		
Cushman, W. C	M	***				Pierce, H. N Polledo, Y. Y	MM	M	M M	M	E. M. E. M.
Davidson, H. J Detwiller, C. H	M	и́	M	ii	Ph. B.	Pool, J. L	M	M	• •	••	
Doolittle, C. H Driscoll, T. F Dwight, A. S	M M	M M	M	M	E. M.	Ripinski, B Rodgers, H. M	M M	M M	M	M	
Dwight, A. S		M	M	M	E. M.	Rothschild, A	M				
Eddie, E. C Engelhardt, E. N	M M	M M	M M	M M	E. M. E. M.	Sanders, W. E	M	M	M	M	E. M.
Evans, T. B	M	M	M			Schenck, E. W Seaman, H	M	M			
Fishburn, R. E Fries, H. H	M	M M	M M			Shepard, W. H Sherwood, F. P	M	M			
Fulton, T. W	M	M		••		Shope, H. B	M M	M M	M	M	Ph. B.
Gale, W. H Goodwin, H. L	M M	M				Shunk, F. R Smith, J. L	M M	M		::	
Graff, C. E	M M	M	M	M	E. M.	Spencer, R. McD	M	M	**	2.5	
Green, F. J	M	M				Starek, E Steinway, G. A	M M	M	M	M	E. M.
Hall, H. L	M					Struthers, J	M	M	M	М	Ph. B.
Hart, B Haven, J. W	M	M M	M	M	C. E.	Talman, E. M	M M	M M	M	M	E. M.
Hawkes, E. Mc D Hildreth, R. W	M	M M	M M	M M	E. M. E. M.	Thomas, F. M Titus, W. H Trask, H. R	M M	M M	M	M	E. M.
Hoffbauer, O. A	M	M	M	M	E. M.	Trowbridge, S. B. P Tucker, W. C	M		M		
Hollis, H. L Horner, R. N. W. K Huntington, F. W	M	M	M	M	E. M.		м				
Huntting, H. O	M	M	M			Van Cortlandt, E. N Van Tuyl, C. B		M	M 	M M	E. M.
Ingram, E. L	M	M	M	M	C. E.	Velié, C. D	**	M			
Johnson, A. G	M	M	M	M	E. M.	Wallace, W. J Warren, W	M M	M			
Lacombe, C. F	M M	M	M	M	E. M.	Watson, F. M	M M	M	M	M	E. M.
Ladew, J. H Lane, R	M					Whitman, E. P Wiltsie, E. A	M M	M M	M M	M M	E. M. E. M.
Leaming, E	M	M M	M M	M M	E. M.	Wolf, L. S	M	M M	M	M	E. M.
Lee, H. C Lee, R. L	M			147		Worth, G. A	M				

M indicates member.



G. PECK) FACULTY OF THE SCHOOL OF MINES IN 1883 (EXCEPT FROF. W.

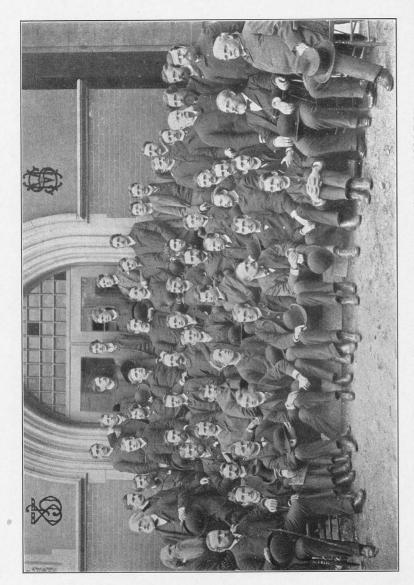
# HISTORY OF THE CLASS OF '85 MINES, COLUMBIA COLLEGE, 1881 TO 1885.

By W. E. Sanders, Class Historian.

Once upon a time, as all good fairy tales begin, 94 callow, bashful and hopeful youths met together by reason of an experience that was to change the tenor of each existence and the entire course of the lives of a majority of them, that was to take them as raw material and so knead and mold and fashion and influence and instruct them that they might be sent forth from the factory as from a furnace, the refined and finished product of the old School of Mines of Columbia College. This eventful gathering occurred at and near Oct. 1, 1881. And thus for good or ill, for better or for worse, for affairs great and affairs small, our "Class of '85" was organized and launched as an integral and concrete fact in the existence of what is now Columbia University in the City of New York.

How the years return as I look back upon the long past scenes! How familiar faces come to life, and smile with friendly nod or frown in well-merited rebuke! How voices of the night sound from the depths of the eternal silence, vibrant with feeling and tenderness, joyous with the exuberant enthusiasm and good fellowship of thoughtless care-free youths, or the kindly feeling and mutual regard of bosom friends and friendships, or grave and meaning with the subject of the lecturer! How these voices return to stir the listening ear, to thrill anew the chords of memory! The courses we poured over, the studies over which we burned the midnight oil, the subjects of the curriculum, the vital essence of our college existence, were not all we gained by our four years of life under the fostering care of our beloved Alma Mater; since there are active influences in so worthy and noble an institution as Columbia University that do more good to her sons than all the benefit they may receive from her scholastic training. The precepts towards honorable dealing and fair living, the uplifting influences that tend to mold manly character, the kindly friendships formed between a splendid corps of strong and patient instructors and their students, the intimate associations which in youths of generous minds form a mutual regard so cherished and sincere that the passing years serve but to strengthen its ties;—these are the incalculable benefits given to all; while pride and affection for the mighty Mother engendered in the hearts of her sons are as strong and lasting as is life itself. And all of these blessings and rewards the members of the Class of '85 received in full measure during their undergraduate life both within the well-remembered halls and without the sheltering walls of the School of Mines.

President Barnard, he who labored so largely and effectively to build up the instruction afforded by Columbia and place it at the high level that has since been the foundation of her expanding greatness, we remember during his later years with veneration. He passed to his reward



HE CLASS OF '85, SCHOOL OF MINES, COLUMBIA COLLEGE

long since. Even to touch upon his mighty works would overcrowd our time and space. His memory we revere, and may his rest be sweet!

Of Professor Chandler and Professor Van Amringe we all know, and have followed with admiration and pride their crowding labors through nearly half a century in the cause of our Alma Mater. We have wondered at their unselfish devotion to Her, and have been amazed at the energy and abounding vitality they possessed, as well as the perennial youthfulness, never-failing good nature and kindly interest in their students. They will receive the thanks and appreciation of thousands of their students and of countless others for their noble duties nobly performed, and they will carry with them in their retirement from the University and the old schools the love and personal affection of the sons of Columbia who have been influenced for good by their broad high-minded characters and their sunny personalities.

Of other loved memories of our "dear delightful days" that ended a full quarter of a century ago, the mind reverts with unbounded affection and pride, but sadly and reverently, to those lordly giants of the olden time, now no more,—to Professors Trowbridge, Newberry, Egleston, Rood and Peck. The knightly, kindly, gentle Trowbridge, great engineer and great of heart. Newberry, of venerable mien, gentle, kindly and thoughtful, and in lectures as dry as the dust of his beloved lamellibranchiata and gastropods, pterodactyls and ichthyosaurs of prehistoric æons. And Egleston, of kindly but impatient ways, methodical, a slave to his duty, energy personified. His style of rapid-fire diction in the lecture room was effective; for once he had started upon a sentence. no convulsion of nature, fall of constellations or wreck of worlds could daunt or stop him until his say was said; and sometimes in phrase so warped and convoluted that no formula of mathematics outside of the fourth dimension could establish its sinuosities. And Rood, passing silent through the corridors, dressed in that heaviest of ulsters and the hottest of scarlet "four-in-hand" ties, even during the most torrid of summer days; and I remember the fire in his sweltering lecture-room as a blast almost from the Inferno. But if that quaint, lovable and kindly nature enjoyed the added warmth upon a midsummer day, yet was his heart and being fanned by gentle fires, and unexpected mirth and humor would flash and beam in him as flash the lightnings of his beloved Physics. And Peck, great mathematician, highest authority on and author of mathematical and mechanical works, always pleasant and courteous, kindly and affectionate and winning good fellowship.

To have sat at the feet of that grand old guard to partake from them of the wisdom of the ages were glory indeed. Passing to the adjunct-professors and instructors, we remember with gratitude Hutton, Rees, Munroe, Waller, Ricketts, Wells, Moses, Goodwin, Churchill, Britton, Laudy, Greenleaf, Mayer, Stengle, Loiseau, and Registrar Fisher, all kindly and patient with our failings, and ever spurring us to better work and even, it may be at times, to higher marks.

# Class of '85 Mines

With regard to the Class itself and its membership, it may be said that 94 lads were gathered from the four corners to matriculate at its organization. Only 29 of this original number were graduated with the full class of 45 on June 10, 1885, while during our undergraduate period many others joined our ranks.

Of non-graduates, four of our number left college before graduation to enter business life, or other professional fields; these were J. H. Ladew, J. P. Petty, J. L. Poole and Major Francis R. Shunk, U. S. Engineers.

During the vacation at the end of our Freshman year, we were called upon to chronicle the death, by drowning, of Thomas G. Nichols, and in the following summer our beloved comrade, Howard Seaman, the warbler of the Columbia Glee Club, who possessed a personality of singular charm and high promise, was drowned at Mount Desert, Maine.

The Class organization was as follows:

	Freshman	Sophomore	Junior	Senior	
	'81-'82	'82-'83	'83-'84	'84-'85	
President	Thos. B. Evans Jos. Struthers, Jr. F. P. Sherwood	W. E. Sanders Jos. Struthers, Jr.	Jos. Struthers, Jr. C. F. Lacombe	C. F. Lacombe I. H. Woolson Chas. E. Graff Leon Marié	

In college life we took a prominent part, and we proved our physical prowess in many victories. Like Paddy with his blackthorn, we were every ready for a scrimmage of some sort, and the class gained brilliant successes in the "cane rushes." First, as Freshmen we proved our right to sport the beaver and cane, after many a wild tussle with the Sophomores. And when, during the spring of 1882, unseemly posters were nailed by '84 high on a venerable and lonely elm of our attenuated campus at the old college site at 49th Street, there was a notable gathering of our Class and a hard-fought battle royal was waged through certain hours during three days. Just as winged Victory had perched upon our banners, the contest was suddenly and unceremoniously prohibited by President Barnard. The following year, however, the sport of "killing off" the "Freshies" was revived by us in attempting to decide the vital question as to their right to wear the cane and beaver, and the heavy men of our Class had concentrated for annihilation of a Freshman, when Chandler appeared upon the scene to prevent bloodshed. Happening to get hold of Woolson (one of our heavies), the genial Doctor was being railroaded unceremoniously towards the stone steps leading thenceward to the power-plant, when his identity was discovered in time to prevent an unfortunate mistake. Doughtily he returned to the melee, and by his authority compelled the surrender of the cane to himself. Later, Woolson was called to conference, and approaching the presence with fear and trembling was given the cane with the remark

that "evidently it belonged to Eighty-five." Last but not least was the informal afternoon tea in the so-called lunch room—Peace to its walls!—but '84 and '85 won out, and Wall was cleaned out.

In aquatic sports we won undying glory and a series of crowning victories that spoke in no uncertain tones of the high quality of the Class, as the following brief record will testify:

1881:-Fall Regatta, Harlem River, Oct. 22. Class Eights-

Winner, '83, in 7 min. 42 1-5 sec.

Second, '85—E. P. Frame, C. H. Mapes, G. B. Lee, Γ. B. Evans, S. Williams, E. W. Cassidy, W. C. Cushman, W. O. Partridge (stroke), H. S. Dormitzer (coxswain).

Third, '84.

1882:-Spring Regatta, Harlem River, May-

Winner, '85, 11 min. 45 sec.—W. C. Cushman, E. Hunt, C. B. Crowell, E. P. Frame, R. L. Lee, E. P. Whitman, G. B. Lee, W. B. Peet (stroke), H. S. Dormitzer (coxswain).

Second, '83.

Third, '84.

Columbia-Harvard Freshman Race, Harlem River, July 1, 1882-

Winner, Columbia, time 10 min. 56 sec.—W. E. Sanders, J. Middleton,
C. B. Crowell, E. C. Hunt, R. L. Lee, E. P. Whitman, G. B. Lee,
W. B. Peet (stroke and captain), H. S. Dormitzer (coxswain).
Second, Harvard, by 10 lengths.

Harlem Regatta, October, 1882. Metropolitan Athletic Club, Atalanta Athletic Club, Columbia. The same crew as that which rowed in the Columbia-Harvard race in July. With only five days of training in the shell, and against two picked crews from the two athletic associations above mentioned, our crew crossed the line last, but without clear water between any of the shells.

1883:-Spring Regatta, Harlem River, May 12-

Winner, '85 (11 min. 33 sec.)—W. E. Sanders (bow and captain), J. Middleton, C. B. Crowell, E. P. Frame, F. J. H. Merrill, E. P. Whitman, G. B. Lee, E. C. Hunt (stroke), H. S. Dormitzer (coxswain).

Second, '86.

Third, '84 (distanced).

"Bob" Norris was on the 'Varsity track team, winning the mile walk in the college games in '83 and '84, and second place in Intercollegiate in 1884 at New York. F. P. Bemis was our representative in shot putting, winning college games in '84, and was on the Intercollegiate team.

Of the merry days of our life at the old School of Mines at 49th Street, our work of surveying took us into Westchester County, and the confines of Pelham Manor, where we ran our lines and traverses to our hearts' content, and where (as Secretary Struthers of that time states) "we were monarch of all we surveyed." Of our Summer School of Mining, on Keweenaw Point, Michigan, among the famous copper mines, mills and

smelters of that beautiful region, we gained by practical observation much valuable knowledge of our future chosen work, and enjoyed many a merry lark and jest and prank. Of the exams that were sent by Providence to keep us in constant terror, and over all the strange and funny happenings because of them, it were best now to draw the veil of silence and permit them to sink into the limbo of oblivion to which they rightly belong.

At last arrived the day of June 10, 1885, when the sheepskins were delivered, and as Mining Engineers, Civil Engineers, Bachelors of Philosophy in Analytical and Applied Chemistry, in Architecture and in Geology, we were turned loose upon a defenseless world, to make good or ill use of the gifts that had been granted to us by Alma Mater, and to work our way outward and upward by the aid of the tools She had placed in our hands and taught us to use.

How the old buildings and rooms come forth from the dim and shadowy past, peopled with the faces of our vanished years, many of which, thank God, still rejoice our hearts and memories with their smiling presence, while the problems we then pondered and worked over look out at us from the blackboards be-dimmed and powdered with the dust and erasures of the years—and many of those problems have disappeared from our minds as completely as have those old rooms from our lives.

At last the task is done. In closing this résumé of our college days, I wish to thank you, my classmates, for much of consideration that I have received in the past, and much of kindness and affection that I so well am assured is mine from you; and in return I wish for each and all of you, mates of the olden times, every success, every good, every reward, and every happiness that life can bestow. And for those of our number whom we will meet no more upon this earth, I pray that their rest may be fair and sweet.

#### HISTORY of the CLASS ORGANIZATION from 1881 to 1885

By various Secretaries, aided and abetted by the Class Poet.

For the first 20 years after the date of graduation, as far as organization was concerned, the Class of '85 was in innocuous desuetude, the members meeting only by chance or at semi-occasional Alumni dinners.

The organization was revived by the sending out of a circular letter signed by Lacombe, Woolson, Struthers and Marié, dated March 23, 1905, announcing a dinner to be held on June 14, the twentieth anniversary of graduation.

This dinner was held at Hotel Astor, with Prof. Hutton as guest of honor, and the following were present: Graff, Huntington, Ingram, Lacombe, Mannheim, Marié, Miller, Moldenke, Norris, Page, Starek, Struthers, Titus and Woolson. At this time it was decided to elect Class officers annually, and a slate, presumably worked up by the ring, resulted in the election of Woolson as President, and Struthers as Secretary-Treasurer.

The second Class-dinner was held at the Columbia University Club on March 30, 1906, with Graff, Hawkes, Huntington, Ingram, Mannheim, Moldenke, Norris, Page, Struthers and Woolson present. The Class officers were re-elected, and "Billy" Sanders was given the life job of Historian and Poet, in appreciation of an excellent "pome," which runs as follows:

#### TO THE CLASS OF EIGHTY-FIVE.

While memories throng of Gotham-town,
From mountains bleak and cold,
I send my love and blessings down
To greet the boys of old.
Brave lads, who meet together there
From regions wide apart,
Where duty leads, to you I bare
An overflowing heart.
Though wide apart our feet may move
And severed we may strive,
We'll drink a cup to the Class we love,
To dear old Eighty-five.

The memories throng adown the years,
As clouds through summer haze,
And shed a brightness that endears
Our cherished college days.
I see the friends of that far time
And catch their brave desire,
I view their manhood's early prime
And take their youthful fire.
Success be their's and full their joys,
May all their actions thrive.
God bless and keep those merry boys
Of dear old Eighty-five.

Ah, Eighty-five! affection turns
To that familiar name,
And love for Alma Mater burns,
An all-consuming flame.
Swift passed those years beneath Her roof,
As in review to seem
Like visions fair, the warp and woof
Of some enchanting dream.
Where'er Reunion finds us, boys,
We'll one and all contrive
To drink a cup to our storied joys
And to dear old Eighty-five.

The third dinner was held at the New York Athletic Club, on April 5, 1907. The following members were present: Detwiller, Dwight, Graff, Lacombe, Mannheim, Moldenke, Norris, Sanders, Titus, Struthers and Woolson. Quoting from Moldenke's account the subjoined slate was jammed through: Dwight, President; Woolson, Vice-President; Moldenke, Secretary-Treasurer (d—m); Class Poet, Sanders "IT" for keeps. The following "pome" from Sanders was received, read and placed on file:

#### THE DAYS OF EIGHTY-FIVE.

I sing of a time that has long passed by—
Of a time more joyous, far,
Than the hours that swift through the present fly,
Than the days of the present are.

Ah! glorious days of that early time,
Long, long may their memories thrive;
Those, our golden hours of youthful prime,
Happy days of old Eighty-five.

Far across the years do they beckon fair, Soft and fair through a tear-dimmed haze; And their songs drift clear to the listening ear, Sweet the songs of our college days.

And the years they come and the years they fade;
Fate spins while we toil and strive;
But we'll pledge true faith to the friends we made
In the Class of old Eighty-five.

Ah! my friends, dear friends, how the years return As I gaze in each kindly face, Where I see the ancient affection burn, That e'en Time cannot erase.

Let us drink to the old Class-Spirit, boys, That has kept through the years alive. Here's a loving-cup to our pristine joys, And to dear old Eighty-five.

After much alleged poking on the part of the President and ex-Secretary the new Secretary, Moldenke, was inspired to a radical change in our methods of procedure and invited the entire Class to be guests at his home, "Castle Elsinore," Watchung, N. J. On May 9, 1908, Detwiller, Dwight, Graff, Huntington, Ingram, Meyer, Norris, Page, Struthers, Whitman and Woolson braved the dangers of a foreign country and went to New Jersey in response to the invitation. The delegation was

entertained in Molly's new cast concrete castle, decorated in blue and white in honor of the occasion. The election of officers resulted in the re-election of Dwight President and Woolson Vice-President, but the rest of the slate failed by reason of the pathetic appeal of our host, and Norris was elected Secretary-Treasurer, with the promise that he would be let off after one year's service, which promise it may be here stated was wickedly and fraudulently violated at the next dinner, when he was again made "goat" as a fitting reward for his failure to discharge the onerous duties of that office during his incumbency. Sanders, the life officer, did his duty nobly with a "pome" with apologies to various and several other authors. On the reading of the "pome" it was decided that such apologies were necessary but would not be accepted. Moldenke was delightful as a host and the courtesy of Mrs. Moldenke and her charming olive branches added much to the pleasure of the occasion.

#### TO OUR COLLEGE DAYS.

Pome by the Pote of the Sherries,
From Yubaland, California.
With apologies to Bill Shakespeare, Milton, Byron, Al Tennyson, Jack
Whittier, Bill Bryant, Ollie Holmes, et als.

From where Sierra's beetling crags in all their grandeur rise, Upspringing from the pine-clad hills to kiss the sunset skies: From California's sunny slopes, where spread her sands of gold, Fair land of romance and of song, whose tale is never old;

Where downward sweeping to the sea the Yuba River flows
To gladden valleys far below with breath of melting snows;
From lands of vine-clad slopes and vales the wooded hills between
Of vales and slopes surpassing fair and clad in living green;
Dear Classmates all, from out my heart with fond affection stored,
I greet you as again you meet around the festal board;
I give my greetings to you, lads, from this spot where I am,
And send my love and blessings from beside the Yuba dam.

A vision rises to my mind: How like a pictured scroll
I see again those early times before mine eyes unroll;
Again we live our college days of strenuous sport and toil
(How swiftly sped those long past hours of midnight-burning oil,
Or of candles with each end ablaze! Ah! days of thoughtless youth,
But days of springtime buds and flowers, of living light and truth).
Within the gates of Knowledge we partake of Learning's store,
Acquire the laws of Technic truth and Scientific lore;
In sport again we strive, we toil like galley slaves at oar
To beat "Fair Harvard"—Oh, that we might play the game once more!
Full bright with shining hopes were they, those years of long ago,
Our happy, glorious, golden years in Columbia College, Oh!

## Class of '85 Mines

I think of all our youthful pranks and of our Freshman ways,
For some of us were Freshmen to the end of college days;
Of rushes with their riot in a wild unruly swirl,
With "Prexy" tearing of his hair; and of the co-ed girl;
Of Chandler with his quips and jibes, who beamed on us the while;
Of Peck of Algebraic fame, Van Amringe's genial smile;
Of gentle Trowbridge, Newberry of mild and friendly mien,
And Egleston's impatient ways but kindly thoughts, I ween;
Of Hutton's pleasant face; of Goodwin, famous oar;
Of Ricketts, Loiseau, Stengle, Wells; I see them all once more.
But heed no frown of Prex or Prof. among these Western pines,

As I dream of old Columbia and our dear old School of Mines.

Some of our boys have weary grown and laid them down to rest,
Asleep beneath the azure sky upon Earth's loving breast;
There's Hildreth, gentle evermore, and Watson, kind and true,
And Barkley's humorous, genial ways, and dear old Crowell, too,
And Seaman of the silvery voice; How memory recalls
Those dear companions of our days within Columbia's halls!
We gather in Columbia's name, from regions far and near,
In fellowship of ancient days to meet each gladsome year:
And eye to eye and hand to hand and heart to heart, for aye,
We'll pledge true faith and cheer, my boys, as the years go rushing by;
And while we face the shafts of time, we'll meet, Oh, Classmates mine,
We'll meet and greet each other for the sake of Auld Lang Syne!

In 1909 the Class dinner was held at the Engineers' Club, on June 3. Owing to the absence of the Class President, and the fact that Secretary Norris had several other things to do (his customary habit), it was necessary to telegraph to the "pote" for his contribution, which explains some of the alleged jokes contained therein. There were present Graff, Hollis, Huntington, Lacombe, Mannheim, Moldenke, Miller, Meyer, Struthers, Whitman, Wiltsie, Woolson and associate Poole. As Norris was conspicuous by his absence, the minutes were kept by Struthers, as usual, and the Secretary takes no responsibility for the excellent form in which they were sent to the Class.

The election for officers resulted in Struthers, President; Miller, Vice-President; Norris, Secretary-Treasurer, and the re-election of "Billy" Sanders to his life position of Historian and Poet.

The following "pome" is the "Pote's" contribution:

#### PROLOGUE.

Yer tellygraft arrived to hand my peaceful rest to mar; With its mishtherus hyrogliffs "G. S., M. P., G. R." And p. d. q. it catches me—there is no chance to shirk, So I must corrugate me brow and get me down to work.

"Expect a poem," now, ye do! Consarn yer blawsted nerve (The only fun about it is that you too have to serve).

Here, I must give the wheels a turn, unwind the bloomin' coil, Knock off a yard or two of rhyme and burn the midnight oil; And mewed up here, like mewing Tom, while midnight hours enthuse, Amuse the musing miners with the music of my muse,

With dithyrambic ructions and blanked pentameter verse,
Rambunctious hexameter frills, each than the other worse,
In memory of other days, in rhyme that's bold and free
I'll offer here the best I have to mon cherez frères d'amie;
I'll give a poem, sure I will, to curl your fringe of hair
And make you wish you ne'er had sent that tellygraft, I swear!

#### "POME."

From where Ixitlit's swarthy sons in lazy languor dream Beneath the torrid southern sun with scorching rays agleam; Where squalid Mexicali sprawls beneath Imperial skies, And tawny Mexic maidens dwell with dark impassioned eyes; Where painted squaws of Cocopah through streaked faces smile And togged in vari-colored hues the passing hours beguile; Where turbid Colorado pours its silt of priceless worth To make Imperial Valley bloom the garden spot of earth; Where buzzards float the skies along, envenomed serpents crawl, And poisonous insects creep the ground, night prowlers shrill their call; Where balmy southland skies at eve o'er mortals cast a spell, And days flame fierce with blazing heat, hot as-I dare not tell; From southron lands afar from you I greet you, boys, once more, And on you, gathered at the feast, my benedictions pour. I thrill with tend'rest thought for all who throng the festal board, For you and for the absent ones in mem'ry fondly stored. God bless and keep you, merry lads, whatever luck attends, God bless and keep you, one and all, my dear and cherished friends.

Toasts were drunk to-

- (1) Our Departed Brothers. (In silence.)
- (2) Our Responsive Absent. (With hearty good will, for they would be with us if they could.)
- (3) Our Non-Responsive Absent: (With anathema, for they are the real "dead ones.")
- (4) Our Own Sweet Selves. (God bless us! Few as good and many a damsite worse.)

The President was authorized to appoint a committee for our twenty-fifth anniversary celebration, and the following were selected: Struthers, Chairman; Norris, Secretary-Treasurer; Amy, Dwight, Hollis, Lacombe, Miller, Noble, Whitman, Woolson, Van Cortlandt.

The first meeting of the twenty-fifth celebration committee was held on July 23, 1909, and organized as stated above. Lacombe was appointed chairman of the dinner committee, the other members being Marie and Struthers. At this meeting the plan of instituting a memorial scholarship to be known as "Class of '85, School of Mines, Scholarship," proposed by Dwight, was finally approved and steps taken to raise a sufficient fund to carry out the plan.

The committee held meetings in New York, Nov. 29, 1909, Jan. 7, Feb. 25, March 29 and May 5, 1910, all of which meetings were well attended by the members of the committee and other members of the Class who were available, with the result that a fund was raised sufficient to institute the proposed scholarship.

# THE TWENTY-FIFTH ANNIVERSARY REUNION AND DINNER

By R. V. Norris.

The twenty-fifth anniversary dinner of the Class was held at the Hotel Astor, New York, on May 31, 1910.

The dinner committee, Lacombe, Struthers and Marié, outdid the wildest expectations of the Class in making this a record dinner. The college room of the Hotel Astor was draped in blue and white, at the four corners were huge blue and white shields carrying the names of the Professors under whom we all spent our four years at the "Mines," in the centre of the table was a replica in iron of the old college crown illumined with electric lights and surrounded by forget-me-nots and daisies, at each end were illuminated cross hammers in metal and glass, the new '85 banner, a present from Mrs. Lacombe, stood behind the President's chair, and the Columbia College seal, a part of the wall decorations of the room, was surrounded by a wreath of laurel and electrically illuminated.

# EIGHTY-FIVE MINES REUNION JUBILEE.

May thirty-first, 1910.

Quit thou thine art, thy work or craft,
Wherever thou may'st be,
And from the mart, the furnace, shaft,
Throng to our Jubilee!
Away with pen and pencil, thou,
The work within the mine,
At smelter, college, office, now,
And gather into line!
Forget thy woes and Life's affairs!
With hearts of merry cheer
We'll drift away from worldly caresReunion time is here.

Long has it been since we have met
As college-mates of old;
But true affection joins us yet
By shining threads of gold.
We've wandered to the ends of earth;
Yet come we back to be
Together joined in joyous mirth,
At this, our Jubilee.
And some we miss—our heads we bow—
Their memories are dear;
We know that they are near us now—
Reunion time is here.

Twenty-six members of the Class, comprising every one who had promised to come, and three guests, were present: Bemis, Detwiller, Doolittle, Dwight, Engelhardt, Graff, Hollis, Huntington, Johnson, Lacombe, Lee, Mannheim, Miller, Moldenke, Norris, Page, Sanders, Starek, Struthers, Titus, Whitman, Cox, Middleton, Peet, Pool, Sherwood, with Professors Chandler, Ricketts and Munroe as honored guests.

W. E. S.

The menu was decorated with the '85 Class pin, colored by hand in blue, white and gold, and enclosed in it were vignettes of thirty-two of the Class; the failure of the other members to forward photographs cut them out of this exhibit of "the way we look now."

The interest which the Class of '85 has taken in this, their twenty-fifth anniversary, was shown by the attendance and by letters and telegrams from absent members. The distance which some men came to attend this reunion is really noteworthy: Engelhardt from San Francisco, Doolittle from Salt Lake, G. B. Lee from Douglas, Ariz., Hollis from Chicago, Bemis from Davenport, Iowa, Sanders from near St. Louis, Starek from St. Louis, Page and Miller from Pittsburg, Titus from Providence, Norris from Wilkes-Barre, Moldenke and Graff from the wilds of New Jersey.

Of the thirty-six remaining graduate members of the Class alive and accounted for, twenty-one were present, which with five non-graduate members brought the Class attendance up to twenty-six.

The roll was called by the Secretary, letters and telegrams read from Cary, Clark, Ingram, Marié, Merrill, Meyer, Noble, Polledo, Wiltsie and Woolson, most of the rest answering their names by being present.

Dr. Struthers in his inimitable way replied to the toast of "The Class of '85, School of Mines," and many and long were the cheers to the old Class. Dwight, to whose happy thought was due the selection of a scholarship as a class memorial, properly replied to the toast "The Class Memorial Scholarship"; Miller paid a beautiful tribute to our "Honored Guests," to which Doctors Chandler and Ricketts replied in fitting speech, and as toastmaster Lacombe paid tribute to our "Old Professors" whose names decorated the shields at the corners of the room. Billy Sanders was on the toast list to deliver the "Class History," but instead announced his own engagement, reducing the list of Class "bachelors" to

## Class of '85 Mines

the vanishing point, with Struthers still heading this enviable bunch. Special cheers were given for Polledo, who failing to be present, sent cigars of the highest product of his native land, and a special salvo for Mrs. Lacombe, who besides making and presenting the Class banner was personally responsible for the wonderful table decorations.

It was good to see five of our old Freshmen crew, Peet, Middleton, Whitman, Lee and Sanders, sitting at oar-marked places; seven of the crew were from the "Mines" and it still holds the record as being the only Freshmen crew that ever beat Harvard.

A bronze replica, 31/2 inches square, of the Class pin with the blue and white '85 shield enameled thereon made an exquisite paper weight as a memento of our anniversary.

The scholarship subscriptions to date have reached the full sum of \$10,000 required, of which \$7,000 has been received and transferred to the Treasurer of the University.

It was impossible to hold an election of officers at the Class dinner, owing to the very long program and the presence of guests, so the present officers hold over for another year.

# ADDRESS (CONDENSED) OF CHARLES F. LACOMBE

Toastmaster of the Jubilee Dinner.

Mr. President and Gentlemen:

It is a great privilege to have the honor of beginning the proceedings of the Twenty-fifth Anniversary of the Graduation of the Class of '85, School of Mines. The guests who have honored us represent that splendid body of men who started our school and whose names are inscribed on our shields. We love them, we revere them, we are children of their brains.

We have with us our loved Chandler, the cheerful Ricketts of the Assay Laboratory, and our formerly austere but now genial miner, Munroe. Behind them, my Classmates, I think are the approving spirits of Egleston, Uncle John Newberry, Father Trowbridge, good old eccentric Rood, the genial, loving and beloved Peck. Dear old Van Amringe is still with us, thank God: May he live long and prosper! Among the best left to us yet is Freddy Hutton, with his wise head on young shoulders. He would be with us to-night, but he could not, and we regret it deeply.

Dr. Chandler, representing those men as you do, I feel I am stating the impressions of my classmates when I say that even as unthinking and irresponsible freshmen we realized you were rare men indeed, but since then we understand what a privilege it was to have learned and worked under that grand corps of Professors, and we know the great and good fortune we had in studying under you. The influence of the body of men you represent, with their standards of learning, honor, endeavor, and kindness, goes farther than you will ever know; nor can we ever express our gratitude for the results in our lives. With great hopes for the University now, it will be wonderful, indeed, if it ever obtains men equal to you or the standards you set in the college days.

To you, my old classmates, it is a great joy to welcome you and to see your genial faces once more as we gather to honor our University, "Columbia," our School, "The School of Mines," and our Class, the Class of 1885. Twenty-five years have slipped by so quickly we do not realize it except from the fact that we have changed from boys to men, our hair is silvered and our faces show the marks of toil and battle. Never mind, to-night we have our old Professors with us, and we are young again. Like our ever victorious crew we worked, sat tight and sawed wood: we have all had our victories and our defeats—let us celebrate our victories to-night with great joy and forget our defeats.

Finally, to our famous crew, I will later propose a toast which is not on the list for the reason that the committee was not sure that any of the men who came would represent it. This sentiment has been in our hearts for just twenty-eight years to-night, and I wish to tell you a short story concerning it.

At the time our class entered college, the contrast between the big men of '84 and ourselves was commented upon. Though slim and light in weight, we were mighty in spirit; but this latter characteristic was not then known. I remember how we rushed, and fought, and tore down signs, and put up others. Sometimes we were forced back, sometimes we held our own, but never were we beaten in spirit, we only fought the harder. Finally the great crew sign rush came and we won. It was a good augury. In the meanwhile a set of wiry light men were training and working under Jasper T. Goodwin as a Freshman crew. Reviled, ridiculed, their funeral notices published, they worked on, not disheartened or discouraged, until the trained eye of Goodwin saw that he had a perfect machine, a crew of eight men who rowed not as eight individuals, but as a single unit.

The class race day came. This crew, this reviled, all-but-buried crew, beat those of the other classes easily.

Then came the great day at the end of the Freshman year when our crew rowed against the eight giants of Harvard, who rowed as eight, not as one. You know the story: We won, gloriously. Weren't we proud that day? A victory like this had never been won before nor has it been won since. I call the names of that great crew with pride: Sanders, bow; Middleton, Crowell, Hunt, R. L. Lee, Whitman, G. B. Lee, Peet, stroke and captain, and Dormitzer, coxswain.

Seven of that eight come from the Mines. Five are now sitting at this table in the order they rowed: Sanders, Middleton, Whitman, G. B. Lee and Peet. One is dead, Crowell, and one absent in body but present in spirit, Bob Lee.

I move you, Mr. President, that to-morrow at the commencement exercises of Columbia University Mr. Whitman carry the banner and the four others form his escort. These men were never beaten; they have earned the honor of being our standard bearers, now as then. (Unanimously carried amid cheers for the Freshman crew of the Class of '85. Ever victorious, mighty and glorious. God save the crew!)

# ADDRESS OF DR. JOSEPH STRUTHERS

President of the Class of 1885.

Classmates, Honored Guests, and the Rest of the Universe-Greeting:

My task to respond to the toast of the Class of '85, School of Mines, Columbia College, more familiar and dear to us as "'85 Mines," is one of great pleasure, on account of the long period of loving associations since 1881, when first as a verdant freshman I ornamented the scenery at Columbia, and became officially connected with the Class as its Secretary. The task is not easy, for at the outset I am between the two horns of a dilemma. On the one hand I am impressed with the seriousness of the occasion (for a quarter of a century has passed since graduation, and that is enough to make any one serious), yet, on the other hand, I feel that we should shout, rejoice, and be fully glad that after all these years we are again met together to renew our youthful feelings of class loyalty and individual esteem. However, I trust I shall be able so to mix the joyous with the serious as to yield a proper "blend" suited to every palate; or, taking as an illustration this effervescent glass of wine, may the spontaneous bubbles of joy for this great occasion so permeate the liquid memories of our individual careers as to make us forget the sorrows and disappointments, and recall only the good that has come to us. Moreover, may these bubbles, rising to the surface and escaping without let or hindrance into the superambient air, be prophetic of the easy passing off on the morrow of that katzenvammerisch headache which is said to follow all well-conducted quartercentury class-dinners.

Undergraduate Period.—In our college days our class spirit was remarkable and unique. We abominated sham and we resented imposition. We stood for the right and for it we fought with our might. Do you remember the grievous wrong that '84 tried to perpetrate on us by dictating that we should adopt green as our class color, and wear a green button on the class cap? Perhaps we were verdant and might have matched the proposed color, but not for a moment would we allow such a public aspersion to be cast on the good name of '85. And great was the resultant rush! And greater was our victory!! And the hated green was displaced forever by a rich and ruddy red, which we selected as emblematic of the good cause for which we had fought and bled. Red is the complementary color to green and the choice was also complimentary to our prowess in physical debate.

Do you remember the classy tea party in Wall's lunch room, in which for the time being we joined with our loved enemies, '84, in physically demonstrating our disapproval of the violation of the Pure Food laws (although it was not then known under that name)? Once again did right prevail; and imposition, sham, as well as other and more material things, were ground under the heel of outraged justice.

Do you remember the Peck of trouble in mechanics? Again as a class did we rally under the standard of right, and by concerted action rescue

several of our classmates from threatened oblivion, incidentally putting a stop to cribbing, which, until we took our decided stand, was unfortunately but unavoidably the usual course of procedure in some departments.

These were splendid victories, both moral and physical, and they redound to our immortal glory.

It was during these four years of undergraduate work that we wrought out our salvation as a class. Some of our original members fell by the wayside; but our ranks were recruited later from other classes and other schools. Our work as individuals in the various courses and sections, was enough and more than enough to fill every waking hour of the day and night. No dormitories were available for the development of class camaraderie. From Brooklyn, Newark, Orange, Staten Island, Whitestone, Kingsbridge, and other equally remote places (and in those days there were no "tubes" to annihilate time and distance) several of our members traveled daily to and fro, so that it was rush in to leeture or laboratory and rush out to catch a train or boat or both, leaving no time for leisurely song on the campus or festive gathering for dinner. Yet, in the absence of later-day environments conducive to the development of a proper esprit de corps, we did so realize our responsibilities and appreciate our opportunities that at our graduation dinner, in 1885, the earnest group there collected to do honor to our class and to our Alma Mater stood individually and collectively for all that was honest, honorable and right—and it was a group good to look upon.

So serious were we that even the spirit of levity and frivolity, the usual accompaniment of a graduation dinner, was conspicuous by its absence; and, thanks chiefly to Bob Norris, even the spiritus frumenti was banished. (I might here say that Norris has since had a change of faith in this last-named direction.)

At the close of the dinner we parted, I am not ashamed to say, with tear-dimmed eye and a lump in the throat, almost overwhelmed with the thought that never again would so many of our beloved classmates assemble as a whole, and that never again would some of us meet on this side of the great divide.

Graduate Period.—After graduation we were literally scattered to the four winds of the earth—Europe, Asia, Africa, South and Central America, Mexico, Canada, all over the United States, including Alaska. We went out into the world and followed our various callings, assuming financial and other responsibilities, gaining position and honor, and, above all, the respect of our fellow-men.

It is interesting to note the diversity of professions now followed by our graduate members. That little band who received their diplomas on the stage of the old Academy of Music Wednesday morning, June 30, 1885, included: M. E., 37; C. E., 3; Chem., 2; Arch., 3; Geol., 1; total 46.

Of the 37 M. E., death or oblivion has claimed 7, leaving 30 now in practice; these 30 are scattered in the following fields of work:

Mining 5, Metallurgy 8, Chemistry 2, Civil Engineering 2, Electrical Engineering 1, Mechanical Engineering 1, Law 2, Banking 1, Teaching 2, Insurance 1, Business 3, Retired 2; total 30.

One Civil Engineer is teaching in his profession; three Architects are following that profession; one Chemist is following Editorial and Secretarial work and one Geologist follows Mining.

The ability to take up a different line of work and follow it successfully shows not only the good material in the class but the result of our early training at Columbia under the wise guidance, patient care and personal interest of our splendid corps of teachers and their associates—notably Egleston, Trowbridge, Newberry, Van Amringe, and last but not least, Chandler—great, lovable, human men who, by precept and example, so impressed our young receptive minds as to create therein high ideals and the determination to rise above the ordinary and make the world better for having lived in it. The development of these high ideals was greatly aided by the whole hearted and unselfish friendship of our classmates, each helping the other to attain true manliness of character, which, after all, is one of the greatest prizes of life.

In 1905, realizing that the graduating class would soon be old enough to vote, we formally organized and thereafter held our annual meetings and a dinner, at which only a mere handful has been able to attend. "As the twig is bent so is the tree inclined," and now at the 25th anniversary reunion comes what is to me a most wonderful-yes, almost miraculous—event, namely, the creation of the \$10,000 fund for our class scholarship, which has only been possible through the splendid financial support given by practically every member to the call for funds. No single large subscription to swell the total, and in most cases the individual has made great personal sacrifice to help the worthy cause. The scholarship is not a selfish physical advertisement but something that for all time will help some one to rise to a higher plane of usefulness. Moreover, it is founded on broad lines—there is no limitation as to age, nationality, creed or color, only that the recipient shall maintain the standard set for such scholarships. This record is one that stands preeminent as an eternal monument of which any class, ancient or modern, may well be proud.

And now, classmates, I give you the toast borrowed from our "pote lariat," a guarantee that it is a good one:

And the years they come,
And the years they fade,
Fate spins, while we toil and strive,
But we'll pledge true faith
To the friends we made
In the Class of old Eighty-five.

# ADDRESS OF CHARLES L. MILLER

Vice-President of the Class of 1885.

Mr. Toastmaster, Honored Guests and Dear Classmates:-

It has been my good fortune to-day to be able to attend two festive gatherings at which the "fullness of years" was the celebrating cause.

Earlier in the day I was present at a golden wedding anniversary which was observed at a little town in Pennsylvania, 100 miles from here, by a couple who for 50 years have happily shared life's joys and sorrows. Many felicitous remarks were made at this gathering, all tending to prove that one of our guests (Dr. Chandler) was correct in saying a few weeks ago that saccharine was not the sweetest thing on this earth, but only the sweetest thing that did not live and move and breathe. Who of those here are so lacking in experience but that they will entirely agree with him?—except possibly a bachelor or two, and these I wish to urge to not linger any longer, but to take unto themselves a living example of that sweetest thing on earth that does live and move and breathe.

From the fifty-year golden wedding celebration, I came to our own silver anniversary, and amid all the joyousness of our gathering and the pleasure of being together once more, it comes with something of a shock to us to recall that 25 years have passed since we bade farewell to our Alma Mater in all the glory of newly fledged Engineers, Chemists or Architects. We said good-bye to each other, and between some of us there has not been any opportunity for a hand clasp since that time. Shake strong and hearty, Classmates, and get more of the come-back spirit into you. Don't wait for the next twenty-five year reunion,—you will miss many intervening good times, and not many will be left when the golden anniversary rolls around.

We are exceptionally favored to-night in being able to enjoy the presence of three gentlemen who were members of the Faculty at the time we were striving for our degrees at the old School of Mines at 49th Street. "Our Honored Guests"—Doctor Chandler, Professor Munroe, and Doctor Ricketts. We honor your titles, gentlemen, but for to-night we would have you be just Chandler, Munroe, Ricketts. We ask you to be boys with us, "just for to-night," and as such we extend to you affectionate greeting; in body and with voice from those present, and in spirit from those members of our Class who were not able to join us.

How active our memories become as one picture after another passes before our mental vision, and we are back again in the old lecture room listening to the very first admonitory lecture by Dean Chandler at the beginning of our freshman year. Our affection for Columbia dates from that moment, as well as for those through whose association and precept such love was awakened and developed.

Problem followed problem in rapid succession in those days,—too rapidly we often thought as we were led by Chandler from the atomic

theories of our hopes to the crystallization of ideals, whose qualitative reactions and quantitative determinations should show perfect tests to indicate the measure of our leaders' instructions.

What devious and sometimes dark paths we trod with Munroe,—running lines more or less straight from Pelhamville to Lake Superior—going up and down vertical and inclined shafts, along drifts and levels to the slopes from where the ores rich in experience were drawn and raised to the surface, there to be separated into pure metal and rejected dross.

What pointers we received from Ricketts in the Assay Laboratory as we chased the elusive button which should have contained the solution of our problem, but whose blick or absence of blick so often brought only a repetition of our labor.

It is not given to many men to be as active in public and private life for as long a period of years as has been our dear Doctor Chandler. He has retired from these activities for a period of rest after having been a source of inspiration to thousands who will cherish him as a friend as well as a teacher. Everyone in this room is indebted to him, and we wish to add our tribute to the many testimonials which have been so deservedly showered upon him. His greatest reward will be in the satisfaction which will come from the consideration of work well done, and as such thoughts come to him, we trust that he will keep a little niche in his memory for the appreciation of the Class of '85.

We are seriously jovial on this occasion—our Class always was a serious one, in that its enthusiasm was not of the exuberant kind, but deep down in our hearts, dear Guests, there is a stirring of sentiment which it is difficult for us to express in words: We respect you; we honor you; we love you, and there is no measure to the esteem with which we regard you. That health and happiness may be yours for years to come—is the sincere wish of the Class of '85 Mines.

On June 1 the Class attended Commencement exercises of Columbia, attired in gown and mortar board. We were given the right of line and seats on the platform, where we saw 1,164 students receive their degrees and listened to President Butler's speech and the conferring of honorary degrees. After the Commencement exercises the Classes of '85 Arts and Mines followed their band to the front of the Alma Mater statue, where the '85 "Scholarship" was formally presented to the College in an appropriate speech by Arthur Dwight and accepted by President Butler; then across 116th Street, where '85 Arts presented their memorial in the form of a most unique sun dial, a stone sphere seven feet in diameter casting its shadow to indicate noon. By an ingenious arrangement worked out by Prof. Jacoby, '85 Arts, Professor of Astronomy in Columbia, the shadow will show New York standard time.

After these presentations the Class still with their band marched to the Alumni luncheon, where the place of honor at the upper end of

the central table had been reserved for '85. The luncheon was a pandemonium of cheers with speeches by Van Amringe and President Butler.

Sir William White of England and William Allen White of Kansas, recipients of honorary degrees, also spoke.

The afternoon was taken up watching the antics of the "naughty" classes of 1900 to 1910, who appeared in costume and kept the fun going almost continuously, and in seeing Columbia's baseball team disastrously taken into camp by the Syracuse aggregation.

In the evening the Old Guard Band, which had been employed all day by the Classes of '85 and 1900, assembled on the Library steps and played college music.

# ADDRESS OF ARTHUR S. DWIGHT

On the Occasion of the Presentation to Columbia University of the Class

of 1885, School of Mines, Scholarship.

June 1, 1910.

President Butler, and Trustees of Columbia University:

We of the Class of 1885, School of Mines, in commemoration of the 25th anniversary of our graduation have gathered here to-day to renew our bonds of old-time fellowship with one another; to greet our beloved professors with a maturer appreciation of the difficulties which confronted them in their efforts to mold our student-clay; to testify at the feet of our Alma Mater to the debt of gratitude which we owe her for the good equipment she gave us for the battle of life.

It needs must be that the joy of this reunion should be tinged with sadness, for the faces of the lads we knew so well are before us now as the faces of grizzled men, bearing the honorable scars of their battles with the world; the halls of our student days have disappeared in the growth of a mighty city; and although we regard with respect and pride the splendid group of edifices which now mark the greater University, we must be pardoned if we fail for a time to find in the new environment our own particular niche.

Of the senior professors of our time, Chandler and Van Amringe, God bless them! alone remain to grasp our hands, and they, alas! have signalized this very year by closing their University service and placing their burdens upon younger shoulders. Of our former junior professors and instructors, Munroe, Moses and Mayer are the only active representatives remaining. Barnard, Egleston, Newberry, Trowbridge, Peck and Rood, who wrought so faithfully and so well in building the firm foundation of our Schools of Science, have gone to their reward. What a splendid list of noble names our Roll of Honor bears!

Through all these changing patterns in the fabric of the University history runs one golden thread unchanged. It is the life and spirit of Alma Mater, the fostering mother, representing everything that was beautiful and true in the environment, traditions and influences of our

college days; all the precept and example of those noble minds that gave us of their learning; their patient firmness in correcting our shortcomings; and the wise generosity which held out a helping hand to struggling poverty in its quest for knowledge.

Walls of stone may crumble, and human faces change, but Alma Mater, as each of us loves to picture her, must remain the same though all the fadings of old associations. It is to that Alma Mater we return to-day with joyous hearts, bearing in our hands a gift, in token of our everlasting gratitude.

It is our desire to establish in the name of our Class, a permanent fund, the income of which shall materially assist students of Engineering in Columbia. In thus passing on to other eager ones, who else might strive in vain, the same benefits that we ourselves enjoyed, we feel that we can most fittingly testify our deep appreciation of the value of those benefits, and our enduring love and loyalty for Alma Mater.

Connected as we are with an earlier period, and cherishing many associations, the outward memorials of which have passed away, we can, in establishing this new tie, knit ourselves more closely to the larger life of our University, without destroying our sacred and affectionate memories of the past; and we believe that our interest in the character and work of those who shall successively represent us in this Scholarship, will maintain, so long as any of us shall live, the vital relation which we ardently desire between Columbia University in the City of New York and the Class of 1885 of its former School of Mines.

I have the honor, President Butler, on behalf of the Class of 1885, School of Mines, to deliver to you the formal Letter of Gift, establishing this fund.

#### LETTER OF GIFT

CLASS OF 1885, SCHOOL OF MINES, COLUMBIA COLLEGE.

Joseph Struthers, President; Charles L. Miller, Vice-President; Robert V. Norris, Secretary-Treasurer.

To the President of Columbia University:

Sir: The undersigned, being a Committee acting for and in behalf of the members of the Class of 1885, School of Mines, wish, in connection with the celebration of the twenty-fifth anniversary of their graduation, to establish in Columbia University a fund, the income of which shall be applied to the maintenance of a scholarship under the following terms and conditions:

- (1) The fund shall be known as the "Class of 1885, School of Mines, Fund," and the scholarship maintained by the income thereof shall be known as the "Class of 1885, School of Mines, Scholarship." The value of the scholarship shall be the net annual income from said fund.
- (2) This scholarship shall be awarded as scholarships in the Schools of Applied Science are statedly awarded, to any suitable candidate who

is pursuing a regular course leading to one of the professional degrees conferred on the recommendation of the Faculty of Applied Science and shall be subject to the terms and conditions as to academic work and standing which attach to other scholarships; provided that preference in the award shall be given to any candidate, otherwise satisfactory and of suitable qualifications, who may be recommended for appointment by the Class of 1885, School of Mines, or by any member or members thereof.

- (3) The appointment to this scholarship shall be made annually, but it is the wish of the Class that the appointment of a satisfactory incumbent be renewed from year to year until he shall have completed his course for the professional degree.
- (4) The income of this scholarship fund shall be applied,—first, to the payment of the stated tuition fee and other academic charges of the holder; second, to meeting the cost of his room or rooms in one of the University residence halls, unless, for reasons of weight, he shall be permitted by the Dean of the Faculty of Applied Science to reside elsewhere; and third, be paid to the holder of the scholarship for his personal use.

It is the intention that the Fund shall ultimately reach a sum of \$10,000 or more.

Yours respectively,

JOS. STRUTHERS, IRA H. WOOLSON, ARTHUR S. DWIGHT.

New York, April 26, 1910.

# COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK. President's Room.

April 28, 1910.

Dr. Joseph Struthers, 29 West 39th Street, New York City.

Dear Dr. Struthers:

With great satisfaction and high appreciation I acknowledge receipt of your letter of April 26 transmitting to the Trustees a proposal establishing the Class of 1885, School of Mines, Fund. As I have already indicated to you in conversation, this gift is most acceptable and I know that the Trustees will receive it with enthusiasm and an expression of grateful thanks.

With high regard, I am
Faithfully yours,
(Signed) NICHOLAS MURRAY BUTLER.

# THE TRUSTEES OF COLUMBIA COLLEGE IN THE CITY OF NEW YORK.

No. 63 Wall Street.

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New York, May 6, 1910.

John B. Pine, Clerk. Dr. Joseph Struthers,

29 West 39th Street,

New York City.

Dear Sir:

On behalf of the Trustees and by their direction, I have the honor to hand you herewith a certified copy of a resolution conveying to you the thanks of the University for the proposal of the Class of 1885, School of Mines, to establish a fund for the maintenance of a scholarship.

Yours respectfully,

(Signed) JOHN B. PINE, Clerk.

At a meeting of The Trustees of Columbia College in the City of New York, held at the College on Monday, the 4th day of May in the year of our Lord one thousand nine hundred and ten, the following action was taken:

#### Extract from the Minutes.

RESOLVED, That the Trustees accept with thanks the proposal of the Class of 1885, School of Mines, to establish the Class of 1885, School of Mines, Fund for the maintenance of a scholarship in the School of Applied Science, for the purpose and in the manner described in the letter addressed to the President by Messrs. Joseph Struthers, Ira H. Woolson and Arthur S. Dwight, a committee on behalf of the Class, dated April 26, 1910.

A true copy
(Signed) JOHN B. PINE, Clerk.

SEAL.

# OFFICE OF THE TREASURER OF COLUMBIA COLLEGE, \$68\$ Wall Street.

New York, June 15, 1910.

Mr. R. V. Norris, Secretary-Treasurer, Class of '85, School of Mines, Wilkes-Barre, Pennsylvania.

Dear Sir:

I beg to acknowledge receipt of your favor of the 13th instant enclosing draft on the First National Bank of the City of New York for \$7,000, being the first payment on account of the Class of '85, School of Mines, Fund for the institution of a Scholarship in the Schools of Applied Science of Columbia University. I notice that the balance of the gift will be payable in instalments during the next five years.

I remain, Yours, etc.

(Signed) JOHN McL. NASH.

[The present holder of the Scholarship is Mr. Reed Warren Hyde, of Joliet, Ill., taking the course in metallurgical engineering, Class of 1913.]

# E. J. H. AMY

#### ERNEST JULIUS HYACINTH AMY.

First in our roll of honor (which includes all and each of our own sweet and precious selves) as ever first to answer to his name at the call of the Class, comes our good friend and comrade Amy, a name which served the double use of his cognomen and our own mark of affection, for he was never known to us by his front name or any of them. Suave and gracious and tall and fair, he lent to the list following his name at roll call a genteel air that served at once as foil and cloak for many of us who were the roisterers and swashbucklers of the Class. Of his many good and friendly qualities we might write largely, but suffice it to say that he was a fine fellow and ever excellently well liked by his classmates.

He was born in New York City, July 7, 1863, where he attended the College of St. Francis Xavier, from which he was graduated in 1882 with the degree of Bachelor of Arts. He then entered the School of Mines and was graduated as an Engineer of Mines with the Class of '85.

After graduation he accepted the position of Chemist and Assayer at the works of the San Juan and New York Mining and Smelting Co., at Durango, Colo.; served as Assistant Manager of the same from 1886 to 1887; was Manager of the Hazelton Mt. Mining Co., at Silverton, Colo., from 1887 to 1888; was Assistant Manager of the works of the San Juan Smelting and Mining Co., Durango, from 1888 to 1890; General Manager of the same company from 1890 to 1899; and in 1899 to 1901 engaged in private mining enterprises. In 1901 he moved to New York City and became a member of the firm of H. Amy & Co., Bankers, at 44 Wall St., with which firm he is still connected.

On January 17, 1889, he was married in New York City, and has six children, all of whom are living. He resides at 48 W. 70th St., New York.





AMY.

To begin: There's the amiable Amy.

He's selim and selender, but, blame me!

In Life's bloomin' race

He has set us a pace,

And he'll go very far, allee samee.

And a Banker he is, now. (Whee-oo!)
Sure it seems most too good to be true.
So, for sake of old times,
We'll quit chasin' the dimes
And just borrow a million or two.

29

# FREDERICK POMEROY BEMIS.

How have the mighty fallen! Some, and in fact the larger number of our Mining Engineers, have forsaken the gay and humdrum, the exhilarating and precarious, the usually unsettled and usually hard and disagreeable but always the fascinating existence of the honest miner and the princely smelterman, and have become traders on the exchange, travelers at large, bankers in Wall Street, educators and planters, and what not, and here, in our friend Bemis, we find one who, in the Life Insurance business, is laying up vast treasures on earth. And still we are all of us pretty fine fellows (why should we not own up to it, for otherwise, no one else will for us), and as sweet and handsome as many another class of more tender years, and not yet are we become "A Brotherhood of Venerable Trees."

Frederick Pomeroy Bemis was born at Mercer, Pa., on Oct. 20, 1861, and was married, Oct. 3, 1900, to Eugenia Nichols, of Davenport, Iowa, in which city he now resides.

He was graduated in 1883 at Oberlin College, with the degree of Bachelor of Arts, and from the School of Mines of Columbia with the Class of '85, as an Engineer of Mines.

Thereafter he served as Chemist with the Grand Belt Copper Co. of Hardeman, Tex., until May, 1886. In July of that year he went to Montana, and operated the Dakota Gold Mine at Bannack under lease until June, 1887, when he became Chemist of the lead smelter of the Hecla Con. Silver & Lead Co., at Argenta, in that State. In September of the same year, he returned to Davenport, where he has since been identified with the Life Insurance business, at present being the Assistant General Agent of the Equitable Life Insurance Co. of Iowa. He is a member of the Davenport Academy of Sciences.

In 1886, Sanders met him in the Yellowstone Park, and again in 1887 at Butte, Mont., at the meeting held there by the American Institute of Mining Engineers. He had been engaged in the delightful avocation of underground work, on a "lease," at Bannack, and the condition of his hands, then exhibited with amiable pride, bore ample evidence that he knew well the joys of handling the shovel and "polishing the head of a drill"—good, hearty, wholesome work.

His present height is 6 ft. and his weight 200 lb. He cheerfully furnishes us with the required information as to his personal adornment, and states that he is bald, his hair a little gray, and that he sports a moustache; and we can well believe that he still wears the old genial and amiable "smile that won't come off."

His present address is, 109 West 3rd Street, Davenport, Iowa.

#### FRED. P. BEMIS



BEMIS.

Oh, Thou Bemis! I think of your earlier strife,
Of the days when you worked in the mines; On my life!
Then the horn on your hands was a wonderful sight.
Though your face it was beaming, your eyes they were bright;
And I ween, when you think of your work in the mines,
And the bacon and beans 'neath the far Western pines,
That you sigh for those days, and the earlier joy
Of our life in Columbia. Now don't you, Me Boy?

#### GEORGE CARY.

Although it is possible that a few members of the Class have met our genial and affectionately remembered classmate and friend, Cary, since the old days in the School of Mines, it is nevertheless certain that the Class as a whole has followed with very great interest and pride his success and good fortune as an Architect of more than local reputation. His professional work has been extensive and of the best, and he has accomplished large things. One and all we hail him joyfully and say "Well done!" and we wish him many more well-merited honors.

George Cary was born in Buffalo, N. Y., in 1859; the son of Walter Cary, M. D., and Julia (Love) Cary. He was married Dec. 31, 1908, to Allithea Berge, of Buffalo, daughter of George K. Berge and Carolyn Humphrey Berge, and has one daughter, Marion Love, born Oct. 22, 1909.

He was graduated as an Architect with the degree of Ph. B., with the Class of Eighty-five, School of Mines, Columbia, and received the degree of Bachelor of Science from Harvard University in 1891. He was also a student at the Ecole des Beaux Arts in Paris for three years. He has practiced Architecture at Buffalo since 1889, being the architect of the Contagious Hospital, the Buffalo General Hospital, the Harrington Hospital for Children, the University of Buffalo, the Dental College, the Gratwick Research Library, the Buffalo Historical Society Building, the New York State Building of the Pan-American Exposition, the buildings and Administration Building of the Pierce-Arrow Motor Car Co., the Rumsey Stores, and the Bennett Office Building. He was architect for the Buffalo Improvement Scheme, and for houses in Buffalo, Washington, D. C., Omaha, Neb., Muskoka and Port Carling, and Niagara-on-the-Lake, Canada. He was a member of the Board of Architects for the Pan-American Exposition; a member of the Committee on Municipal Improvement, Chamber of Commerce; President of the Buffalo Chapter of Architects, A. I. A.; Director of the American Institute of Architects; Director of Fine Arts Academy, the Albright Art Gallery; Chairman, Committee on Municipal Art, Buffalo Chapter, A. I. A.; Chairman, Committee on State Law and Public Bureau of Architecture, and Committee on State and City Buildings and Health Laws, Buffalo Chapter, A. I. A.

He is a member of the Beaux Arts Society, the Society of National Science, the Buffalo Historical Society, the Society of the Columbia University Architects, Buffalo Society of Artists, the Columbia Architectural Society; also of the University Club of New York City, and the Genesee Valley Hunt, the Buffalo Park, Buffalo County, and University Clubs of Buffalo.

Cary resides at 460 Franklin Street, Buffalo, N. Y.

#### GEORGE CARY





CARY.

Cary, Architect of Fate,
Working on your walls sublime,
With your mighty deeds and great,
Help me to construct a rhyme—
Otherwise, then, Cary, make
Plans for a divine emprise,
And for me, for old time's sake,
Build a mansion in the skies.

# FRANKLIN ST. CLAIR CLARK.

A serene, courteous and genially friendly chap, well liked, a student, and not of the generally quarrelsome nature characteristic of some of the freebooters of the Class, our comrade Clark joined our numbers at a period subsequent to the launching of our scholastic craft upon the troubled and at times tempestuous seas of scientific learning; and thereafter, through fair and stormy weather, was one of us on our voyage of exploration and adventure, up to the time when we arrived at port and went our several ways.

Franklin St. Clair Clark was born in New York City on May 27, 1865. He was married on August 5, 1905, to Lillian Yancey, and two children make glad their home. He was graduated with the Class of '85, obtaining the degree of Engineer of Mines; subsequently, in 1887, he received the degree of Ph. D. also from Columbia.

Since graduation, he has held several positions connected with the pine-products industry, and has been connected with various business ventures and investments. He is at present the President of the Georgia Pine Turpentine Co. of New York.

As our friend makes no answer to our impertinent interrogations regarding matters so intimate as his personal adornment, we can but surmise that he is of the usual height and weight, and that he is neither hairless nor yet a "long-hair."

Clark lives at present in Fayetteville, N. C.

#### F. S. CLARK



CLARK.

From my early knowledge of you

And the fact, dear Clark, I love you,

It doth pain me inexpressibly to note what you are at.

That a classmate should be willin'

For to enter the distillin'

Line is most excruciatingly the point where I fall flat.

But upon investigation
Of the bloomin' situation
Sure I find I'm incontestibly a talkin' through my hat;
And since I am now divinin'
That, friend Clark, you're not moonshinin'
I retreat incontinently from my place upon the mat.

You may distillate or early
Wood or pulp or shavin's curly,
And I'll wish you only happiness and joy and all of that;
And while through the world I'm scootin'
You may hear me callyhootin'
And a-wishin' you success and wealth and that is where I'm at.

#### HARMON COZZENS

Class of '85 Mines

#### HARMON COZZENS.

How in the name of "Heavings" did Columbia ever turn loose upon a suffering world so graceless a character (and punster) as Cozzens, and that our dear old '85, after having suffered so greatly from several others of us, should be so afflicted—the reasons therefor sure do be pasht th' nowlidge av the saints. This homily on affairs spiritual and terrestrial may best be explained by a verbatim copy of the last document received, some time ago, from our classmate by the agonized class historian.

"After the first flush of pure joy, at receiving a letter from a classmate who had owed me one for 20 years, had passed away (I mean the 'flush' had passed away, not the classmate—only the good die young), I viewed the letter with a feeling of mingled apprehension and awe, coupled with admiration for the nerve of the writer in asking me to reveal selected (and expurgated) portions of my dark and nefarious career to the gaze of a curious world. Honestly, don't you think that the public is getting cloyed with all these 'Crime of the Amalgamated,' 'Shame of Cities,' and 'Pure Food Exposures,' without asking me to contribute?

"Somebody told me recently that even Wiltsie had committed matrimony, which only goes to show that even the most careful will occasionally slip, and as Virgil so pathetically observes 'Facilis descensus Averni est.' This may look like the name of a new breakfast food to you, Billy, but it isn't—it's Latin!

More of the letter might be given, but I refrain. As hinted above, Harmon Cozzens was one of our number and was graduated from the School of Mines with the Class of '85, receiving the degree of Engineer of Mines. Since graduation, he has held the following positions: Superintendent of Yard Department of Minnequa Works, Colorado Fuel & Iron Co.; Engineer, Colo. Smelting Co., Pueblo, Colo.; Engineer, Philadelphia Smelting & Refining Co., Pueblo; First Assistant Chemist, Edgar Thomson Works, Braddock, Pa.; Superintendent for Charles T. Wills, Builder, New York City. In his details he states that his disposition is about the same as usual, if not more so. He also asserts that he has a great deal more hair than either "Kitty" Miller or Starek. His eyes, he assures us, are still dark, occasionally black, due to peaceful disposition in a genial climate, and he asserts that he is still able to eat three large meals per day—"when I have the cash"!

He was born in New York City, on March 28, 1864, and on October 21, 1891, was married to Miss Wehshane of New York. They have two children: Janet Louise, born November 27, 1892; and Mildred Josephine, born February 23, 1897.

He belongs to the Minnequa Club, the Pueblo Golf Club, and the Sons of the Revolution.

His present weight is 160 lb., his height is 5 ft.  $9\frac{1}{2}$  in., and of hirsute adornment, he sports a moustache. Since no statement is made as to the thatch of his head, the same may be considered of no importance.



COZZENS.

Which is why I remark and my language is plain,
That for jokes that are dark and that give you a pain
Our old Classmate, Harm Coz, is peculiar;
Which the same I am free to maintain.

For Harm Coz was his name, and I shall not deny In regard to the same which that name might imply; When I name him an Eighty-five Coz, Sir, You may know that I can't tell a lie.

Long he's lived in a State, near the Rockies so grand, Where he's lived in a state wherein oft he would hand Out his stale chestnut jokes, Sir, at wholesale, With his smile that is childlike and bland.

With his jokes well prepared, they were dished up so fine Nary one ever dared to object or repine
At their over-ripe chestnutty flavor,
As'at times on the dish we would dine.

And because of the love that we felt for the lad We could never reprove though his jokes were so bad; And the chestnuts ourselves oft we'd crack, Sir, In the frolicsome manner we had.

By our love in each heart do we gladly confess That he's played well his part; and we wish him success, And may ample good fortune attend him With fair bliss and all true happiness.

#### CHARLES HENRY DETWILLER.

In order to even up affairs scholastic as well as social in '85, it was fortunate indeed that the roistering spirits of the class could, in a measure, be balanced and, as it were, rendered innocuous by the quiet, steady, good nature of our more even-tempered mates; else, indeed there would have been no existence possible within an uncertain radius of the old School of Mines.

And one of these pleasant, cheery, delightful fellows was Detwiller, our good friend, comrade and classmate.

Charles Henry Detwiller was born at Greenville, N. J., on Jan. 3, 1863, and on April 27, 1905, was married to Ethel R. Hassell, of Plainfield, N. J. They have one daughter, Marguerite Cecelia, who was born April 30, 1907, and of whom her father says, she is the best of them all. He resides at 151 East 7th St., Plainfield, N. J.

He was graduated with '85 with the degree of Ph. B. in Architecture. Thereafter, from June, 1885, to 1888, he was a student and draftsman in the offices of Architects in New York and Europe; in 1884 to 1892 a practicing Architect, in Jersey City; 1892 to 1899, of the firm of Detwiller & McConly, Architects, New York; 1899 to date, Practicing Architect, New York. His practice has been of a general nature. He has affiliated at various times as officer and director with a number of companies.

He is a member of the Architectural League of New York, the Plainfield Country Club and the Park Club of Plainfield.

His height is 5 ft. 6.598 in., weight 148 5-9 lb., and as to his personal appearance, he does not adorn himself with any cutaneous excrescence. He feels as young as in our college days. He has traveled extensively, having been several times to Europe, throughout the West Indies, to Mexico and elsewhere.

#### C. H. DETWILLER





#### DETWILLER.

Here's luck to you, Detwiller, lad!
To wish you joy doth make us glad;
We wish you endless pleasures.
May no dark clouds your skies distress,
But skies of balm your days caress;
May yours be health and happiness,
Be bountiful your treasures.

#### CHARLES HORACE DOOLITTLE.

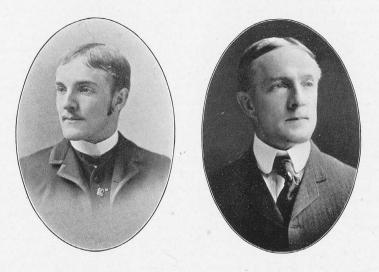
During the period of the entrance examinations for the School of Mines in 1881, at a time when Sanders was seriously contemplating giving up his quarters at the Hotel, and taking less pretentious, more humble ones, Doolittle suggested that they join forces and hunt up a room. This they did, and thus began a very delightful friendship that now has lasted nearly 30 years.

Charles Horace Doolittle was born December 4, 1861, at Wappingers Falls, Dutchess County, N. Y. He prepared for college at Colgate Academy, Hamilton, N. Y., and entered Columbia School of Mines, graduating with the Class of '85 with the degree of Engineer of Mines. He reports that some of the professors said he was a good student, while others differed in their opinion. As an offset to the latter possibility he writes: "At any rate, I was and have been a hard worker, which sometimes overbalances the scale where brains may be lacking." And we all know full well how necessary the work is, whatever, in our modesty, we may state as to the possession of brains.

After graduation, he reached Denver, Colo., in July, 1885, and secured a position as Assayer and Chemist with a little copper smelter in West Denver. Later he secured a similar position with the Elgin smelter at Leadville. From Leadville he went to Sultepec, Mexico, as Superintendent of a small lead smelter, which position he held until the summer of 1889, when he went into the ore-buying business in Mexico, whereby he saw that country very thoroughly. The work, the long and disagreeable horseback and stage trips becoming monotonous and tiresome, he finally determined to return to the United States, where he accepted the position of Chemist at the Philadelphia smelter. From here again he branched out into mining and smelting, and spent the next five years in Montana, Mexico and Colorado, finally being appointed General Manager of the Bingham-New Haven Copper & Gold Mining Co., Utah and Eastern Co., in charge of two mines, one concentrator and one smelter, which position he still holds. While the story is easy to relate, the road at times has been a hard one to travel, but abundant success seems to have been the reward.

Classmate Doolittle is married and has one daughter named Dorothy. He belongs to the University Club of Denver, the Alta and Country Clubs of Salt Lake City, the American Institute of Mining Engineers and the Colorado Scientific Society. His residence is 1242 East South Temple St., with offices at 508 McCornick Building, Salt Lake City, Utah.

#### CHARLES H. DOOLITTLE



#### DOOLITTLE.

Thou Ute from Utah's vale of green beside her sea of brine, Where Mormon wives are lined abreast, not hitched in tandem line; Where fair Salt Lake her homes outspread beneath embowered shade, And laughing streams burst joyous forth from mountain dell and glade; Far, far above the peaceful scenes, there mountains lift on high Huge mighty shapes that fling their crests against the azure sky; Rock-ribbed they rise to guard the wealth within their masses hid, But hid in vain, for there you've delved and lifted off the lid; There while you've mined the massive ore and took it out in chunks You've gained renown and cash galore, corralled no end of plunks, Good work you've done, thou bully lad, it sure do beat the Dutch And while Doolittle you may be, Doolittle, you do much.

#### ARTHUR SMITH DWIGHT.

When warriors bold return from war and fields of carnage, from massacres and deeds of blood and daring, how much more satisfactory it is to all concerned, and particularly to the object of adulation and gratulation, that he returns not upon his soldiers' spears, not as a dead, mussed-up corpse, but as a particularly live and robust one, with unwhispered request that tears and other paraphernalia be reserved for future occasion. And how our manly "buzzums" swell with pride when we think of the heroic fiber of a little band of our countrymen who held themselves true to their traditions of heroism amidst the encircling menace of angry hordes of Mexico's swarthy sons on that day when the peace of Cananea disappeared before the fires of revolution flaming against the Eagles of Ixitlit. And our pride increases when we behold in one of our number a leader in those strenuous times. Dwight, Salud!

Arthur Smith Dwight was born at Taunton, Mass., on March 18, 1864, and on June 4, 1895, he was married to Jane Earl Reed, of Joliet, Ill. He was graduated with the Class of '85 with the degree of Engineer of Mines, having previously received a diploma without degree from the Brooklyn Polytechnic, in 1882.

From 1885 to 1896 he was in the service of the Colorado Smelting Co., Pueblo, Colo., being Superintendent of the company from 1889 to 1896, inclusive. From December, 1896, to 1899, he was the General Superintendent of the Consolidated Kansas City Smelting and Refining Co.; to March, 1900, Member of the Operating Committee of the American Smelting and Refining Co., at Denver, Colo.; to April, 1903, Assistant to the President of the Campania Metalurgica Mexicana, managing the smelting plant at San Luis Potosi, Mexico. From June 1, 1903, to March, 1904, he was Assistant to the President and Consulting Engineer of the Greene Consolidated Copper Co., Cananea, Sonora, Mexico. From March, 1904, to July, 1906, he was the General Manager of the same company. From August, 1906, to date he has been in private practice as Consulting Engineer, in connection with general mining and metallurgical work. He is Vice-President of the Candelaria Mining Co., operating at San Pedro, Chihuahua, Mexico, and President of the Dwight & Lloyd Metallurgical Co., owning and developing some important metallurgical patents of his own.

He is a Life Member of the American Institute of Mining Engineers, a member of the Institution of Mining and Metallurgy (London), and of the American Electrochemical Society. He is a member of the Engineers' Club and of the Rocky Mountain Club, New York; of the Denver Club, Denver, Colo.; Vice-President in 1910 and President in 1911 of the Alumni Association of the Schools of Science of Columbia University, etc.

His height is 6 ft.  $\frac{1}{2}$  in., and his present weight 153 lb. His hirsute adornments consist of gray hair ("plenty of it") and an excuse for a moustache. His address is 25 Broad St., New York City.

#### ARTHUR S. DWIGHT



DWIGHT.

Hail, Dwight! We ken your works of might, recount your daring deeds, We see you treading Duty's path wherevermore it leads;

We know the Industries you've run and made their pulses quicken, The Smelters that you've managed oft, without Directors kickin';

The Mines that you have handled as the stocks they quickly riz (Stockholders lafin' fit ter kill when you got down ter biz);
We see you slayin' Mexic's sons with seven-foot machetes,

(You've shed your blood in pints, b'gosh! when fit by Western skeeters),

In fact you done hull lots o' things an' fit an' bled an' died, Then settled down ter work ter git the other fellow's hide; But never thought we you'd evolve ('tis sad the tale to tell!)

A true de luxe edition of the real old brimstone hell.

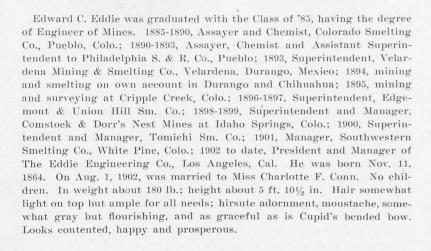
Inventin' roastin' furnaces for sulph'rous fires an' blazes, You've made the Old Boy sit him up—your furnace him amazes;

But whether breathin' brimstone fumes or balmy airs caressin',

We wish you joy and wealth, friend Dwight. Good Luck! an' here's our blessin'.

EDWARD C. EDDIE









EDDIE.

The historian has waited, impatient, in tears,
That fell swift in a flood from his eyeballs;
In despair hath he turned to the cup that oft cheers
With its festive and frolicsome high-balls;

And still ever, anon, would the weepin' return,
Whilst fierce groans from his buzzom came rippin'—
Disappointment was his, so again he would turn
And quick back to the high-balls go skippin'.

And why thus did he sigh and thus weep and cavort,
Whilst the moans from his buzzom were rended?
And why thus did he oft to the liquid resort,
'Til his aches with the high-balls were blended?

Ah! long, Eddie, my lad, he had waited long then
For your record; he'd hoped you would send him
Fair the tale of your life, aye, the scratch of a pen;
Aber nit! So fierce agonies rend him.

And now, tearfully, Eddie, he begs you confide:
Will your procrastinating be o'er
When our old Father Time doth his scythe lay aside
And himself e'en, alas, be no mower?

#### EUGENE NICHOLAS ENGELHARDT.

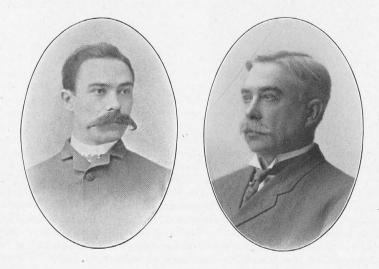
During the old days at Columbia and of our life and work in the School of Mines, there came amongst us a stranger who was for a time little known to us, but even so, the members of the Class very soon held him in high esteem and regard, and much admired the manliness of the man. Quiet and unobtrusive, attentive and always courteous and genial, earnest and friendly, he went his way. Later, we learned to know him better, and always to be pleased with him. Not given to vain boastings was he, and we learned but little of his life's history, but that which we heard dimly, added greatly to our interest. And it is to be doubted if more than a single member of the Class knew that he, our classmate, was even then the rightful possessor of our Class-cup to be awarded as a prize for the exhibition of that high and reckless courage necessarily shown by one who has launched his bark upon the Sea of Matrimony; for even at that time Engelhardt was a married man!

He was born in Moscow, Russia, on February 26, 1855, and before entering college was married to Adelaide Kuroff, also of Russia. Of children they have five, as follows: Catharine, Sophia, Mary, Anna, and Adele; and of grandchildren two, Eugene and Elizabeth, children of Sophia.

Our classmate now stands 5 ft. 10 in. in height, and weighs 195 lb. He makes the honest confession that his hair and moustache are gray.

He was graduated with the Class of '85 with the degree of Engineer of Mines; since which time he has been occupied professionally as follows: Assayer and Chemist, Pueblo (Colo.) Smelting & Refining Co., 1885-1886; Assistant Superintendent to same, 1887; at the instance of the then Manager of the company, Marcus Daly, Superintendent of same, 1888. In 1889 he assumed the position of Assistant Superintendent with the Anaconda Smelting and Mining Co., Anaconda, Mont.; Assistant Superintendent of Selby Mining & Lead Co., near San Francisco, Cal., 1889-1907; and from 1907 to date, Superintendent of the same works. His present residence is 647 El Dorado Ave., Oakland, Cal.

#### E. N. ENGELHARDT



## ENGELHARDT.

Thou Engelhardt, thou man of might, of fair and kindly deed, Whose youth in Epic lines is writ though none its pages read; Of modest worth and true as steel, thou'rt evermore serene; No shaft of fate can bend thee low nor change thy steadfast mien. Your classmates toast you, one and all, with bumpers brimming o'er; We'll drink your health and happiness, and then we'll drink some more; We'll toast the work that you have done, that none might better do; We wish thee joy, thou Angel heart, and here's a cup to you!

#### CHARLES EVERITT GRAFF.

Pleasant and genial and of a humorous twist, our good friend Graff passed with us through the many vicissitudes of undergraduate life, and in his quiet, friendly way gained a vast hold upon the affections of his classmates and in their high esteem.

Charles Everitt Graff was graduated with the Class of '85, receiving the degree of Engineer of Mines. In 1890, he was married to "one of the prettiest and the best women in the world," Miss L. M. Bunce, of Brooklyn, N. Y. They have two children, Helen, a miss of 16 summers, and Manton, a boy of 14.

After graduation, he spent a busy summer in the field, surveying farm lands, laying out drainage ditches, and doing a country engineer's medley of jobs, until, in the fall, Fate took him to the province of Entre Rios in the Argentine Republic and set him down in the Construction Department of the Ferro Carril Central Entre Riano. Here, from general assistant to anybody and everybody, through the Chief Engineer's office to the shops, thence to the rail-laying and construction gang, and then to preliminary survey of new routes, a somewhat thorny but decidedly interesting course was his. He writes: "The joys of that time were not many nor great, but of the greatest were the occasional meetings with my classmate, William F. Bush, who held a position on the same road." Returning from Argentine in the summer of '87, an effort was made to settle down near New York, and a position with the National Cordage Co. was held for several months. The spring, summer and fall of '88 were spent in Prescott, Ariz., as Engineer, Assayer and Assistant Superintendent of a mining and milling company; and, needless to say, like most of the Arizona gold-mines, the bottoms of the prospects and the company's bank-account were soon reached. From the winter of '88 until the fall of '90 a somewhat varied experience as expert in twine manufacture and the use of binding-twine in the harvest fields of the Middle West gave varied and valuable experience. In October, 1890, a position as Constructing Engineer was taken with the Standard Oil Co., since which time his experience has been in the construction of stills, boilers, refrigerating plants, concrete steel, steel frames, hollow tile, and numerous other styles of building. Continual calls on all the physics, chemistry, electrical, mechanical and other knowledge he ever met. After some four years this opened up to the Superintendent's office of the same works. There, older, fatter, somewhat gray, a little bald and fairly well content, he still remains. Weight 160 lb. "Those who know best say I don't change much in appearance. After a long personal acquaintance with the 'Octopus,' I'm quite sure he hasn't horns and a tail, and I'd trust him much farther than a lot of people who are only hunting octopi as a source of income and glory."

His address is 27 Clinton Ave., Jersey City, N. J.

## Class of '85 Mines

#### CHARLES E. GRAFF





GRAFF.

We read these days the many crimes that Potentatoes do;
Their cussedness we read these times—it makes us very blue.
The world is going to the dogs, the country's gone to smash,
The while the bloomin' Octopi corral our hard-earned cash.
With ten tackles they tackle us, on earth, in sea or air;
We cannot crawl or dive or fly, they get us everywhere.
They own us, meat and blood and bones, our hides hang on their door;
They furnish music while we dance, who never danced before.
In fact, we're in a precious mess through all their coups des main,
We're in it, sure, and like to stay, the which is very plain.
Thus state the writings we have read, and studied all their kinks;
If half they say is true, b'gosh! the game is up, b'jinks!

We know of Octopi that thrive through all this bloomin' coil, Of one, the fiercest of them all, yclept ye Standard Oil. A fearsome sight we read it is, a sight to give a scare, As from behind wide-reaching arms its baleful eyeballs glare. But we are told by one we know, one whom we trust and love, That Standard Oil is meek and mild and harmless as the dove; That backed by him, our errant knight, our dear old Charlie Graff, The beast will play the sweetest tricks ('twould make a dead man laff); While steering it around the lot, with gee! and whoa! and haw! He puts it through the dearest pace (excuse this smile, Haw! Haw!)

We know that you for long have been well soaked in kerosene (The "Eagle Works" you long have run, and long have there benzine). We know, good lad, how well you've done in all you've had to do, And well we know, dear pal of old, how straight you are and true, And Standard Oil is lily white, when lights your oil ablaze. Ah! Graff, we know you as of old, the Light of other days,

#### EMIL McDOUGAL HAWKES.

From Mining and Mining Engineering to Law is a far cry, but some of the Sons of Columbia's School of Mines have made it, and none more effectively and worthily, we will be bound, than our classmate Hawkes, the kindly and friendly and good-natured fellow that he was and is. Some of us who have followed actively the Mining Engineering profession into all its quicksand twists and convolutions and evolutions have at times found it a far cry to the Law, indeed, and many there are of us who have squirmed and twisted as we might beneath the tortures of that modern inquisition when, exposed to the withering fires of sarcasm from the lips of the cross-questioning inquisitor, we were wrapped, as is the mummy in yards of linen, in the endless meshes of the law. For reasons such as the above, legal connections are looked upon with little favor by the average Mining Engineer; but our good friend Hawkes appears to have made the transition with vast credit to himself and to the glory and honor of the Class. Hawkes, my lad, we salute you!

Emil McDougal Hawkes was graduated with the Class of '85 with the degree of Engineer of Mines. Thereafter, he entered the School of Political Science of Columbia College, receiving therefrom, in 1886, the degree of Bachelor of Arts. He then entered the School of Law of Columbia College, and graduated from the same in 1887, with the degree of Bachelor of Law. In 1886, as a student, he entered the law office of Charles P. Daly, for many years Chief Justice of the New York City Court of Common Pleas. He was admitted to practice before the New York bar in 1887, since when he has practiced law continuously, with the exception of a period during 1902 and 1903, when, as Commissioner of Docks, he was a member of the Cabinet of Hon. Seth Low, Mayor of New York City. He represents the water-front interests of the New York Chamber of Commerce on its Committee on Harbor and Shipping; of the Merchants' Association on its Committee on Harbor and Shipping; and of the City Club in its similar work. He is Vice-President and General Counsel of the Maritime Exchange of the Port of New York. He was appointed in 1906 by Governor Higgins of New York as a member of the Interstate Bridge Commission to study the question of bridging the Hudson River with a bridge span of about 3,000 ft. He was elected by the Committee to act as its Chairman.

In politics he has been a Republican and a leader of the New York County 25th Assembly District. He is Vice-President of the New York County Republican Committee. He resides at 42 East 26th St., New York City.

#### E. McDOUGAL HAWKES





HAWKES.

Of a man who would turn from the work of the mines And take to the practice of Law;

That he's queer it would seem, or he often repines, Or he may have a case of "big jaw."

But still we must own that one thus may escape Many ills that we miners have had;

While expounding the law he'll dodge many a scrape That would send any saint to the bad.

And we note with delight that our own darling Hawkes Has "made good" at the bar, where he shines."

(Oft our miners have, too; and their aftermath talks
Proved each man to strict virtue inclines.)

Glad we hail you, good lad, and we wish you all joy; May successes attend you alway.

Ah! may never ill luck your good fortune alloy; Be fair happiness yours for aye!

#### HENRY LEONARD HOLLIS.

These vagrant and vagabond Mining Engineers are tremendously handy and delightful friends to meet; and often the historian has had reason to bless the happy ill-luck that has driven them away to examine some purely imaginary, fictitious mine in some out-of-the-way, forgotten corner of the wilderness, for, through their seemingly ill-starred luck, and the wander-lust of strenuous professional endeavor, have occurred some of the most delightful reunions with classmates in out-of-the-way places to which he at times has been consigned. In this wise did Sanders meet Hollis at Joplin, Mo., where the latter was engaged on some mine examinations within the zinc fields, in 1899; and in similar manner, during one of his own excursions into the uncharted wilderness, did the historian chance to meet him at an out-of-the-way camp called Chicago, in Illinois. With regard to the meeting in Joplin, Hollis has always accused the scribe of flirting with the waitress or the cook or somebody; but since he did not bring all of the proofs and records back from that journey into the unknown, the same is not proven, and though the flirting is barely possible, it may not have happened.

Henry Leonard Hollis was born at Boston, Mass., on Feb. 17, 1866.

He was graduated from the Columbia School of Mines with the Class of '85 with the degree of Engineer of Mines. On Nov. 9, 1892, he was married to Jane Dustin Grannis, of Chicago, Ill. Their child, Clara Elizabeth Hollis, was born June 30, 1896. Since graduation he has been occupied professionally as follows: Assistant Chemist to the Edgar Thomson Steel Works until October, 1885; and until December, 1889, was Chief Chemist of the North Chicago Rolling Mill Co. Since then he has been in general practice as a Consulting Engineer and Metallurgist, operating for mining companies and in the examination of mining properties. He is President of the Cuba Mining and Milling and Metallurgical plants and Consulting Engineer for the Cusi Mining Co.

As to public services, National, State or Municipal, he regrets that they have been confined to talk.

He is a member of the American Institute of Mining Engineers; of the Engineers' Club, New York; the University and the Union League Clubs of Chicago; the Onawentsia Country Club, Lake Forest, Ill., the Skokie Country Club, Glencoe, Ill., and the American Club, Mexico City.

He is 5 ft. 10 in. in height, weighs 135 lb., is smooth shaven and the "hair leetle thin on top."

He resides at Winnetka, Ill., while his office address is First National Bank Building, Chicago.

#### HENRY L. HOLLIS





HOLLIS.

A health to Hollis, Classmates all,
Drink deep, let cooling liquid fall
Upon each thirsty gizzard.
We'll drink a rouse to his good name,
A bumper to his honest fame,
As one who knows the mining game
From primal A to izzard.

He's mined in far Dahomey's land,
Chicago wildernesses, and
In other barb'rous places;
In East and West and North and South,
In lands of balm, of flood, of drouth,
He's mined; he'd brave the cannon's mouth
When he some metal chases.

#### FREDERICK WOLCOTT HUNTINGTON.

Like so many of our classmates, Huntington has placed taboo the wild delights and exhilarating influences of the mining profession and settled into the more prosaic, even if more respectable, calling of education. In his letter to the historian he explains this integration or accretion of good hoss-sense as an excuse for his lapse from the virtues of all honest miners, by the statement that his mining operations took him into regions that were unhealthy for his family, and therefore mining was given up for the work of teaching the young idea how to shoot, to so bend the young shoot (as we understand it) as to incline the tree towards an upright existence. Here his work is worthy and worthily done.

He was born at Middlefield, N. Y., on March 4, 1864. He was graduated with the Class of '85 as an Engineer of Mines; since which momentous occasion he has been connected with professional work as Superintendent or Assistant Manager from 1885 to 1891, with the Iron Mask Mines Gilman, Colo.; 1891 to 1893 with the Terra Ceia Phosphate Mining Co. Florida; and from 1897 to 1898 with the Mindrinetti Gold Placer Mining Co., Dutch Guiana, S. A. His present position, since 1898, is as teacher of Physics in Erasmus Hall High School, Brooklyn, N. Y. He was married June 4, 1890, to Harriet Stewart Graham, of Grand Rapids, Mich. Their two children are Constance, born July 21, 1893; and Harold Graham. December 28, 1897.

His present height is 5 ft. 9½ in., weight 135 lb. His adornment consists of a slightly bald head (I have his word for it), no beard, and a short moustache. Address, 1801 Dorchester Road, Brooklyn, N. Y.

#### F. W. HUNTINGTON





HUNTINGTON.

So, Huntington, you quit the game Our Mining Engineers have played, Through arctic cold and tropic flame Oft, worn and torn, we've plied the trade. The ties of home were strong to draw And turn you from the Wander-lust That holds our kind within its claw To break and grind us into dust. Your work of teaching younger lives, Of leading up each youthful mind, Is worthy where the teacher tries To be a blessing to his kind. We know you, Huntington, of old, How thoughtful, gentle, straight and true, The kindly ways and heart of gold That were so large a part of you, And knowing wish you endless joy And toast your pedagogic fame. With strongest words they might employ Your classmates you acclaim.

#### EDWARD LOVERING INGRAM.

Our good friend and classmate was a marked man from the day of his birth and was destined for great things. Else how could Destiny have picked him out of so many millions of less interesting persons, adown the æons of Time, and so arranged time and place that he was taken up by the tides of fortune and lifted to that utmost pinnacle of human ecstacy—to be a graduate of the Columbia School of Mines, in the Class of '85.

He was born in Philadelphia (City of Brotherly Love) on Sept. 9, 1862, and was graduated with the Class of '85 as a Civil Engineer.

Evidently, he is unmarried, in that the blank spaces following the queries as to marriage date, the maiden name of wife, original residence of wife, children's names, dates of birth, are answered in blank—a long, firm, decisive blank—a blank of character, such as might be expected of a bachelor of the good Old School.

Since graduation, he has been occupied in a professional way as follows: With the War Department, 1885 to 1891, in connection with River and Harbor work, rising from Draftsman to the position of Assistant Engineer; in 1891, with the Engineering Department of the Middle Division of the N. Y. C. & H. R. R. R.; with the U. S. State Department, 1891 to 1894, Assistant Engineer on the survey International Boundary between the United States and Mexico; private practice, 1895 to 1901, City Engineering at Buffalo, N. Y.; with the U. S. Navy Department, 1901 to 1906, as Expert Aid in Civil Engineering in the New York (Brooklyn) Navy Yard; and 1906 to date as Assistant Professor of Railroad Engineering and Geodesy, at the University of Pennsylvania.

With reference to his affiliations in professional and social institutes, societies and clubs, he is an associate member of the American Society of Civil Engineers; a member of the American Association for the Advancement of Science; member of the Alumni Association of Columbia University; member of the Alumni Association of the University of Pennsylvania; member of the Philadelphia branch of the Columbia University Alumni Association; member of the Society of Sigma Xi; member of Engineers' Club of Philadelphia.

His height is 5 ft.  $10\frac{1}{2}$  in.; weight 167 lb.; and as to hirsute adornment, he still retains his hair and sports a moustache.

Address, University of Pennsylvania, Philadelphia, Pa.

#### E. L. INGRAM





#### INGRAM.

You, too, have outside practice quit To take to teaching school, Make youth pick up its heels a bit And learn its minds to rule. But Engineering holds you fast, From it you could not draw For you, good lad, by it are classed, Obey and know its law. As Civil Engineering Prof., At Penn's famed 'Varsity, To you our lids we're pleased to doff,-We drink a health to thee. For, Ingram, you a credit are To Alma Mater dear: We toast your faithful guiding star And greet you with a cheer. To wish good fortune are we glad, And happiness always; A cup to you, thou bully lad-We wish you joyous days.

#### ARTHUR GALE JOHNSON.

Arthur Gale Johnson was born in New York City January 9, 1862, received his early education at Columbia Grammar School, and was graduated from the School of Mines with the Class of '85 with the degree of Engineer of Mines. In 1891 he was married to Miss Stewart, of Salt Lake City, Utah, and is blessed with three children, two boys and a girl.

For a year or so subsequent to graduation he was connected with the smelting of silver-lead ores in Colorado, but finally returned to New York and entered the steel business in the works of Isaac G. Johnson & Co., at Spuyten Duyvil, New York. Here he has been immersed in the management of the plant for many years, giving special attention to the manufacture of high-grade steel castings.

Johnson is of so retiring a nature that despite frequent appeals by letter and telephone he declines to furnish a glowing description of his present personal charms. The flowing hirsute adornment which bordered his face in former days has been reduced to a gentle fuzz on his upper lip, and the "thatch" surmounting his noble dome of thought gives fitting evidence of the hard work that he has accomplished.

He resides at Spuyten Duyvil, New York.

#### Class of '85 Mines

#### ARTHUR G. JOHNSON





JOHNSON.

A mild and gentle mannered lad,
It truly seemeth ter'ble sad
To see him goin' to the bad,
Indeed it is a shame!
Come, Johnson, cease your naughty ways,
Make simple faro, poker plays
Or roulette e'en, but stop this craze
For playin' the "Shell game."

However, Johnson, when I learn
The shell game played by your concern
Is not the western game I yearn
To see played on the square,
And when I learn your shells are steel,
An arm to make Oppression reel,
To strike for Freedom, then I feel,
Your game is right and fair.

And so by Harlem's tide-swept shore
Your works at "Spouten Dyvil's" score
With shells to win when cannons roar
In battle for the right.
Your classmates all acclaim with praise
Your work. They wish you happy days,
Success and wealth and pleasant ways,
A life serene and bright.

#### Class of '85 Mines

#### CHARLES FREDERICK LACOMBE.

Of all the bold, bad men and toughest of tough characters who graduated from the Columbia School of Mines with the Class of '85, it is probable that there were none so villainous, none so lost to decency, none so degenerated and morally demoralized as our mild-mannered and genial comrade "Charlie" Lacombe—unless it be the humble historian of these records of our Class. Whereby hangs a tale which Sanders says is too long and bold to relate here.

Charles Frederick Lacombe was born at 81 Clinton Place, New York City, on May 27, 1865. On June 3, 1890, he was married to Sara Laller Thayer, who died on May 10, 1893, and on September 12, 1900, to Nancy E. Edrington, of Memphis, Tenn. He was graduated with the Class of '85 with the degree of Engineer of Mines, and thereafter started for the West, first at Butte and later as Assayer and Surveyor at some silver mines in the Oquirrh Mountains, about 30 miles from Salt Lake, where he lived in exile with a hound pup, some miners, and four feet of snow, for seven months; with Salt Lake as a sort of Heavenly Paradise for recreation and baths. In 1886-87, Assistant in the Assay Laboratory, Columbia School of Mines. He was then sent out to Nevada to test one of the usual non-workable patent amalgamators at the Consolidated California and Virginia mill. Thereafter he went into a cattle raising proposition, out of which he secured a real Navajo blanket and a bronze bull.

In 1888-89, examination of mines from Colorado to California and Montana and to Sonora. Thereafter he went into the electrical business, with which he has since remained in various capacities and positions of responsibility and trust. In 1890, organized the Mountain Electric Co. Thereafter pioneer work in high tension transmission, in the West, occupied his attention, and his affairs were progressing satisfactorily and profitably when the succulent plum built up by him was swallowed up by the captains of high finance.

On coming to New York in 1902, he was employed by the City to fight the Gas and Electric Trust for lower prices, winning out so satisfactorily that the prices have been decreased by about \$5,000,000 a year. The lines laid down by him in his reports of 1903 and '04 are followed to-day with splendid results. Thereafter he took up the matter of relighting New York and is still doing it. Since 1904 there have been added \$,000,000 candle-power on the streets, while the whole scheme has been reorganized. Starting as an engineer of two Boroughs on lighting only, with 14 men, he now has 200 under him and is Chief Electrical Lighting Engineer of the City of New York and the first Engineer ever in charge.

He is a member of the Columbia University Alumni Association of the Schools of Science, the American Institute of Electrical Engineers, and the University Club, New York City. His height is 5 ft. 10½ in., present weight 140 lb., and his hirsute adornment consists of a beard and moustache somewhat gray.

His office address is—13 to 21 Park Row, New York City.

#### CHARLES F. LACOMBE





LACOMBE.

And now here is to Charlie Lacombe!
Live we here or wherever we rombe
We will drink to his health,
To his pleasures and wealth,
As he lights up this bally old dombe.

For he do light old Manhattan Isle; And faseeshusly smileth his smisle, As his lights scintillate; While the Town thinks its grate For to sin till late once in a whisle.

#### Class of '85 Mines

#### GEORGE BARSTOW LEE.

It is probable that few youngsters hang so closely together during their college days as do those who pull oars on the same crew or belong to the same team, for sentiment and their college work thereby become so closely interwoven as to make their undergraduate lives warp and woof of the same fabric, however marked and colored may be the figures shaped in the weaving. And looking back now, after nearly thirty years, the memory retains all the freshness and brightness of coloring of the skeins as they were drawn into the makeup of our very beings. One sees "G. B." beaming and exuberant, at times effusive and boisterous-which the abrasion of hard years of professional toil has worn away, as the "nap" from old clothes, somewhat worn but always reliable. Care-free, friendly and affectionate, full of life and good nature, and always up to some prank. We see him (and another who shall be nameless) at a semi-annual examination, interviewing two unwashed Italian organ grinders with dolefully decrepit hand-organs that tinkled semblances of different tunes (save the mark!), and then paying them generously to serenade the School of Mines from the inner quadrangle. Up rush a number of windows with Tommy Rocks glaring Anathema, Waller shaking his fists in vigorous tones and general turmoil from examination rooms; and when the sons of sunny Italy are incontinently bounced to the street by Mike and his cohorts, we see in our mind's eye even Prexy Barnard mildly rushing from his residence, with ear-trumpet in hand, to order them to remove from beneath his windows and cease their discordant noises—and G. B. and pal sauntering down Madison Avenue, for matters were getting warm in and about college.

George Barstow Lee was born at Hartford, Conn., August 21, 1863, and on April 4, 1889, he was married to Anna Mead, of New London, Conn. Two sons they have: Charles Shepard Lee, born May 15, 1892, and Stephen Mead Lee, born Nov. 15, 1895.

Lee was graduated with the Class of '85 with the degree of Engineer of Mines. Subsequent to graduation he went to Butte, Mont., and there worked for the Alice Gold and Silver Mining Co., as Assistant to the Assayer. Thereafter, until along in 1887, he was Assayer with the Kansas City Smelting and Refining Co., at Argentine, Kan.; from 1887 to 1893 he was Assistant Superintendent and Superintendent of the Rio Grande Smelting Co.; in 1894 Superintendent of the Guggenheim Smelting Co.; in 1896 Superintendent of the Union Smelting Co.; from 1897 to 1900 he was Superintendent of the Arkansas Valley Smelting Co.; 1902 Superintendent of the Veladena Mining and Smelting Co.; and from 1903 to date he has been Superintendent of the Copper Queen Reduction Works at Douglas, Ariz. He is a member of the American Institute of Mining Engineers and resides at Douglas, Ariz.

#### GEORGE B. LEE





LEE.

Oft I dream, yes! G. B., and I'm glad I'm alive Just to dream of the days when for old Eighty-five Long we toiled, fierce we strained at the tough-bladed ash, As we lifted the shell in the heart-breaking dash. With the lungs like to split and the head fit to burst And the universe twisted all t'other-end first, How with furtive side-glance through the tail of the eye We would scowl out across at that other one nigh, Who there pulled out his heart on our oar in the shell That raced swiftly beside us, and wish him a spell Of the warmest of times in a real scorching spot That is often reported infernally hot. With each seat sliding free and the oars catching fine, With fire coursing our veins as though warmed with rare wine. How we held to our work with the shell riding true And our oars keeping time to the hullabaloo That the coxswain was roaring; each one of us mad; Aye! and maddened and reckless, each one of us glad. Of those glorious days do I dream evermore, And oft think of you, Lee, mighty man at the oar! Ah! those dear bygone times were too joyous to last, And their bright, happy days have long, long ago passed. When as lads, thoughtless lads, did we work on the crew,— But full-statured we long have had man's work to do. You have builded vast smelters, huge industries made, Turned the wealth of Golconda to Commerce and Trade; And where ores from far depths of the earth have been mined In your smelters you've worked them, their metals refined. While converters convert and your furnaces roar Still your record you hold, mighty man at the ore!

#### PAUL AUGUST LOUIS MANNHEIM.

Paul August Louis Mannheim was graduated from the School of Mines with the Class of '85 with the degree of Engineer of Mines.

From May, 1885, to Oct., 1885, he was engaged in the pleasurable occupation of touring Europe, and for two years he continued his studies at the Royal School of Mines at Freiberg in Saxony, Germany; in 1887, he was Assayer of the Kansas City Smelting and Refining Co., at Argentine, Kan.; later he was Chemist at the Pueblo Smelting and Refining Co.'s Works, Pueblo, Colo.; from 1888 to 1890, he was Chief Assayer of the same works; then until 1892, Chemist of the Montana Smelting Co., at Great Falls, Mont.; from Feb., 1892, to 1895, he was Assayer and Chemist in charge of the United Smelting and Refining Co., at East Helena, Mont.; and from 1895 to 1897, he was Assistant Superintendent of the same works; in 1887 he was Superintendent of the same works; from August, 1897, to May, 1901, he was Superintendent of the plant of the United Smelting and Refining Co., at Great Falls, Mont.; from May, 1901, to July, 1903. he was Assistant Superintendent and Metallurgist of the Monterey plant of the American Smelting and Refining Co., at Monterey, Mexico; from July, 1903, for a number of years, he was Superintendent of the Blast Furnace Department of the Perth Amboy refining plant of the American Smelting and Refining Co., at Maurer, N. J. Resigning from the same, because of ill health, he spent some time traveling abroad. He is a member of the American Institute of Mining Engineers. For all that Mannheim has toiled so long and faithfully and has ever held himself to his work with such splendid fidelity, the years appear to have changed him but little, and he is still the same genial, kindly and companionable comrade and friend as of old. We all of us wish him joy, prosperity and abundant success.

His present address is 76 Warren St., New York City.

#### P. A. L. MANNHEIM



MANNHEIM.

Here's to Mannheim! Good Friend, of your friendship I boast, For there's none who's more kindly and true;
To the end of the bumper your health do I toast,
And I wish fullest blessings for you.

Long the years you have passed 'mid your sulphurous fire,
And the fumes and the smells of your job—
(To play Imp wid the flames I could never aspire,
And so far I've side-sthepped 'em, be gob!)
But in spite of your work, that's suspiciously near
To the work of the Divvil's own crew,
You may smelt till you smell but of brimstone, My Dear,
And I'll still wish for blessings for you.

#### LEON MARIÉ.

Leon Marié was graduated with the Class of '85, School of Mines, with the degree of Engineer of Mines. After graduation he entered the engineering corps of the Pennsylvania Railroad and remained with this company until the end of 1887. Later he entered the firm of G. H. Buek & Co., art lithographers, and was associated with this company until the business was bought out by the American Lithograph Co. in 1893. Shortly thereafter he embarked in the real estate business, which he followed for almost six years, constructing about 50 buildings in New York City. Later he twice visited Alaska to examine and report upon a gold mining proposition. Following this, for about two years he was purchasing agent for the well-known printing press manufacturers, R. Hoe & Co., resigning this position on account of illness in his family. Returning from Europe, Mr. Marié retired from active business and has since been occupied as director in various real estate and building companies and in the management of his own estate. From his knowledge of New York real estate and building, he is often retained as an appraising engineer in such matters. Mr. Marié has been married three times-first in 1888, secondly in 1905, and the last time in 1910.

His permanent address is University Club, New York City.

#### LEON MARIÉ





MARIÉ.

You have little idea of the troubles and aches That a poet must often go through; Or the moans and the groans an historian makes When he kicks up his hullabaloo. While you know not the facts you would deem it a joke That he burns with his internal fires; If historian and poet should go up in smoke You'd ne'er miss such impossible lyres. From the bright story-land where you wander in dreams, In a honeymoon radiance divine, If you'll send in your life, up to forty-odd reams, The historian would sure take it fine; And he'd bless you, my lad, while he fev'rishly wrote, And would waft you a far-away kiss; Long he hopes, Marié, you may joyously float On the seas of connubial bliss.

### FREDERICK JAMES HAMILTON MERRILL.

Frederick James Hamilton Merrill was graduated from the School of Mines with the Class of '85 with the degree of Bachelor of Philosophy in the Department of Geology, and in 1890 received the degree of Doctor of Philosophy from Columbia University.

From 1885 to 1889, he served as an Assistant on the staff of the Geological Survey of New Jersey; from 1890 to 1893, he was Assistant State Geologist of New York; from 1893 to 1894, he was the Director of the New York State Museum; from 1899 to 1904, he was State Geologist of New York; and from 1904 to date he has been engaged in general practice as Consulting Geologist and Mining Engineer.

He was born in New York City, April 30, 1861, and on Sept. 1, 1887, married Winifred Edgerton of New York. They have four children: Louise, born June 3, 1888; Hamilton, born Dec. 21, 1890; Winifred, born July 21, 1897; and Edgerton, born April 21, 1901.

His public services have been those for the State Geologist of New York, and in other related positions. He belongs to the Mining and Metallurgical Society of America, the Geological Society of America, and the University Club of New York City.

His height is 5 ft. 8 in., and his present weight is 200 lb. If the memory of the historian serves him not ill, he wears the same moustache he sported in his undergraduate days. His present address is 322 Mason Building, Los Angeles, Cal., and the University Club of New York City.

#### Class of '85 Mines

#### F. J. H. MERRILL



MERRILL.

Here's to Merrill! Directing Surveys Geological;
Who knows all that relates to formations of Earth;
Who is up on her epochs in lines chronological
And can tell without blinkin' the date of her birth.
He backward can peer through Time's greatest abysses
And quick reconstruct life that then did exist;
With each type he's conversant, his mind never misses
To grasp clearest of facts from dim vistas of mist.

He has joshed Eosaurus of age Carbonif'rous;
Played bridge with the Archegosaurus sometime;
Is acquainted with all of those big bugs splendif'rous
That though dead long ago play the divil with rhyme.
He has bowin' acquaintance in æons Jurassic
With the Ichthyosaurus, Archæopteryx, too;
He has slept with those bedded in Jura Triassic,
Fairest Ornithopoda and Brontosaur. Whew!

But, retiring from dead ones Palæ-onto-logical,

He has struck for the open, has made for tall pines;
And, as proper and righteous, his mind working logical,

He has given up spooks for a life in the mines.
And wherever his labors, in Mexican mountains

Or else in "God's Country," wherever he is,
Do we ask Dame Fortuna to lead him to fountains

Of her wealth, and may happiness ever be his.

#### HERMAN HENRY BERNARD MEYER.

Herman Henry Bernard Meyer was graduated with the Class of '85 with the degree of Engineer of Mines. After graduation, family considerations obliged him to remain in the vicinity of New York where he followed the profession of Engineer. During the last half of 1885, he was engaged in field work, in connection with the new park system in the upper part of New York City. From the end of 1885 to the summer of 1897, he was Engineer with the Oregon Iron Works, designing and erecting and renovating gas manufacturing plants throughout the eastern part of the United States. In July, 1897, he accepted the position of Constructing Engineer of the Brooklyn Union Gas Co., which position he filled until Nov. 1, 1901. Following a purely personal inclination, he then gave up the engineering profession, in order to devote himself to library work. Beginning even before the date of his actual separation from the Brooklyn Union Gas Co., he devoted about a year to the systematic study of libraries until August 1, 1902, when he entered the Astor or main reference branch of the New York Public Library, where he remained until Dec. 31, 1904. From Jan. 2, 1905, to date, he has been with the Library of Congress, as expert cataloguer until Oct. 15, 1905, then as Chief of the Periodical Division until July 1, 1906, subsequently as Chief of the Order Division until Nov. 1, 1908, when he became Chief Bibliographer, in which capacity he is now helping scholars, investigators, and public men all over the country, his special duties being with members of Congress, both Senators and Representatives.

Like other works of fiction, this story ends with the most joyous chapter of all. He was married Sept. 3, 1904, to Helen Harris Spalding and has lived happily ever since. In his work he finds his pleasure.

#### Class of '85 Mines

#### H. H. B. MEYER





MEYER.

Meyer has quit us, Oh, my brothers,
As have done so many others;
Quit our Engineering scheming
And in other work engages;
He has joined the ranks ecstatic
Of Librarians erratic,
And his brain is ever teeming
With the lore of all the ages.

He can classify all knowledge,
Even all we learned at College,
And can tag all kinds of learning
And then mark it onto cardage;
Lith'rachure—in but one minnit
He can tell you all there's in it,
And of authors' soulful yearning
He's informed and knows the yardage.

And we hope his years are merry
In our Uncle Sam's Library,
Where, midst old and modern writing,
Oft his brows are corrugated;
And we drink his health in liquid
That contains a sthick to lick wid;
In his work we are delighting,
And for him we are elated.

#### Class of '85 Mines

#### CHARLES LEWIS MILLER.

A quiet, agreeable and kindly chap, direct in his ways, determined in his manner, even-tempered, well set up but not tall, studious and standing high in his studies and friendships, one who held a very high place in the esteem of his classmates, "Kitty" Miller, as he was always affectionately called, became one of us and made our hearts glad then, and in his high place he has since so borne himself that he has made us proud of him, and because of him, of ourselves.

Charles Lewis Miller was born in Reading, Pa., Sept. 30, 1861. He was graduated with the Class of '85 with the degree of Engineer of Mines, and for nearly the entire time since has been identified and actively connected with the business in which he has long been an Iron Master. On Nov. 20, 1888, he was married to Beulah Peters, of Parryville, Pa. Two children they have, Lyman H., born March 12, 1890, and Kenneth, born Nov. 15, 1896.

Quitting a temporary position in 1885, he entered the iron and steel business as Chemist in March, 1886. He has continued at the work ever since, advancing through various positions and grades until he became Vice-President and General Superintendent of the American Steel and Wire Co., which position he now holds. He is in charge of the operating department, with plants extending from Worcester, Mass. to San Francisco, Cal. The operations of these works cover the manufacture of pigiron, Bessemer and open-hearth steel, and wire and wire products of all kinds.

He belongs to the Engineers' Club of New York, the American Institute of Mining Engineers, the Duquesne, Union and Athletic Clubs of Pittsburg, the Union Club of Cleveland, Ohio, and the Athletic Club of Chicago. He is also a member of the Alumni Association of Columbia Schools of Science and the Society of the Upper Eighties.

He states that his height is 5 ft. 3 in., his weight 148 lb., and as regards his hirsute adornments, he wears "some whiskers" and a bald head.

He resides at 1086 Shady Avenue, while his office address is 828 Frick Building, Pittsburg, Pa.

#### CHARLES L. MILLER



MILLER.

We would toast you, Oh! Miller; the work you have done
And the glorious way you have done it;
Well we know by good nerve hath the vict'ry been won
While each plant is a dream as you've run it.
While we bow and kow-tow, we would meekly inquire
Of this job you've so long been about, Sir:
Aren't you tired of constructing such finely drawn wire?—
It's a subject that seems long drawn out, Sir!

#### RICHARD GEORGE GOTTLOB MOLDENKE.

Where "buds the promise of celestial worth" but at Castle Elsinore among the beautiful Watchung mountains of New Jersey and in the person of our old friend Gottlob; and who of the Class of '85 might read the official report of the reunion of our comrades, held on May 9, 1908, at that shrine of good cheer, but that he would wish in his heart of hearts to make for himself a pilgrimage to that Mecca of dreams, there to bask in so celestial a friendship and to pluck the flow'ring buds of such delightful hospitality as was received by our more fortunate classmates on that occasion blessed to their memories. We salute you, Moldenke, thou man of worth, and the gentle dame at your fireside.

Richard George Gottlob Moldenke, born at Watertown, Wis., Nov. 1, 1864, was married Sept. 18, 1891, to Anna H. Heinz, of New York City. Four children have come to bless their home: Elise, born Oct. 21, 1892; Anna, born Dec. 7, 1894; Edel, born Jan. 19, 1897; and Richard, born on Feb. 25, 1899. They live at Castle Elsinore, Watchung, N. J.

He was graduated from the Columbia School of Mines with the Class of '85 with the degree of Engineer of Mines, and in 1887 he received from the same institution the degree of Doctor of Philosophy. Since graduation he has held a variety of positions, including hydrographic work on the U. S. Coast Survey, sanitary work in New York City, Professorship of Mechanical Engineering in the Michigan Mining School, but has turned his attention especially to the manufacture of malleable gray-iron and steel castings. As a consulting metallurgist on iron and steel he gives special attention to foundry practice, and is Secretary-Treasurer of the American Foundrymen's Association. Also he is a member of the Directorates of a number of mining and manufacturing enterprises. In a characteristic communication to Sanders he intimates his connection with certain enterprises in the following vigorous terms: "I feel for you, indeed, I do. In that God-forsaken land of manana, I can imagine you looking over a row of patriots sunning themselves and keeping busy at doing nothing. Still there is much money there. I have some thousands of plunks of mine there, and they are likely to stay there-also doing nothing."

His public services have been as a member of the Roosevelt Advisory Board to the Geological Survey and the Manager of the New Jersey State Village for Epileptics. He is a member of the Alumni Association of the Columbia University Schools of Science, of the American Institute of Mining Engineers, the Iron and Steel Institute, the American Society of Mechanical Engineers, the American Society for Testing Materials, the International Association for Testing Materials, the Verein Deutscher Eisenhuettenleute, the American Foundrymen's Association, the Electrochemical Society, etc.

His height is 5 ft. 10½ in., his present weight is 146 lb., and as to hirsute adornment, he owns up to the possession of whiskers, but says nothing as to their size, color, age or previous condition of servitude.

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He lives with his family at Watchung, N. J.

#### R. G. MOLDENKE





MOLDENKE.

Moldenke, thou of whiskers rare!
(That bunch I envy greatly!)
Their like we'll never find I swear;
They catch the wind so nately.
But, bearded full or whiskerless,
With pleasure I'm confessin'
We drink your health and happiness
And wish you every blessin'!

Ah, Comrade, swift have sped the years Since those of our first meeting; Fond memory for aye endears
The early joyous greeting,
As backward with regretful gaze,
With eyes of eager longing,
We look upon those cherished days
With happy visions thronging.

But though the past may beckon fair,
Far greater than its pleasure
Are thoughts that we have done our share
Of Duty's fullest measure.
And you, Moldenke, in the place
Where now you stand exalted,
We cheer, good lad, your heart of grace,
Your pride that ne'er has halted.

#### LOUIS SPENCER NOBLE.

One of the greatest delights and heart-satisfying rewards that can come to "a brave man struggling in the storms of fate," that Wandering Jew, that vagabonding Happy Hooligan, the circuit-riding Mining Engineer, while in the field and engaged on expert work in the examination of mines, and on that quest drifting from sea to sea and from Mexico to Alaska, journeying through unbroken wildernesses, passing over and through vast mountain ranges, enduring the drouth and heat and discomforts of the desert, ever wandering as a lost soul from Paradise, ever pioneering—the greatest reward that can come to him en route or during his occasional stops is that somewhere, sometime, he will drift into the vicinity of some beloved comrade of the earlier days at college, and with him in heart to heart communion review the blissful memories of the past, and with him renew their golden youth. Always companionable, cheerful and friendly, it was indeed a pleasure to meet "Louie" Noble.

Louis S. Noble (natus-uncertain, but about "1492 up to date"), was graduated from the Columbia School of Mines with the Class of '85 with the degree of Engineer of Mines. From 1885 to 1889 he served as Mining Engineer with the Iron Silver Mining Co., Leadville, Colo.; from 1889 to 1890 he was Superintendent of the Constancia Mining Co., Sierra Mojada, Mexico; from 1890 to 1891 he was the Assistant Manager of the Blue Bird mine in Butte, Mont.; during 1891 he was in New York on matters relating to the family estate; from 1892 to 1896, in general engineering practice, examinations and similar work in Leadville, Colo., for a time in charge of the Ibex Mining Co., Manager of the New York Mining, Milling and Tunnel Co., and Manager of the Leadville Gold and Silver Extraction Co.; from 1896 to 1898, Consulting Engineer to Lewis & Marks, Johannesburg, South African Republic, also General Manager Vereeneging Estates, also Consulting Engineer Transvaal Estates & Development Co.; and from 1898 to date at Denver, Colo., engaged in general examination work and as Consulting Engineer to the American Finance & Securities Co., and to the New Gold King Mines.

In June, 1889, he was married to Miss Atala Blow, of Norfolk, Va., who died in May, 1909. He is a member of the American Institute of Mining Engineers and may be addressed, Denver, Colo.

#### LOUIS S. NOBLE





NOBLE.

At Duty's call, along sequestered ways,
You've wandered far since those delightful days
When we were mates and classmates; Ah! the old
Fair days, ashine like cloth of purest gold.
You've trod vast northern, western, southern lands;
Have delved and moiled in Afric's golden sands;
In northern cold, 'neath southern suns you've mined;
The Golden Fleece we long have known you'd find!
Serenest joys, may they abide with you
And happiness be thine life's journey through;
We drink your health and toast your lucky star,
For, Noble, you done noble and you are.

#### Class of '85 Mines

#### ROBERT VAN ARSDALE NORRIS.

Robert Van Arsdale Norris was born in Newark, N. J., May 2, 1864, the son of Thomas B. and Mary L. (Ruxton) Norris. His early education was obtained at the Collegiate School, New York. He passed his examination for 1884 Arts in Columbia but did not attend the class and was graduated with the Class of '85 with the degree of Engineer of Mines.

In the summer of '85 he was Assistant to Prof. Munroe in the Summer Schools of Mining and Surveying, and later an Inspector of Dredging, of the Morris River of New Jersey. Early in 1886, Chemist for Hermann Behr, a manufacturer of printing inks, etc. June, 1886, to 1894, with the Susquehanna Coal Co. (Pennsylvania Railroad) as Assistant Engineer; 1894 to 1900, principal Assistant Engineer of the Coal and Water companies of the Pennsylvania Railroad, and 1900 to March, 1904, Chief Engineer of the same companies. He entered private practice as a Consulting Engineer, in March, 1904, resigning his position as Chief Engineer of the Coal and Water companies of the Pennsylvania Railroad and becoming Consulting Engineer of the same. Consulting Engineer for Coxe Bros. & Co., 1905-1907. Consulting Engineer of the Wilkes-Barre and Hazleton Railroad Co., 1905 to date.

During 1905 and 1906, as Consulting Engineer for the Lehigh Valley Coal Co., he planned and built their Ransom and Black Creek Storage plants, of 700,000 tons capacity, at a total cost exceeding \$800,000. 1906 to date, Consulting Engineer of the Sterling Salt Co. May, 1907, to date, Consulting Engineer of the Coal Department of the Delaware, Lackawanna & Western Railroad Co.

Is Director and Vice-President of the Mineral Development Co. of Mexico and of the Proprietary Mines Co. of New York; and Trustee of the Forty Fort Cemetery Association, dating back to and which preserves the bones of victims of the Wyoming Massacre. In 1906, he was appointed Lecturer on Coal Mining at Harvard University, which appointment has been renewed yearly and which he still holds.

He has written professional papers that have appeared in the "Transactions" of the Mining and Mechanical Engineers, "Engineering and Mining Journal," "Engineering Magazine" and "Mines and Minerals."

Is a member and Councilor of the American Institute of Mining Engineers; a member of the American Society of Civil Engineers, the American Society of Mechanical Engineers, the Franklin Institute, North of England Institute of Mining and Mechanical Engineers, Institution of Mining Engineers, Great Britain, Engineers' Club of New York. He is also a member of the Westmoreland Club, Wilkes-Barre; the Scranton Club and Scranton Engineers' Club, Scranton; Columbia Mines Alumni Association; Wyoming Valley Country Club, Wilkes-Barre; Tau Beta Pi, and (mirabile dictu) in good standing in the First Presbyterian Church of Wilkes-Barre. Address, Wilkes-Barre, Pa.

Norris was married June 7, 1893, to Esther Wadhams Shoemaker, of Wilkes-Barre, Pa. They have three children: Robert Van Arsdale Norris, Jr., born June 9, 1894, now attending Hotchkiss School, Lakeville, Conn., and destined for Yale University and to tread his father's footsteps in the Columbia School of Mines; Jane Shoemaker Norris, born April 20,

#### Class of '85 Mines

#### R. VAN A. NORRIS





NORRIS.

Of Norris, whilst we drink his health
And wish him endless joy,
With life serene and ample wealth
And bliss without alloy,
Our minds revert to other days
And other scenes the while;
And while with pride we sing his praise
We beg his leave to smile.

We ken the days our Class surveyed
Westchester's land of dreams,
Traversing lines through sylvan glade
And by her rippling streams.
And Science here was put to rout,
For Norris worked until
He gravity did knock quite out,
Made water run up hill!

But in his work he's long made good
And won him fair renown;
He at the front has ever stood,
Fate could not turn him down.
He walked his contests heel and toe,
His foot-work sure and true;
Ah! Norris, lad, your worth we know,
And here's a health to you.

#### GEORGE STEVENS PAGE.

During the session of the School of Practical Mining, held on Keeweenaw Point, Michigan Peninsula, in the summer of 1884, an event occurred that was so "amoosin'" that it has stuck in the minds of many of our classmates through the many long years that have elapsed since the occurrence; and now that the victim and principal actor in the comedy has found fame and worthily won his way to proud and lofty eminence in the technical and business world of the steel trade, it is only just and right that an intimation of the happening should form a part of the chronicles of the Class of '85.

At Houghton a portion of the mining engineers of the Class in attendance on the Summer School were domiciled. And on one glorious mid-summer Sabbath morning, while the lads were preparing themselves for agreeable outings to points of interest, a portion of the paraphernalia with which our friend Page was removing from his countenance a week's ragged growth of whiskers, was suddenly whisked away and concealed just as the beard had been shorn smooth from one side of his face. First protestingly, then insistently, and finally angrily, he insisted upon a return of the missing article, and then in some heat he began his search for it, only to have the razor itself disappear. This was probably the one time in his cheery life when the genial, the companionable, the jolly and kindly Page quite drifted away from his temper.

George Stevens Page was born at Eagles Wood, N. J., Sept. 21, 1864, and on Feb. 25, 1888, was married to Delilla Blinn Horn of Weatherly, Pa. His olive branches are: William, born Jan. 20, 1889; Blinn Stevens, born Jan. 1, 1891; George Reuben, born Sept. 19, 1892; Pauline Stevens, born Dec. 8, 1902, and Lowell Briggs, born June 19, 1904.

He was graduated with the Class of '85 with the degree of Engineer of Mines. Subsequent to graduation he spent three months on the U. S. Coast Survey, the following nine months into 1886 as Assistant Chemist with the Edgar Thomson Steel Works. From 1886 to 1899 with Park, Brother & Co., Ltd., in the manufacture of open-hearth and crucible steel; from 1899 to 1900 with the Park Steel Co., Pittsburg, Pa.; from 1900 to 1902 as Superintendent of the Park Works, Crucible Steel Co. of America; from 1902 to date, Assistant Manager of the Park Works, Crucible Steel Co. of America, Pittsburg, Pa., thus rounding out 24 years of service with the same people, a record for success and fidelity that speaks for itself in a manner to increase the loving pride of '85 in the achievements of her sons.

He is a member of the Columbia University Alumni Association, the Columbia University Association of Pittsburg, the American Institute of Mining Engineers, the Engineers Society of Western Pennsylvania, the Columbia University Club of New York, the American Electro-Chemical Society, the Pittsburg Chamber of Commerce, and the Stanton Heights Golf Club. His height is 5 ft. 8 in., his weight 192 lb., while his hirsute adornment is, so he states, mottled.

He resides at 324 North Long Ave., Pittsburg, Pa.

#### GEORGE S. PAGE





PAGE.

As backward through the Book of Time I turn the well worn leaves, Each golden phrase of prose or rhyme My joyful soul receives.

Through leaves illumed by treasure trove,
Where thoughts of friends engage,
I turn at last to one we love—
A dear and treasured Page.

Oh! Page, adorned by honors won Through days serene and true, Thy labors long and nobly done We toast,—and here's to you!

#### YSIDORO YGNACIO POLLEDO.

Ysidoro Ygnacio Polledo was graduated from the School of Mines with the Class of '85 as an Engineer of Mines. In 1885, he was Assistant Engineer on the Survey for Waterworks for the City of Santiago de Cuba; from 1886 to 1889, he was Assistant Engineer and Principal Assistant Engineer for the Cardenas and Jucaro Railroad, Cardenas; from 1889 to 1890, he was the Manager of the Santa Barbara Sugar Plantations, at Baro; from 1890 to 1895, he was the General Manager of the Cardenas Sugar Refining Co., Cardenas; from 1895 to 1897, he was Assistant Engineer of "Harbor Works" at Havana, Cuba; from 1890 to 1895, he was engaged in private work as a Consulting Engineer in the redesigning of plants for the manufacture of sugar; from 1899 to 1900, he was Assistant Engineer for the Harbor Works at Havana; from 1900 to 1902, he was Technical Director of the Santa Lucia Sugar Factory; from 1902 to 1903, he was General Manager of the Matanzas Railroad Co.; from 1904 to 1906, he was Manager of the "Banco" Espanol de la Cuba, Havana; and from 1907 to date, he has been in private practice as a Consulting Engineer. He is a member of the American Institute of Mining Engineers and his present address is Apartado 75 a, Havana, Cuba.

#### Y. Y. POLLEDO



POLLEDO.

Hail! Polledo, of fair Cuba's Isle.

Sure it doeth my heart good to greet you;
But it truly would cause me to smile

To clasp hands with and see you and meet you.

Then come back from that far sunny clime

To the lads of the long, long ago,

To the friends of our youth and our young manhood's prime,

Of the days fair and happy; Heigh-ho!

#### Class of '85 Mines

#### WILBUR EDGERTON SANDERS.

It sufficeth to say that only the innate and in(co)herent modesty of the objective subject of this "story of a life" prevents the Class Historian (officially—when writing of Billy Sanders) from dealing in higher superlatives than these hereinafter detailed, specified and contained, to wit: He air young an' beautifullest an' fair; he hez carroty face an' a freckled hair; he seems pure an' nobil ez he kin be—but, nixkumarouse, Bill, yer kaint fule me! He hez wondrous grace in hiz nether pegs, when he pir-hoo-etts on hiz rear hind legs; an' he thinks he's sum with hiz hullaballoo; but he kaint fule me—know him throo an' throo! He hez tears in hiz eyes when he talks uv him; what he sez uv him, sure it ain't so slim; but I sez ter him, with hiz reinekaboo, naow yer kaint fule me—so yer jess gaow tew! An' ter h'ar him talk uv ther pace he's set; an' uv what he's done, fer he's braggin' yet; what a bad man he, an' so Woolly! Gee!—but I know yer, Bill, an' yer kaint fule me!

Wilbur Edgerton Sanders was born at Akron, Ohio, Aug. 21, 1861. His early life was spent at Virginia City and Helena, Mont. In 1881 he entered the School of Mines and was graduated with the Class of '85 as an Engineer of Mines. Shortly after graduation he began work underground in the mines of Butte. Later some seasons were spent at prospecting, and while thus retired from active mining work he served as clerk on the Committee on Enrolled Bills of the U. S. Senate at Washington, D. C., and as Librarian of the Historical Society of Montana.

In various minor capacities he has been identified with diverse and extensive mining affairs throughout the Western United States, British Columbia, Alaska, and Mexico. As Superintendent or Manager of Mines he has had charge of important operations in Montana, Nevada, California, New Mexico, Kansas, Missouri, and other States. As Consulting Engineer he has been connected with mining litigation between various mining interests in Montana and California, and with mine examinations in Alaska and in Mexico, in British Columbia, and throughout the western mining field of the United States. During the last year and a half he has been identified, as Consulting Engineer and Vice-President, with the Engineers' Exploration Co., Ltd., of Los Angeles, Cal., in connection with extensive irrigation interests of that company in Mexico, and at the present time is the Superintendent of the Fairview Fluorspar and Lead Co., of Fairview Landing, Ill.

He has written for "Transactions, American Institute of Mining Engineers," "Mineral Industry," "Engineering and Mining Journal," "Mining and Scientific Press," also for the Historical Society of Montana. His article on "Mine Timbering" has, with similar ones, been published in book form by the Hill Publishing Co.

He is a member of the Alumni Association of the Schools of Science, Columbia University, the American Institute of Mining Engineers, the Montana Society of Engineers, the American Geographical Society, and the U. S. Forestry Association. His height is 5 ft. 9 in., present weight 160 lb. He still retains his scalp-lock, while the cutaneous excrescence is carefully eradicated from his face. He is not married, but 'as 'opes.

#### WILBUR E. SANDERS



#### SANDERS.

Here's a toast: To the Sweethearts, the Wives of our Boys,
To the true, tender loves that possess 'em;
To our Boys and their joys no unhappiness cloys,
(Though their Wives, we've no doubt, oft confess 'em),
And to those who ne'er yet have divided their joys,
To our Bachelors, ever, God bless 'em!

I would toast you, oh! Friends of my earlier days,
Quaffing sweets from the deep, flowing bowl.
You "done noble," brave Lads; for each record assays
Full a hundred per cent., on me sowl!

May fair joyance and gladness forever be thine,
In full measure, as is my regard for you mine.

By the memories dear of each glorified year
Of our friendship so loyal and strong,
Be true happiness thine and all bountiful cheer
As you journey Life's pathway along.
And I pray that success all your efforts attend;
May bright fortune smile on you, dear classmates, my Friends.

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HENRY BRENGLE SHOPE.

Henry Brengle Shope was graduated from the School of Mines with the Class of '85 as a Bachelor of Philosophy in the Course of Architecture. He was born in Baltimore, Md., on October 1, 1862. Since graduation, he has been connected with the office of Hunt & Hunt, Architects, 1700 Broadway, New York, and is at present a member of that celebrated firm. He is a member of the Architectural League, New York; of the Genealogical Society, and of the Calumet Club. He is 5 ft. 10½ in. in height; his present weight is 180 lb., and he wears his whiskers smooth shaven.

#### H. B. SHOPE



#### SHOPE.

As o'er fair stretches misty curtains drift
To dim some brightness, hide some sight we prize,
So misty years, save through some vagrant rift,
Good friend, have hid you from our friendly eyes.

Classmate of early days, of youth's fair prime,
With kindly faces, hands to clasp your hands,
With mem'ries joyous of that golden time,
We greet you, Shope, from near and distant lands.

Classmate, we wish you well! Success be thine
And fair thy pleasures 'till the pathway ends.
For sake of bygone days join thou our line
And, joyous, mingle with your classmate friends!

#### EMIL STAREK.

Some incidents of our College days, some characteristics of our classmates, some happenings or events that then occurred, are indelibly woven into our memories of those times. Of Starek we remember the cause which led to the nickname by which he was known to us all, that of "Pop" Starek. We remember how, at each well-rounded period of a lecture, his inquiring mind would evolve some point requiring a more lucid explanation, some point of deeper, more hidden import than others of us were aware of, and up would go his hand, with fingers popping like a bunch of firecrackers on a Celestial New Year.

We ken the time during one of the lectures of Prof. Chandler in chemistry, wherein he was holding forth in his humorous, interesting way on magnesia and its compounds; and, having touched upon a certain combination, he dilated in enthusiastic style on the benefits to be derived from and the happy results obtained by a proper application of the milk of magnesia to cases of infantile midnight colic. "You are awakened from refreshing slumber," quoth the genial Doctor, "sleep is annihilated and the midnight airs shattered, your ear-drums pierced and all but broken by the frightful wails of the infant. Suddenly, a bright thought strikes you; you smile and place the infant in his crib, and administer a liberal dose of that gracious remedy for such distempers, the milk of magnesia. The wails cease, and the child drops into a dreamless sleep, while"—a fire-cracking cannonading bursts upon the ambient air of the lecture room. "Oh! That has already happened to you, has it?" quoth the quick-witted Doctor; and the joke, too good to be permitted to die early, lives for aye in the affectionately-given handle of "Pop" Starek.

Emil Starek was born near Prague, Bohemia, in Austria, on March 24, 1861, and was married in 1892 to Lillian S. Youngs, of New York. They have one son, Emil Starek, Jr., born August 24, 1895.

He was graduated with the Class of '85 as an Engineer of Mines. He later received the degree of LL. B. in 1889, and of LL. M. in 1890.

From 1885 to 1887, he was Assistant with the U. S. Geological Survey, and from 1887 to 1892, Assistant Examiner, U. S. Patent Office.

He is a Patent Counselor and Expert and Attorney at Law, with offices at 907 Chemical Building, St. Louis, Mo. As Counselor in patent causes he has devoted much time during the past six years to metallurgical and chemical inventions, particularly with reference to smelting- and roasting-furnaces, pigments, sulphuric acid, the treatment of copper-mattes, and the like. He has operated on mining and metallurgical improvements throughout Montana, Utah, Arizona, New Mexico and Tennessee, representing large smelting interests in those regions. He has been Patent Counselor for the Anaconda Copper Mining Co., of Montana, the Ducktown Copper and Iron Co., of Tennessee, the Copper Queen Copper Co., of Arizona, and large interests in Utah.

His height is 5 ft.  $7\frac{1}{2}$  in., and his present weight is 130 lb. He reports that he is smooth shaven, but gives no data or details. It is a proper question to ask—how much he is smooth shaven?

#### EMIL STAREK





STAREK.

Some things are plain to understand, oft proved by rule of thumb, And some are full of tangled threads to strike a wise man dumb; Inventions strange and full of quirks we see where'er we turn, The minds that think them work by jerks, have queer ideas to burn. Inventors' minds run broad and deep or else are turned by cranks. Oft-times they draw the richest prize, most oftentimes get blanks. The brightest minds may twisted get and run invention mad—
I'm glad I'm not built that a'way; 'twould be so awful sad.

Now, think with what terrific aches the brain would have to do
That for its line invention takes to work out ideas new.
To evermore unravel knots schemed up by other men;
To win their patents quick for them, then start all new again,
Must sure be fierce; but that is what our Starek long has done.
It may be joyous work, indeed—but not for me such fun.
I'd rather lie upon my back and gaze up to the sky
In fair, idyllic sylvan glade, or—chase me off and die.

If I, for one, was at his work I never would despair
For fear in some hereafter place I'd have it fiercer there.
Though hard his work he's done it well, as through each darksome maze
He's led his clients faithfully, has won their grateful praise.
Your classmates look with pride upon the work that you have done.
Your high success in Patent Law we toast, Columbia's son;
You take our friendship with you, lad, your earthly journey through.
We drink your health and happiness: Good Starek, here's to you!

#### JOSEPH STRUTHERS.

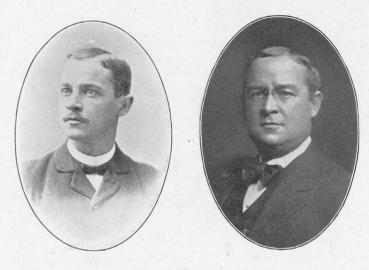
Hail to thee, blithe spirit! Ever the same thou art; jocund as the merry month of May, good Heart; rosy and pleasing as are other full-blown American Beauties; sweet and delicious art thou as are ripened fruits, as honey and morning dew, as are nectars and mint-juleps and fizzes and high-balls of glorious memory; rotund and robust as—but words fail me! Suffice it is to say, Thou are Thou!

Joseph Struthers was born Nov. 13, 1865, in New York City. Early education: Private School; then Grammar School No. 68; College of the City of New York, 1880 to 1881; then the School of Mines of Columbia College, from which he was graduated with the Class of '85 with the degree of Ph. B. in the course of Chemistry, later, in 1895, receiving the degree of Ph. D. from Columbia University.

From 1885 to 1900, on staff of instructors, Department of Metallurgy, Columbia University, assisting Professor Egleston and later Professor Howe; 1901 to 1902, honorary lecturer in Metallurgy at Columbia University. In 1896, first summer school in practical metallurgy of Columbia University, held at Butte, Mont. He has visited many metallurgical plants in the United States and Europe, and has carried on special metallurgical investigations. In 1890, author of "Quiz Compend on Chemistry and Physics," Lea Bros., Philadelphia. He has also written numerous articles for the "Engineering and Mining Journal," "Mineral Resources of the U. S.," "Twelfth Census of the U. S.," "Transactions of the American Institute of Mining Engineers," "International Encyclopedia," "International Year Book," "Science," and "School of Mines Quarterly." From 1892 to 1900, on Board of Editors and Business Manager of the Quarterly. In 1900 to 1901, Assistant Editor, Vols. VIII and IX, and 1902 to 1903, Editor, Vols. X and XI, "The Mineral Industry." In 1901 and 1902, Field Assistant, U. S. Geological Survey; in 1903, Special Agent for the U. S. Census; in 1904, Secretary of the Division of Mining Engineering, St. Louis Exposition; in 1903 to 1905, Assistant Editor, and from 1906 to date, Editor, Assistant Secretary and Assistant Treasurer of the American Institute of Mining Engineers; from 1903 to date in charge its "Bulletin" and "Transactions," Vols. XXXIII to XL; in 1907, Chairman Jury, Mines and Metallurgy Section, Jamestown Exposition; in 1908, Delegate A. I. M. E. to Governors' Conference on Conservation of Natural Resources, Washington; 1909 to date, Trustee and Secretary Engineers' Club, New York City; 1907 to date, Chairman House Committee, 1909 to date, Secretary Library Conference Committee, United Engineering Society Building; 1910, Trustee and Treasurer United Engineering Society; member A. I. M. E., Columbia Alumni Association; Director, Society "Upper Eighties," Phi Gamma Delta Fraternity, Xi Graduate Chapter; Sigma Xi Society and Tau Beta Pi Society (honorary); Engineers' Club; N. Y. Athletic Club.

Business address, 29 West 39th St.; residence, 376 East 136th St., New York City. Episcopalian. Generous contour. Plenty of hair on the top of his head, slightly tinged with gray at the sides. Still single.

#### JOSEPH STRUTHERS



#### STRUTHERS

Ah, Joe Struthers! Thou man of the jovial mien
And the humorous wag of the jaw;
With the cherubic smile that is kindly serene,
And the bone-smashing grip of your paw;
And though you are the man who, with malice of thought,
Forced me into this terrible muss,
And to do there is naught that I sure hadn't ought
But to knock you, and luridly cuss;
Yet by Friendship's pure gold and my love for you, Joe,
Do I wish for you blessings divine;
Do I toast your true happiness evermore, Joe,
And this tender regard that is thine.

#### WARREN HARRIOT TITUS.

Some are born great, some achieve greatness, while others have greatness thrust upon them, with the poet; and sometimes good natured Billiken, the god of things as they ought to be, assumes charge of the affairs and fates of certain glorified individuals, and they retire from the wear and tear of business life, and give up "the worm, the canker, and the grief" of the professional grind to tread the primrose paths of dalliance and joyance. All of which may be said to be more or less apropos to the state of beatitude reached by our kindly, beloved, and ever happily remembered friend and classmate. Titus.

Warren Harriot Titus was graduated as Engineer of Mines with the Class of '85, and during the following year he took a post-graduate course in Civil Engineering and traveled in Europe. From 1886 to 1892, with the Board of Health, New York City; Assistant Sanitary Engineer and Inspector of Plumbing, from October, 1886, to 1887; Assistant Engineer and Special Inspector of Plumbing, Drainage, Light and Ventilation, from 1887 to 1888; Assistant Sanitary Engineer and Special Inspector and Examiner of Plans for Plumbing, Drainage, Light and Ventilation, from 1888 to November, 1890; Assistant Chief Inspector of the Division of Plumbing, Drainage, Light and Ventilation, from November, 1890, to June, 1892; Acting Chief Inspector in charge of Division of Plumbing, Drainage, Light and Ventilation, from December, 1891, to June, 1892; Examiner of Plans for Plumbing, Drainage, Light and Ventilation in the Department of Buildings in New York City, from June, 1892, to October, 1895. In 1895, he began successful private practice as a Sanitary Engineer, in New York City, his specialties being the preparation of plans, specifications and the superintendence of water supply and sewage disposal plants for country residences and institutions; and the preparation of plumbing plans and specifications for large city buildings, including fire service. He retired from professional work in 1903.

He was born in New York City, Dec. 18, 1864, and on Oct. 22, 1899, was married to Frederika S. Havemeyer, of Newburgh, N. Y.

For some years he was a member of Squadron "A," the crack cavalry organization of N. G. S. N. Y., being previously, for many years, a member of Troop "A," the nucleus of Squadron "A." He is a member of the University Club, Providence; of the Wannamoisett Country Club, Providence; of the Alumni Association of the Schools of Science of Columbia University, and of the Association of Ex-Members of Troop "A" and Squadron "A," N. G. S. N. Y.

In height he measures 5 ft. 8¾ in., and he weighs 135 lb. He now modestly asserts that he wears "only an upper-lip adornment," but whether that means that he wears no hair "on the top of his head, in a place where the hair ought to grow," "affiant further sayeth not." We "kinder" reckon, however, that it is all there, with possibly a few silver threads.

He resides at 111 Blackstone Boulevard, Providence, R. I.

#### WARREN H. TITUS





TITUS.

When you take up Engineerin'
(Where so fine an avocation?)
You expect to go careerin'
To the ends of all creation;
But sometimes good luck awaits you
With a fine New York location,
And good Dame Fortune rates you
Avec Corps de Sanitation.

So it was our good friend Titus

Missed the land of quick hair-triggers,
And that now he would invite us

To inspect his facts and figgers;
But we butt not in, dear Titus,

Mix not in your avocation:
With your vast work you affright us,

Avec Corps de Sanitation.

We are proud of you, dear Titus,
Proud of you as thunderation;
Your successes do delight us
In the work of your vocation,
And we wish you joy and pleasure
Whatsoe'er our avocation,
Drink your health in fullest measure,
Glory be to Sanitation.

#### EDMUND PINEO WHITMAN.

Some characteristic of one's classmate is usually made a peg upon which to hang, or a target for some shaft if one sharp enough to tickle can be found in the quiver; but of the lads who pulled upon the crew little else remains to write upon than that single glorious fact. But enough remains of that to satisfy. However, one supposedly amusing night experience with which the writer was slightly connected along with Whitman and Walter Peet, and possibly Joe Ladew, was the placing of red fire behind the porches of certain houses which were hidden away among the trees that then covered portions of Washington Heights. This scheme seemed wonderfully funny until finally a tremendously big shot-gun or blunderbuss was turned loose at us at short range, which luckily or unluckily missed a hoped-for target. Along with heart-failure we had a sudden change of heart, and, failing thereafter to see where the amusement came in, very properly and earnestly retired.

Edmund Pineo Whitman was graduated from the Columbia School of Mines with the Class of '85 with the degree of Engineer of Mines. After graduation he entered the woolen manufacturing and importing business, with one of the large Boston firms, with whom he was identified in various capacities for a number of years, his residence, during a considerable portion of the time, being in Boston. Subsequently, he became connected with the cottonseed oil industry, and for some years was identified with the Southern Cotton Oil Co., of New York. Lately, however, he has entered the industry in connection with the brokerage and sale of cottonseed products, with offices at 214 Produce Exchange; the name of the firm being Whitman Brothers, of which Edmund Pineo is President and Treasurer.

As a guess, his weight is 230 lb., his height 6 ft. 1 in., and with smooth shaven face and very gray hair.

#### Class of '85 Mines

#### E. P. WHITMAN





WHITMAN.

Ah! Whitman, lad! Long years have sped since those we passed at College;

Oft dream I of our days within the dear old School of Mines.
We did a lot of hustlin' then and gained a heap of knowledge
And picked vast wisdom up in chunks in many various lines.
Full joyous were these blissful days, by-gone, but evermore

Their memories return to me and all my youth renew.

Glad hours were they, but happiest yet to thrill my being's core Were those we worked together

When we pulled upon the crew.

With Peet at stroke, George Lee at seven, while six was pulled by you; Bob Lee at five and Hunt at four, with Crowell starboard three,

And Sanders lining up at bow and Middleton at two;

And Dormitzer as coxswain, with his lurid "langwidge" free, Or counting strokes for fiercest spurts while holding us together (With substitutes good Joe Ladew and Tom MacAdam, too).

Keen lads were all for mighty deeds and jaunty courage whether A race was won or lost then

When we pulled upon the crew.

The miles we rowed 'neath blistering suns or fair or stormy weather, The days our mettle sore was tried by coaches fierce to do;

With Goodwin, Rives, Cornell, to teach us snap and catch and feather, And Cowles, Van Sindren, Simmons, Yes! and others leal and true.

I think of these brave days of old, their pains and aches galore, But days of pride and victory. Ah! gladness that we knew!

Ah! days of happy memory! Dear comrades at the oar,

In dreams I see you oft as

When we pulled upon the crew.

ERNEST ABRAM WILTSEE.

Ernest Abram Wiltsee was graduated from the School of Mines with the Class of '85 as an Engineer of Mines. In 1885 to 1886, Assistant Chemist to the Edgar Thomson Steel Works, at Braddock, Pa.; from 1886 to May, 1887, chemist with the Colorado Coal and Iron Co., at Pueblo, Colo.; from May, 1887, to August, 1888, Chemist for the Globe Smelting and Refining Co., Denver, Colo.; from August, 1888, to April, 1890, Assistant Superintendent of the North Star Mining Co., at Grass Valley, Cal.; from April, 1890, to 1891, Superintendent of the Menlo Mines, Grass Valley; in January, 1892, on expert work in Nevada County, Cal.; from January to August, 1892, with the California State Mining Bureau; from August, 1892, to January, 1893, on expert work through California; in April, 1893, Manager of gold mines for Barnato Bros., Johannesburg, South Africa; on July 1, 1894, Manager of the Geldenhuis Est. and Gold Mining Co., Johannesburg; on June 1, 1895, Superintending Engineer for the Consolidated Gold Fields of South Africa, Ltd., Johannesburg; from April 1, 1896, to November, 1899, in general mining work, with offices in San Francisco, Cal.; in 1900, with the Wiltsee-Seely Investment Co., Denver, Colo.; in 1904, Resident Manager of the Venture Corporation, Ltd. (London); in 1906, in general mining business, with offices in New York; and at the present time, he is the Managing Director of the France-Wellman Oil Co., operating oil properties, located at Midway, Kern County, Cal., and with offices at 628 W. P. Story Building, in Los Angeles, Cal.

#### E. A. WILTSEE





WILTSEE.

The world for you has been too small, And long you've wandered wide, On many shores you've heard the call Where rock to wave replied; Through Northern wilds you've trailed the lure; Where Southern airs have blown, There restless hope has bid endure The hardships you have known. In East and West you've rustled gold And plucked from Afric's store The wealth that Midas gained of old— Before he sought for more. You've wandered, Wiltsee, far and wide, To gain the wealth you sought, 'Til Fortune standing by your side To you her treasures brought.

#### IRA HARVEY WOOLSON.

Before the imposing front of a person so august as a full-fledged 18-karat, dyed-in-the-wool Columbia University School of Science Professor, the historian would be inclined to "lave his work the bye," to side-step the task and retrousse "down the center and do-si-do" in fear at the flippant temerity that would suggest a familiarity so assured as to attempt the personal and professional details in the life of such an one. However, that the aforesaid dignitary is our own Woolson, a member of the Class of '85, and therefore a party of whom we are in no wise "skeered," these are considerations that render the task permissible, while the fact that "de gent" has resigned from his professorship to accept a position in the techno-commercial world, whereof the place that has known him hithertoherebefore will know him no more forever, renders him a peculiarly fit subject for one of our patent non-collapsible double-riveted reinforced obituaries, and the historian assumes that he is safe by a comfortable margin in thus furnishing a close-fitting, plushlined, burglar-proof biographical sketch.

Along with other generous traits and characteristics, Woolson is well remembered for his whole-souled and ready loyalty to the class and to class interests, as well as to those of the great Mother who so generously nourished our youthful understandings. Ever at the front to give the light of his countenance, his uplifting enthusiasm and hearty support to aid those who, from a sense of loyalty, of patriotic pride, if you will, undertook the deadly grind, the wear and tear of training, for crew or athletics, he was a force to be reckoned with.

Ira Harvey Woolson was born at Lewiston, N. Y., Aug. 11, 1856, and was graduated with the Class of '85 as an Engineer of Mines. In 1893 he was married to Anita Mason, of Yonkers, N. Y. In 1885 to 1886. Assistant of the Geological Survey of New Jersey; from 1886 to 1887, Assistant in the Assay Department of the School of Mines; in 1887 to 1889, Assistant in Drawing under the beloved Professor Trowbridge; in 1901. Instructor in Mechanical Engineering under the genial and kindly Professor Hutton. In 1902, Official Testing Engineer for fireproof materials, etc., for the Bureau of Buildings of New York City; in 1903, Adjunct Professor of Mechanical Engineering under Professor Hutton, and during 1908 was transferred to the Department of Civil Engineering. In 1903, Delegate from New York City to the International Fire Prevention Congress, London, and established the Columbia Fire Testing Station; July 1, 1910, resigned from Columbia and accepted position of Consulting Engineer to the National Board of Fire Underwriters; member of the American Society of Mechanical Engineers, American Society for Testing Materials, National Fire Protection Association, National Association of Cement Users.

He is 6 ft. in height, his present weight is 185 lb. He asserts that he is possessed of a good head of hair and a moustache. However, he fails to state whether his hair is black, blue, green, yellow, red, gray or white—a fatal omission.

#### IRA H. WOOLSON



WOOLSON.

Here's to Woolson, Professor of Science Mechanic! Of the ingrowing strains of a tuber-meshanic, Or the stress that exists in a rubber-neck torsion, He can tell in a jiffy with ne'er a contortion. He's an Expert on building and fireproof construction, Knows what will endure e'en the flames of Destruction; He knows all about fire (or he will, I don't doubt it-All one needs is but time to find out all about it!) Of concrete reinforcement he knows the deflection, On the strength of materials he's surely perfection: In mathematical subjects, indeed in all Science, He's full cyclopædiculous, full of reliance; And we doff our chapeaux to you, Woolson, thou wonder, Glad to drink your health, honor and glory, By Thunder! And because of the friendship we bear for you ever, With the thrill of affection that weakens, Ah! never, Do we wish fairest joys may true happiness send you; May bright Fortune smile on you and good luck attend you.

#### ASSOCIATE MEMBERS



JOSEPH HARVEY LADEW.

Joseph Harvey Ladew attended the School of Mines in the freshman year of the Class of '85, leaving the course the next year to enter the leather trade in the important firm of Fairweather & Ladew, New York. He is now President of the J. H. Ladew Co. He was born in Shokan, Ulster County, N. Y., April 10, 1866, was married Nov. 27, 1902, to Jennie House, of Rochester, N. Y. They have two children: Joseph Harvey Ladew, Jr., age 6, and Oliver Ladew, age 4 years. He is a member of the Union League Club, the New York Yacht Club, the Riding Club, the Lambs Club and the Automobile Club of America. His height is 5 ft. 10½ in.; present weight, 170 lb., and he sports a small moustache. He resides at 813 Madison Avenue, New York, N. Y.



JOHN MIDDLETON.

John Middleton was born in Brooklyn, N. Y., July 25, 1863. He entered the School of Mines with the Class of '85 and continued with us throughout the freshman and sophomore years, in the former of which he was honored by being elected our "First Class" President. He rowed No. 2 of the class crew during 1882 and 1883 and was one of that "immortal eight" who placed the blue and white above the crimson on that memorable occasion, July 1, 1882. For private reasons, "Johnnie," as he was familiarly called, retired from collegiate activities for two years, subsequently resuming his studies with the Class of '87, School of Mines, with which he was graduated with the degree of Civil Engineer.

Early in 1886, he entered the office of Walter M. Meserole, '81 Mines, City Surveyor of Brooklyn, becoming interested in the business in 1894, and in 1900 assuming the city surveying work of the office, specializing in the plan and development of city and suburban real estate and the construction of pavements and sewers.

In 1888 he enlisted in the 23d Regiment, becoming Sergeant. He was on strike duty in Buffalo, N. Y., in two trolley-car strikes in Brooklyn, and was honorably discharged in 1895.

He married Evelyn S. Colyer, March 31, 1891, and has one son, Cornelius W., born Jan. 13, 1893. He is a member of the Brooklyn Engineers' Club, Crescent Athletic Club, Manufacturers' Association of New York, and the Long Island Automobile Club. According to his unverified statements his height is 5 ft. 8 in., his weight is 160 lb., and he still has the same moustache he so proudly "sported" in 1885, but, alas! now no longer jet black as of yore.

His hobby is his automobile, which he loves to drive when he has time, and to talk about whether he has time or not.

He resides at 1390 Union Street, Brooklyn.



WALTER BROWNING PEET.

Walter B. Peet was born in New York City, March 24, 1861, and entered the Class of '85 in the freshman year.

Before going to college he rowed with the Resolute Boat Club on the Hudson River, both as a single sculler and in crews.

In 1882 he was captain and stroke of the freshman crew, which won both the class regatta and the Harvard race with ease, this being the first college eight-oared race which Columbia won.

In 1884 he stroked the 'Varsity crew, which was beaten by Harvard after one of the closest races ever rowed on the Thames. In 1885 he rowed No. 2 on the 'Varsity, which was again beaten. In 1886 he coached the 'Varsity crew, which easily won in separate races from Harvard and Pennsylvania. This crew was the first Columbia eight to win a 'Varsity race. Later he coached various successful Columbia freshman and 'Varsity crews, including the 1895 crew, which won the first Poughkeepsie Regatta.

For some years he followed the profession of his grandfather and father—the instruction of the deaf—and gave up this work to resume the study of medicine, getting his degree of M. D. and also taking the Harvard course of Theoretical Physical Culture, under Dr. Sargent. He has since devoted himself to the practice of medicine and literary work, including the writing of special magazine and other articles on medical topics, rowing-hygiene and anthropometry.

His height is 5 ft. 8 in., his weight 175 lb. Although an expert on physical culture he would do well to soliloquize with Burns—"Oh, wad some power the giftie gie us, to see oursels as ithers see us!"—and so endeavor to realize how far his present contour has departed from his treelman lines.

He married Maud Plympton, and has three children, Maud, Alma, and the youngest, Retlaw, now eighteen years old. He resides at Dunwoodie Heights, Yonkers, N. Y.



BENJAMIN RIPIN.

Benjamin Ripin began the course at the School of Mines with the Class of '85, but left college during the senior year to enter business. He is a member of the firm of Ripin & Co., producers of sparkling wines. He was born in New Orleans, La., Aug. 29, 1864, and on Sept. 28, 1905, was married to Margaret Cohen, of Berlin, Germany. They have two children: Rowena and Paula Morine, respectively five and three years of age.

His height is 5 ft.  $5\frac{1}{2}$  in.; his present weight, 150 lb. He wears a moustache and is nearly bald. His present address is 542 West 36th Street, New York City.

#### LOST, STRAYED OR STOLEN



ANDREW J. BRENNAN





BURNHAM HART



HARRY N. PIERCE

#### Class of '85 Mines

#### ANDREW J. BRENNAN.

And then Brennan there is, Bully Lad!
For to greet him we all would be glad;
But he's gone and got lost,
And, alas, to our cost—
He was one of the finest we had.

#### WILLIAM F. BUSH.

And there's Bush, too, has passed from our midst.
Ah, however, Old Man, could you do it?
For you knew if you done as you didst
You were sartin to live for to rue it.
We have thought through the flood of the years
That some word or some token you'd send us;
But no sign e'er appears, and our fears
And our sorrow are likely to rend us.

#### BURNHAM HART.

The old class spirit holds as when
We met in days of old;
The same affection now as then
Our hearts will ever hold.
We give you greeting from each heart,
That beats so warm and true;
And sympathy for aye! Dear Hart,
We ever hold for you.

#### HARRY N. PIERCE.

Ah, Pierce, the years have passed, as clouds Float swift across the blue;
Their drifting folds as winding-shrouds That hide the sun from view;
The years have passed since last we met, But brightness follows rain;
The clouds obscure our view, but yet We still may meet again.
If thou on Earth's maternal breast Art sunk in dreamless sleep,
Then peace to thee and fair thy rest While stars their vigils keep.

#### In Memoriam

As shades of twilight over sunlight creeping
Shut out the dying day,
So o'er our Comrades dark'ning shadows sweeping
Hid them from us away.

While yet we seek that shadowy veil to render, To clasp their hands once more, We dimly feel each pressure, true and tender, As in the days of yore.

And thoughts of them forevermore will lighten
Those dim funereal glooms;
Their peaceful graves fond mem'ry's tributes brighten
With fair memorial blooms.

W. E. S.

Thomas G. Nichols (1882).
Howard Seaman (1883).
Howell Finch Barkley (1895).
Russell Wadsworth Hildreth (1895).
Frederick Morgan Watson (1900).
Charles Burton Crowell (1902).
Frederick Mayhew Thomas (1908).
Edward Newenham Van Cortlandt (1910).

#### HOWELL F. BARKLEY.

Barkley was with the Class of '85 throughout the four years, graduating with the degree of Engineer of Mines. Shortly after graduation he entered the Health Department of the City of New York, serving as sanitary inspector of plumbing and ventilation from Aug. 18, 1887, to Nov. 11, 1890, and as sanitary engineer of plumbing and ventilation from Nov. 11, 1890, to June 1, 1892. He died in the year 1895.



CHARLES BURTON CROWELL.

"Charley" Crowell entered the class in 1881, rowed on the victorious Freshman crew, and took an active interest in boating matters during his college career. He was graduated with the Class of '85, receiving the degree of Bachelor in Philosophy in the course of Chemistry.

Shortly after graduation he married, and a year or two later he contracted tuberculosis of the lungs and moved to Colorado Springs, Colo., where he lived for about eleven years. Having a private income of his own and being in poor health, he never followed his profession. He was universally esteemed among his associates in the West, as he was in his class. He left no children.



RUSSELL WADSWORTH HILDRETH.

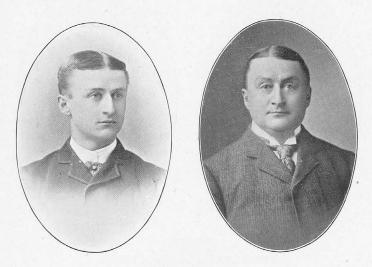
Russell Hildreth was born in New York City, Feb. 12, 1865. His early education was in the New York Public Schools. During his course in the Mines he was quiet, studious, and stood second in his course. He was graduated with the Class of '85 with the degree of Engineer of Mines.

Shortly after graduation he became a draftsman in the New York office of George S. Morison, from which association, coupled with his natural mathematical talent, he was drawn into bridge and structural engineering as his life work. In March, 1886, he went to the Buffalo shops of the Union Bridge Co., and up to April, 1887, was engaged in the inspection of the double track highway bridge across the Missouri River, at Omaha, Neb., for the Union Pacific R. R. Co., and two bridges for the Oregon R. R. & Navigation Co.; April 1 to Aug. 1, 1887, Assistant Engineer on the Union Pacific bridge at Omaha; Aug. 1, 1887, to Jan. 1, 1888, at the Athens shops of the Union Bridge Co., in charge of the inspection of a bridge across the Willamette River at Portland, Ore., for the O. R. & N. Co.; Jan. 1, 1888, formed with W. A. Nettleton the firm of Hildreth & Nettleton, inspectors of bridges, which firm became R. W. Hildreth & Co., Sept. 1, 1888; Russell, having parted with Mr. Nettleton, took his brother Percy S. Hildreth into the firm.

He inspected the New London, Red Rock, and other large bridges, and designed the bridges and viaduets of the Wilkes-Barre & Eastern R. R., including the high viaduet over Panther Creek.

He died of typhoid fever Dec. 24, 1895, at the age of 30.

Hildreth was a member of the American Institute of Mining Engineers, a junior member of the American Society of Civil Engineers, a member of the Engineers' Club of New York, and of the Alpha Delta Phi fraternity.



#### EDWARD NEWENHAM VAN CORTLANDT.

Van Cortlandt, or "Van," as he was familiarly called, was graduated with the Class of '85 with the degree of Engineer of Mines. Later in the year he went West and took a position as manager of a small smelter in Southern Idaho, where he remained about a year. His next connection was for a year with a gold mine in Southern Colorado. Toward the end of 1889 he moved to Denver, Colo., and shortly afterward he went to Panama and Colombia, where he remained for about two years, in charge of a gold mining proposition. He then went to the Celebes Islands for three years, representing a Dutch syndicate. In 1895, he returned to Denver, and opened an office as Consulting Engineer. During the next ten years he traveled professionally to South America, the East Indies, and many of the Western States, and about 1905 he moved to New York, still keeping his Denver connection. He died at the Engineers' Club in New York in the early spring of 1910, his health having been shattered by the attacks of tropical fever he had experienced in his travels. He never married.





FREDERICK MORGAN WATSON.

Fred Watson, born Aug. 1, 1865, and though one of the youngest members of the class, was graduated with the Class of '85, receiving the degree of Engineer of Mines with the highest honors. After graduation he went to the La Noria mines, near Sombrerete, Zacatecas, Mexico, and a short time later to the Sombrerete mine, where he remained about three years in charge of the metallurgical work of the mine. From 1888 to 1894, with the exception of a year in London, he was in charge of the Casa Palca mines in Peru, owned by Johnson & Backus; in 1894, he went to South Africa at the request of Mr. John Hays Hammond; in 1894 and 1895 he was consulting engineer for the Consolidated Gold Fields of South Africa in Rhodesia; in 1895, he was in charge of the Simmer & Jack Proprietary Mines in Johannesburg, built their 280-stamp mill and developed the mines to the premier position on the Rand; in 1899 he became joint manager of the Consolidated Gold Fields, being one of the very few Americans ever appointed to so high a position on the Rand.

The work and responsibility of this position, intensified by the Boer war, broke down his health, and in 1900 he returned to Europe and died during the spring at Cannes, France.

Fred never married and was always the charming host and able engineer whom we knew in College. His name remains as one of the bright ones in the galaxy of the Class of '85.

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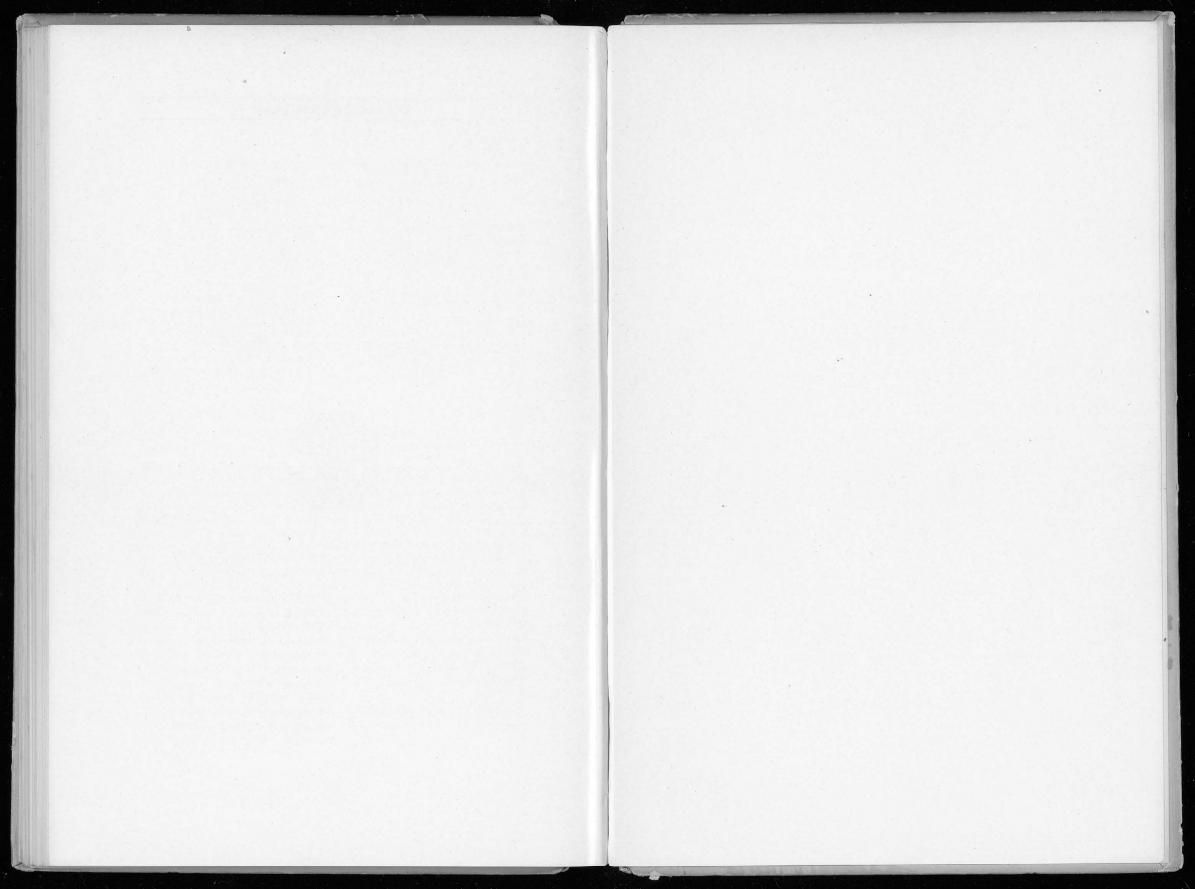


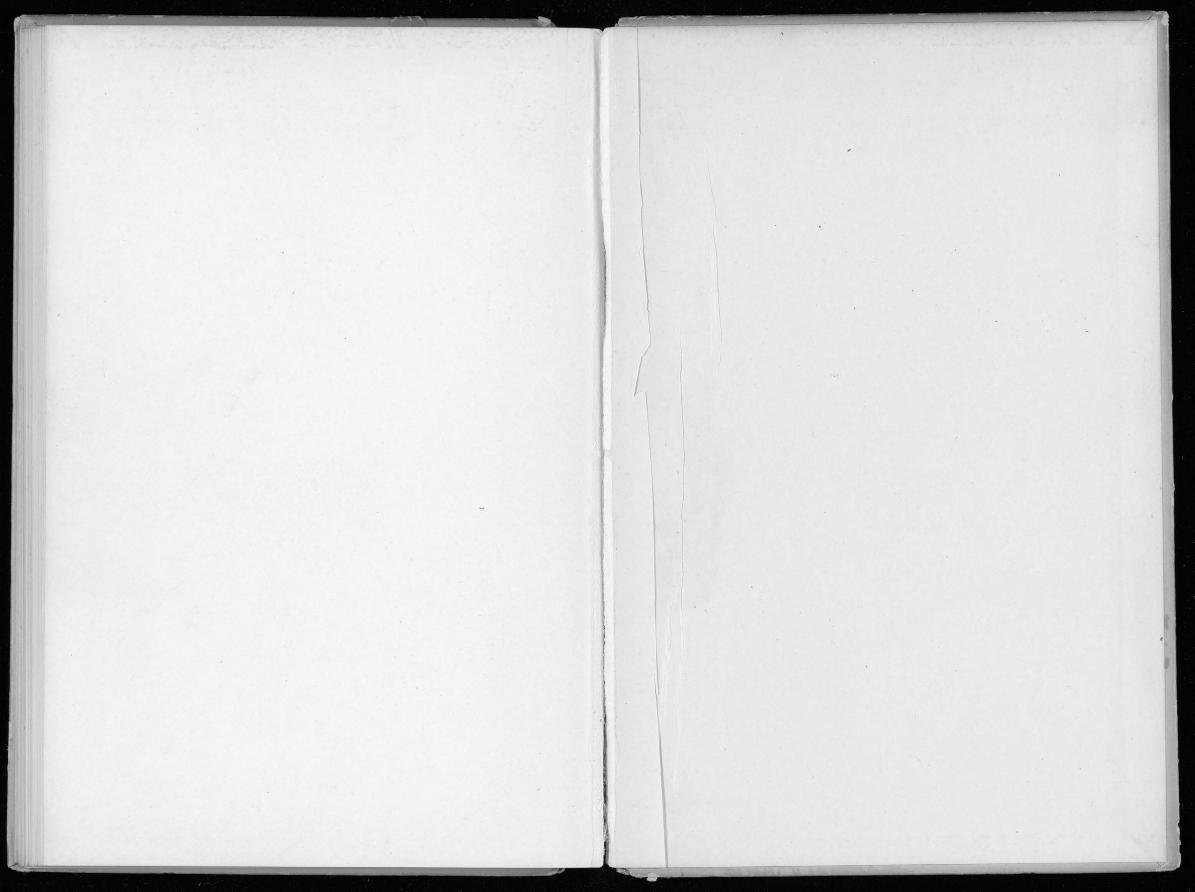
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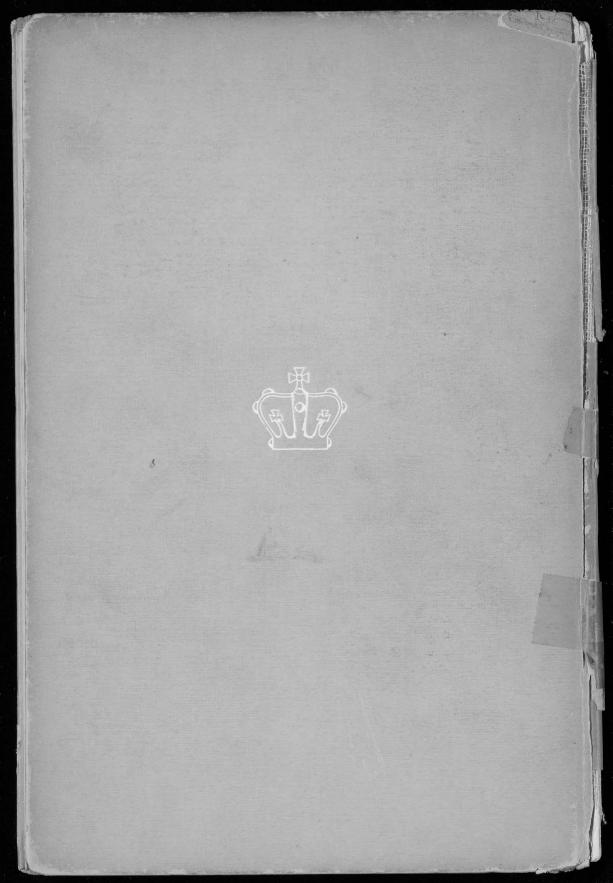
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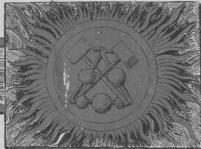
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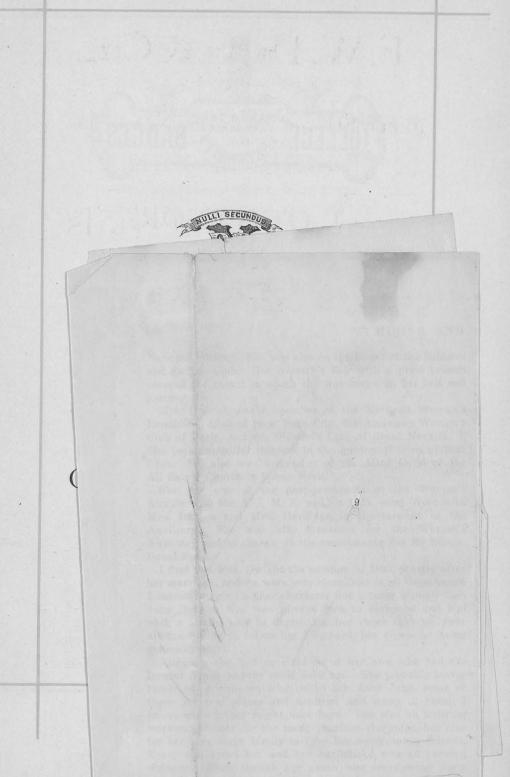
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METALLURGY

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Harvey Batcheller, professor of mining engineering at the School of Mines, Oregon State College, Corvallis.

#### Mrs. Arthur S. Dwight

JANE EARL REED DWIGHT, wife of Col. Arthur S. Dwight, died at her home at Great Neck, L. I., on Jam. 11, 1929, at midnight, after a week's illness of pneumonia. She was born on Feb. 13, 1868, at Joliet, Ill. Her father, Samuel B. Reed, was chief engineer in charge of the construction of the Union Pacific Railroad, the first railroad to cross the continent.

Mrs. Dwight was educated at St. Mary's School, Knoxville, Ill.

After her marriage, on June 4, 1895, to Arthur S. Dwight, she moved to Pueblo, Colo.; and later lived successively in Leadville; El Paso; Argentine, Kansas; San Luis Potosi, Mexico; and Cananea, Mexico, until 1906, when they moved to New York. In 1914, they built their lovely home in



Photograph by Bachrach
Mrs. Arthur S. Dwight

Great Neck, L. I., where so many of us have enjoyed her delightful hospitality.

When we entered the Great War, Mrs. Dwight, on Aug. 7, 1917, went to France. She was not attached to any unit but served in the French Red Cross and canteen at the Gare du Nord in Paris. Later joining the Y. M. C. A., she soon, on account of her unusual abilities, was made regional directress in charge of all the women workers at the American front. In recognition of her splendid work she was awarded the Croix de Guerre with bronze star, by the French Government for bravery under fire. Also she was cited for the order of the British Empire for organizing the relief for the thousands of starving British prisoners of war who drifted into Nancy immediately after the Armistice.

After her return, in 1919, she again took up her work in the New York Diet Kitchen Association and was first one of the managers and later, in 1924, was made president of that Association for two years; and was, until her death, very active as one of the board of managers. Mrs. Dwight retained her interest in the service men for whom she had worked so hard overseas and became president of the New York Unit of the Women's Overseas Service League, having served the previous year as vice-president of the

# "Mining & Metallurgy" articles on Annual meeting A.I.M.E.

Finally the toastmaster introduced the newly elected

President, F. W. Bradley, who in a few well-chosen words expressed the hope that during his term of office he might accomplish something of enduring and constructive benefit for the Institute, and then asked the audience to stand for a moment in honor of the memory of Mrs. A. S. Dwight, who had given so generously of her time and effort in the upbuilding of the Woman's Auxiliary, which has come to have so large a place in the work of the Institute.

The greater part of Tuesday was taken by the annual meeting of the Auxiliary, with Mrs. Donald M. Liddell, First Vice-President, presiding, in the absence of the President, Mrs. Hoover. Before the business of the day was entered upon, resolutions expressing the sorrow of the members of the Auxiliary on the death of Mrs. Arthur S. Dwight, and their deep appreciation of her devoted service, were read. The names of the other members of the Auxiliary who had passed away during the year were read, and the ladies stood in a tribute of silence to the memory of all of these friends who would not meet with them again. The members of the Auxwill all receive the detailed account of the annual

National Society. She was also on the Board of the Soldiers and Sailors Club. Her country's flag with a palm branch covered the casket in which she was borne on her last sad journey.

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Mrs. Dwight was a member of the National Woman's Republican Club of New York City, the American Women's Club of Paris, and the Woman's Club of Great Neck, L. I. She took particular interest in the garden division of that Club. She also was a member of the Altar Guild of the All Saints Church in Great Neck.

She was one of the past-presidents of the Woman's Auxiliary to the A. I. M. E. and, in 1925, went West with Mrs. Barron and Mrs. Hardinge in the interest of the Auxiliary. She was also treasurer for the Woman's Auxiliary and in charge of the investments for its Educational Fund.

I first met Mrs. Dwight the summer of 1895, shortly after her marriage, and we were very close friends all these years. I cannot imagine a finer character nor a truer woman than Jane Dwight. She was always just to everyone and had such a kindly way in expressing her views that we were always willing to follow her judgment, her viewpoint being generally right.

Although she had no children of her own, she had the largest family anyone could have had. She probably leaves hundreds of children who called her Aunt Jane, some of them her real nieces and nephews and many of them, I know, wished they might have been. She was an untiring worker, not only for the many charities she aided, but also for her very large family and for her many, many friends. Every one loved her and her handshake was an assured welcome. Even though her house was overflowing there was always room for one more and she always made the unexpected guest feel that he or she was necessary to make the party complete. Colonel and Mrs. Dwight have given many a boy and girl the education that was needed to start them on their life's journey. These boys and girls know only too well what an unselfish loyal friend and adviser they have lost.

These, as well as the great host of other friends, will form a most enduring monument for her life of good works and while we mourn her loss more than we can express in words, we must not forget the great privilege which has been ours in having had her with us to council and advise these many years.—Leonie W. Eilers.

#### Clifford G. Dennis

CLIFFORD G. DENNIS died suddenly on Dec. 28, 1928, while visiting his eldest son at Atolia, Cal. He was born on Aug. 22, 1881, at San Jose, Cal., and was the son of W. A. Dennis, former manager of the New Almaden quick-silver mines. About 1890 his father moved to Nevada City to take charge of the Mountaineer mine, about one mile down Deer Creek from Nevada City. Here Clifford spent all his boyhood days, acquiring a great deal of first-hand information about the underground mining and the milling of gold ores.

In 1896 and 1897, he attended preparatory school at Belmont, Calif., and then took a special two-year course at the University of California. During his vacations and for a while after leaving the University, Clifford worked as assayer and surveyor for several Nevada County mines and later became a migratory ten-day miner, working in many of the mines of California, Nevada, Arizona, and New Mexico.

About 1901 he secured the position of superintendent of the Santa Felistas Gold Mining Co., Sonora, Mexico, remaining there until 1902. He then returned to California and married Stella M. Kindred of Alameda. In early 1903, leaving his bride for a few months, Clifford went to Korea

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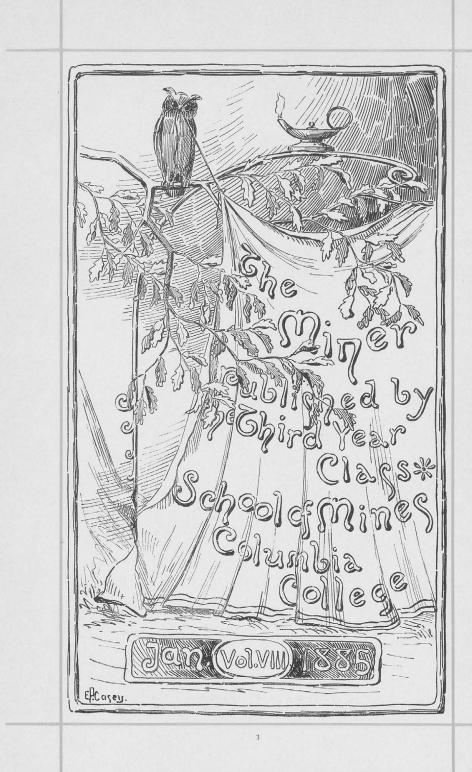
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## · A Warning ·

EAR readers, who in bygone years
Have always bought the MINER;
Who love upon its page to gaze,
Who think there 's naught diviner:

You, learned Profs, who long to greet
Its joyous witty lightness;
And you, sweet child of Eighty-Eight,
Who ne'er hast known its brightness:

You, all good people of New York, You, men with pretty cousins, Who gladly lay your dollars down, And take the book by dozens:—

Alas! Alas! Take care! Read this!

To steal our reputations,
A shameless band dark plots have laid—
BEWARE OF IMITATIONS.

Not distant far from us there lies A little children's college, Where seven of the smallest are Not busy getting knowledge. Ah, no! A little pamphlet sheet
They're craftily devising,
To keep its just, bisected-dollars
The MINER from realizing.

O think not that their poor trash is

The brilliant far-famed MINER;
'T is the *Columbiad!* Half a glance,
Sufficient to define her:—

Its cover is a wretched scrawl,
Its tales far, far from funny,
Its jokes have reached a fearful age;
There's nothing worth your money;

Its sketches you would think were drawn
By flies' legs on a frolic;
A single verse of any poem
Would bring on violent colic.

Take heed, dear friends, and shun their fraud;
Trust not such cheek infinite;
Each genuine MINER bears the names
Of its famous Eds. within it.



### · Editorial ·

Way and according to its own liking, the critical reader will observe that, although this MINER differs from its predecessors in being much better than they, the main characteristics of our prehistoric ancestors have been retained. The old associations and clubs will be found in their accustomed haunts and the new ones have received proper attention. Many superannuated jokes upon the various professors and other *bric-à-brac* have been cast aside and new ones put in their place; a few may creep into our pages in spite of our endeavors to "keep the rascals out." (An invoice of copyrighted puns and "goaks" was expected from the talented ex-historian of '87, but our readers will be deprived of this rare literary treat owing to the Mayersterious disappearance of that individual.)

Believing that there is need of a more reliable source of information than that G.O.P., the "School of Mines Annual Register," we have revived the custom of printing a list of our trustees, faculty and students. By this means also we satisfy the ambition of each and every man to "get his name in the MINER." The space thus taken up is not lost, however, for we have added twenty pages to the usual number and hope to find room for the mention of all our more notorious class-mates. For any further information in regard to what the MINER is for, we prescribe a thorough perusal of its vivacious pages. If you know its object then, you need have no fear of missing a degree of D. Ph.

Members of Eighty-Six should read only certain portions of the foregoing; and the same rule may be applied to what follows. For all our suffering class-mates know what we are about to show for the outsiders—namely, that Eighty-Six is a class unequalled in the annals of the School of Mines, either hitherto or since. The reasons are most obvious.

In the first place a more modest class than this of ours scarcely can be imagined; its retiring disposition being most conclusively proven by the retirement, either into '87 or the wide, wide world, of 53 men since its entrance. 'T is true that, of those who now eat the salt of '87, it is said that their only reason for deserting Eighty-Six was an exaggerated love for certain professors, whom they wished still to be under. But this we believe to be a Butler campaign lie; modesty, and modesty alone was the true cause of their defection. Now, "Modesty is one of the leading characteristics of great minds," according to a well-known author. Integrating and reducing by means of formula [A], we see at once that Eighty-Six is one vast assemblage of great minds.

Next to our modesty comes our capacity for winning rushes. Never, since entering college, has Eighty-Six lost a rush. No! not even on that memorable day when, upon our differential of a campus, we met and conquered the united forces of '85 and the Dean of the faculty. And our deeds of valor on that occasion were but as nothing to our exploits one short year later when we vanquished the howling hordes of '87, with odds of five to one against us. Had we the time and the space, we would recount the history of our laurel-wreathed rushers to such good purpose that Mr. Homer's account of J. Sullivan O'Disseus would be cast aside forever and the '86 MINER enthroned in its place in the hearts of all true hero lovers.

Then, too, we have devoted a few moments to athletics, and in all branches of this study we lead the college. Our innumerable medals, of '87-skin (calf-skin), embossed in gilt, are now on loan (NOT at the Metropolitan Museum).

Eighty-Six has further added to its world-wide reputation by earnest efforts to revive some of those traditional college customs which have been, of late years, "conspicuous by their absence," rather than by their presence. Among other things, athletic sports on the campus have received much attention, several of our members devoting many hours to exercising their arm muscles by pitching disks of Cu and Ni to and fro. The ancient and honored custom of electing a class dude has been re-established; a class dinner is spoken of; and it is even whispered that there is a movement on foot to give a Junior Reception.

And lastly, Eighty-Six numbers more level heads per sq. in. than any other class that has entered this school since it was "founded upon a (Tomy)-Rock." Why? Why, because they have elected us

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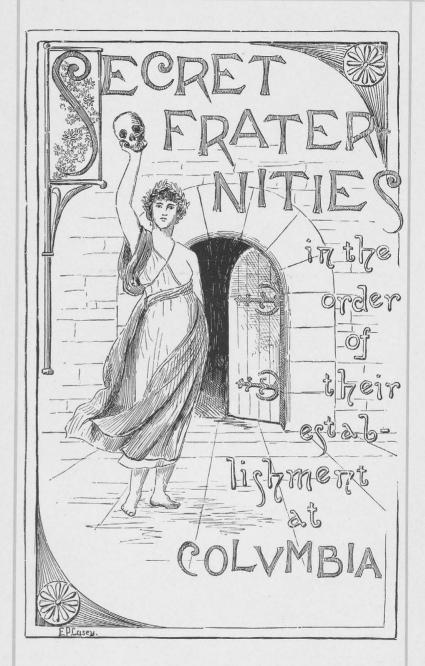
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1887.

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1888.

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CHAS. ELLSWORTH BECKWITH, JOHN VAN AERNAM RHOADES, WALTER LINCOLN TYLER, SIDNEY AUGUSTUS SMITH, JOHN TEMPEST WALKER, JR.

1888.

WILLIAM DE WOLF DIMOCK, SAMUEL COCHRAN HERRIMAN, REUBEN HOWES, HENRY WARD JOHNS, JR.,

DOUGLASS EWELL, WILLARD C. HUMPHREYS,

ROBERT FINNEY MATHEWS, LOUIS MANSFIELD OGDEN, JAMES LANCASTER MORGAN,

JAMES JAY MAPES,

FRANK ATKINS PLUMMER.

#### · School of baw ·

JUSTUS ALBERT BOEIS COWLES, WILLIAM THORNTON LAWSON, EDWIN AUGUSTE RICHARD, PHILLIP LEON RUNKLE, JAMES HENRY WARD, JR.

#### · School of Medicine ·

CHARLES FRANCIS BRIDDON, JAMES HARPER NORTH, JR., MARSHALL WARRIN.

#### · Dost Graduate ·

ABRAHAM VALENTINE WILLIAMS JACKSON.



### · Delta Ghapter ·

## · Fraternity of Delta Phi.

ESTABLISHED 1827.

### · Schools of Arts and Mines ·

1885.

GEORGE MOUNT GRAY, LÉON MARIÉ,

AUSTIN KELLEY, ARTHUR BRONSON TOWNSEND.

1886.

ELLSWORTH MALTBY BARRY, WILLIAM MANICE, FRANCIS ULLSHOEFFER PARIS.

1887.

JAMES REGINALD FOSTER.

1888.

ASA SPRAGUE ASHLEY, Louis de Sibourg, JOHN SLADE,

HENRY SLEEPER HARPER, LEWIS MORRIS, HERMAN ALBERT VEDDER.

#### · School of baw ·

HALLET ALSOP BORROWE, GEORGE FREDERICK GARR, FRANCIS PORTER LOWREY, PHILIP LIVINGSTON, ROBERT TAYLOR VARNUM.

#### · School of Medicine ·

WILLIAM CHRYSTIE, FREDERICK GEBHARDT LEROY, GOUVERNEUR KEMBLE, JR., WILLIAM H. MORGAN, PHILIP RHINELANDER.

LEON ALDAMA DEL MONTE,

### · Post Graduate Gourse ·

FRANCIS BENIGNO DEL CALVO.

# . Fraternity of Delta Psi.

FOUNDED 1847.

### · Roll of Ghapters ·

ALPHA,			 . Columbia College.
DELTA,			Pennsylvania University.
EPSILON,			Trinity College,
IOTA, .			. Rochester University.
LAMBDA,			Williams College.
Рні, .			. Mississippi University.
UPSILON,			
SIGMA,			Sheffield Scientific School.



### · Alpha Ghapter ·

F THE

## · Fraternity of Defta Psi.

ESTABLISHED 1847.

### · School of Arts .

1885.

TEMPLE BOWDOIN, JOHN SCOTT BROWNING,
EDWARD LIVINGSTON BURRILL,
ARDEN MORRIS ROBBINS, GEORGE STILLMAN ROBBINS.

1886.

APPLETON LESURE CLARK, GEORGE AUGUSTUS POST, JOHN HENRY TOWNSEND, CHARLES PINCKNEY KIRKLAND, CHARLES RANDOLPH, ARTHUR TURNBULL,

JOSEPH LAWRENCE.

1887.

James Francis Bacon, Sidney Harris, Stuyvesant Leroy, Jr., Guy Richards, Robert Cornell Sands,

CHARLES ALBERT STEVENS,

WILLIAM HULL BROWNING,
JOHN HENRY HOLDEN,
BENONI LOCKWOOD, JR.,
CHARLES ERNEST SANDS,
SAMUEL SLOAN, JR.,
WILLIAM FREDERICK WARD,

RICHARD THORNTON WILSON, JR.

1888.

GOODHEW LIVINGSTON, WILLIAM S. POST,

VALENTINE HALL, BENSON B. SLOAN.

#### · School of Mines ·

STOCKTON BEEKMAN COLT, GEORGE CARNEGIE PALMER, JOHN HOWELL JANEWAY, JR., S. B. PARKMAN TROWBRIDGE.

### · School of baw ·

REGINALD RIVES, '85, BENJAMIN STEPHENS, '86, J. MAYHEW WAINRIGHT, '86,

5, HERBERT L. SATTERLEE, '85, s, '86, WILLIAM R. TRAVERS, JR., '85, GHT, '86, HAMILTON FISH WEBSTER, '85, J. RUSSELL WHITE, '86.

School of Medicine .

WILLIAM MITCHELL VAIL HOFFMAN.

### · Fraternity ·

## · Phi Gamma Delta.

FOUNDED 1848.

### · Roll of Shapters ·

7						
ZETA,						Indiana State University.
LAMBD	A,					Indiana Asbury University.
NU,					,	Bethel College.
XI,		141				. Pennsylvania College.
OMICR	ON,					. Virginia University.
Pı,						
TAU,						Hanover College.
UPSILO	N,					New York City College.
Рні,						. Maryland University.
Psi,						Wabash College.
OMEGA	,					. Columbia College.
ALPHA	DEU	JTER	ON.			Illinois Wesleyan University.
BETA I						Roanoke College.
DELTA						Hampden Sydney College.
EPSILO	N D	CILTE	DOM:			
7	N D	EUIE	RON,	•	*	. Muhlenberg College.
ZETA I						Washington Lee University.
THETA	DET	JTER	ON,			Ohio Wesleyan University.
IOTA I	EUT	ERON	Ι,			Cumberland University.
XI DE	UTEŔ	ON,				Western Reserve College.
OMICRO						. Ohio State University.



### · Omega Ofapter ·

· Fraternity of ·

## · Phi Gamma Delta.

ESTABLISHED 1866.

#### · Schools of Arts and Mines ·

HAMILTON CADY, JOHN WESLEY FRENCH, HARRY NELSON PIERCE,

JOHN ALBERT RYERSON, GEORGE DOWNING SPARKS, EMIL FELIX STOIBER,

JOSEPH STRUTHERS, JR.

ADOLPH BIERCK, JR.,

James Nack Ballantine, Edward Franklin Cole, RICHARD MASON EDWARDS,

ELIAS BURTON HART.

1887.

WILLIAM EFFINGHAM SUTTON.

1888.

EDWARD MILLS DECKER.

### · Affociate Members ·

LANGDON CHEVES EASTON, WALTER RICHARD GRIFFITH, HUGO JULIUS WALTHER.

HENRY HOWARD MARVIN,

### · School of baw ·

HALSTEAD HOLOWAY FROST, WILLIAM KNOX LOWREY, CHARLES J. HARDY, RUDOLPH V. FRIEDRICHS, WILLIAM LIVINGSTON HAZEN, PURDY VAN VLEIT.

THOMAS MCADAM, AUSTIN EDMUND PRESSINGER,

#### · School of Medicine ·

HERMAN A. EHRMAN, WILLIAM GORDON, CHARLES REISIG HEXAMER,

JOHN DE MUND, ROBERT LEWIS, JR., JAMES HENRY MONTGOMERY,

JAMES B. WARDEN.



### · Beta Ofapter ·

OF THE

· Fraternity of ·

## · Delta Rappa Epsilon ·

### · Schools of Arts and Mines ·

1885

JARED GROVER BALDWIN, JR.,
HENRY ANTHON BOSTWICK, JR.,
CHARLES ALFRED CHRISTIAN,
RANDOLPH EUGENE FISHBURN,
GRANT SQUIRES.

EMLEN PLEASANTS FRAME,
ROBERT COLEMAN KEMP,
HARRY KEARSARGE KNAPP,
EDWARD JOHN MILHAU,
SQUIRES.

1886.

ALFRED FREEMAN BALDWIN,
JOHN VERNOU BOUVIER, JR.,
RICHARD COBDEN,
LINCOLN GRANT MCCORMACK.

CHARLES BELLAMY CULVER,
PERCY SHELDON DUDLEY,
EDWARD WM. S. JOHNSTONE,
LINCOLN GRANT MCCORMACK.

1887.

HARMER ST. CLAIR DENNY, ASA BIRD GARDINER, JR.,
HERBERT BERNARD GAUSE, RICARDO DE BELVIEW SMITH,
HAROLD STREBEIGH.

1888.

WILLIAM BENFORD AITKEN, WILLIAM CALVIN ORMISTON, EDWIN GOULD, EDWARD WILLIAM SCOTT, JR., SAMUEL WYMAN SMITH.

#### · School of baw ·

HERVEY VAN ALEN ANDERSON,
CHARLES MADISON CANNON,
GEORGE CROMWELL,
ELIHU BRINTOL FROST,
CHARLES HALSEY,
JOHN ROGERS HALSEY, JR.,
ALBERT EDMOND SYMINGTON.
CHARLES HERVEY JACKSON,
MARVIN THOMAS LYON,
CHARLES F. MATTHEWSON,
KIER MITCHELL,
EDWARD MILLS PERRY,
CLARENCE MELBURY SMITH,

#### · School of Medicine ·

NICHOLAS JOSEPH DOYLE, ERNEST HOWARD LINES, EDWARD MILLER CAMERON.

## · Fraternity of Zeta Psi·

FOUNDED 1846.

### · Roll of Ghapters ·

Рні,					University of New York
ZETA	, .				Williams College
DELT					20 21
OMIC	RON,				. Princeton College
SIGM	Α,				University of Pennsylvania
Сні,					Colby University
Rно,				,	. Harvard University
KAPF	A,				Tufts College
TAU,					<b>*</b> * * * * * * * * * * * * * * * * * *
XI,					. University of Michigan
OMEG					. University of Chicago
PI,			. 1	Rens	selaer Polytechnic Institute
LAME	BDA,				Bowdoin College
					. Cornell University
					University of California
GAMI	MA,				. Syracuse University
THET	'A XI,			Uni	versity of Toronto, Canada
ALPH	IA,				. Columbia College
	IA PSI,				McGill University, Canada

26



### · Alpha ·

## · Fraternity of Zeta Psi·

ESTABLISHED 1879.

### · Schools of Arts and Mines ·

1885.

JAMES RUFORD FRANKLIN, ERNEST J. HYACINTHE AMY, ARTHUR MCJILTON COX, HENRY BRENGLE SHOPE,

GEORGE ENOS THROOP, E. MACDOUGALL HAWKES.

1886.

FRANKLYN PLATTE SHERWOOD, CORNELIUS VAN VORST SEWELL, RICHARD HAYES McDonald Spencer.

1887.

PEREZ HASTINGS FIELD, JAMES RANKIN PLUM, HENRY MILTON REQUA.

1888.

REGINALD GORDON, H. EGGLETON MONTGOMERY, SYDNEY PICKARDT,

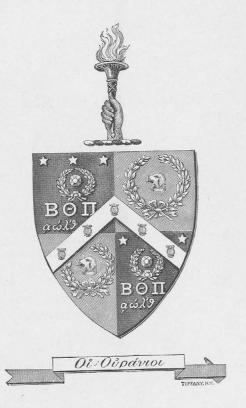
ROBERT LEE MORRELL, HARRY TOWER SHRIVER, E. BERESFORD PICKARDT.

· School of baw ·

COLEMAN EMBURY KISSAM, CHARLES STETSON DEVLIN, CHARLES MEREDITH DONNELY.

· Resident Graduate ·

GEORGE EDWARD WOOD.



### · Alpha Alpha Ghapter ·

OF THE

## . Fraternity of Beta Theta Di.

CHAPTER ESTABLISHED 1880.

· School of Mines

1885.

CLINTON BRAZIL VAN TUYL, CHAS. HORACE DOOLITTLE, WILBUR EDGERTON SANDERS, FREDERICK MAYHEW THOMAS.

1886.

ERNEST JOSEPH LEDERLE.

1887.

FREDERICK ANTHONY BRISTOL, HARRY GILBERT DARWIN, DANIEL COREY ADAMS.

1888.

JAMES LINCOLN HURD.

· School of baw ·

WILLIAM ABBOT JONES, JR., EDGAR STORM APPLEBY,

RUSH CLARK LAKE,
JAMES ISHAM GILBERT.

· School of Medicine ·

FRANCIS ROLLIN PERCIVAL.

### · Fraternity ·

OF

## · Defta Jau Defta ·

FOUNDED 1859.

### · Roll of Ghapters ·

ALPHA, .				Alleghany College.
Beta, .				Ohio University.
GAMMA, .			Wa	ashington and Jefferson College.
EPSILON, .				Albion College.
ETA,				Buchtel College.
THETA, .	12.11			Bethany College.
IOTA, .				Michigan Agricultural College,
KAPPA, .				Hillsdale College.
LAMBDA, .				Lombard University.
Mu,	-9.03			. Ohio Wesleyan University.
Nu,				. Lafayette College.
XI,				. Simpson Centenary College.
OMICRON, .				Asbury University.
PI,				Lehigh University.
Rно,				Stevens Institute.
SIGMA,				Mt. Union College.
TAU,				Franklin and Marshall College.
Рні,				Hanover College
CHI,				. Iowa Wesleyan University
				Wabash College
				. Iowa Agricultural College
OMEGA, . Epsilon Bet		•		Illinois Wesleyan University
-				Butler University
				Western University
			•	Adrian College
IOTA BETA.		•		Columbia College
GAMMA BETA				Columbia conesc



### · Sigma Shapter ·

OF THE

· Fraternity of ·

### · Delta Jau Delta ·

· Schools of Arts and Mines ·

1885.

ALEXANDER DARWIN KEYES.

1886.

ANTHONY ARNOUX, JOHN ALVEY MILLS, LOUIS JOSEPH RICKENDORFER, ARTHUR HOFFMAN VAN BRUNT.

1887.

ELIHU DWIGHT CHURCH, JR., GEORGE ROWLAND.

PETER CHAUNCEY ANDERSON, JAMES ANDREW MOORCROFT,

1888.

VINCENT KING.

· School of baw ·

EDWARD HEDDEN APGAR, JAMES WALDEN CLELAND, JR., EBEN HURD PRAY SQUIRES.

ERNEST CARSON HUNT,

· School of Medicine ·

EDWARD WIGHT CLARK.

# · Fraternity of Phi Delta Theta.

### · Roll of Ghapters :

		0		1		1		
ALABAMA B	ETA,						State	College of Alabama.
Cropari Ar	PHA,						II	niversity of Georgia.
" BE	CTA,							. Emory College.
" GA	AMMA.							Emory College. Mercer University. Monmouth College. Know College
ILLINOIS GA	MMA,							Monmouth College.
" Di	ELTA,							Knox College. Wesleyan University.
							Illinois V	Wesleyan University.
	TA,							Lombard University.
INDIANA AI								Indiana University. Wabash College.
" Bi	ETA,							. Wabash College.
" G	ETA, AMMA,							. Buttler University.
" D	ELTA,							. Franklin College.
" E	PSILON,							. Hanover College.
66 /T	A Tr							De Pauw University.
IOWA ALPH "BETA KANSAS AL KENTUCKY MAINE ALF	Α						Iowa '	Wesleyan University.
" BETA	,						Stat	e University of Iowa.
KANSAS AT	PH A					W	1	University of Kansas.
KENTUCKY	AIPHA							. Centre College.
MAINE ATE	H A							. Colby University.
MAINE ALF MICHIGAN	RETA		•					College of Michigan.
WITCHIGAN .	GAMMA,						Detter	. Hillsdale College.
MINNESOTA	AIDHA							iversity of Minnesota.
MINNESOTA MISSOURI A	TOUA			555	3.53		0 11	
WISSOURI F	ETA			89				Westminster College
" E Mississippi New Hamp	AIDHA		•		0.00		Uni	versity of Mississippi
MEN HAME	CHIDE A	T DII A					Om	Dartmouth College
NEW HAMP	DEEL A	LPHA	,	•	•			. Union College
NEW YORK	CAMMA					Col	leve of t	be City of Now Vork
	DELTA					CO	lege of t	. Columbia College niversity of Nebraska
" Nebraska	DELIA,						· III	niversity of Nebraska
NEBRASKA	ALPHA,						Ohio	Wesleyan University
OHIO BETA	, ,						Onio	Objo University
" CrAM	ма, .		*					Ohio University Butchel College
								Ohio State University
" ZETA	, .							. Lafayette College
PENNSYLVA	NIA ALI	PHA,						Donnaylyania College
	BEI	Ά,			1,77			and Lefferson College
· · · · · · · · · · · · · · · · · · ·	GAN	MMA,		٠	V	vas	nington	Allogbony College
"	DEI	JTA,						Pennsylvania College and Jefferson College Allegheny College Dickinson College
	1011	THOI			•			
SOUTH CA	ZET	Α,					Unive	ersity of Pennsylvania . Wofford College
SOUTH CA	ROLINA	ALPH	Α,					. Wonord Conege
	"	βEΤΑ,					. 50	outh Carolina College
					•			Vanderbilt University
**	BETA,		**				. U	niversity of the South
TEXAS BEZ	ГΑ, .							University of Texas
VERMONT	ALPHA,			•				Jniversity of Vermon
VIKGINIA .	ALITA,							. Roanoke College
"	ВЕТА,	y.e.:						University of Virginia
"	Beta, Gamma,						. Rar	ndolph Macon College
**	DELTA,							Richmond College
46	DELTA, Epsilon	, .					. Virg	rinia Military Institute

32



E.A. WRIGHT, PHIL

### · New York Defta Chapter ·

OF THE

· Fraternity of ·

## · Pfi Delta Theta.

· Schools of Arts and Mines ·

1885.

HENRY LEONARD HOLLIS.

1886.

JOHN DOUGHERTY BERRY, ALEXANDER LAIST, ROBERT HENRY STODDER,
WILLIAM RADFORD WHARTON.

1887.

GEORGE LOUIS BAKER, JOHN BARRETT KERFOOT, GEORGE DUNDAS SCHRIBA, LEO WAMPOLD, JR.

· School of baw ·

JULIUS MARSHALL MAYER.

### · Summary ·

ALPHA DELTA PHI,	1.0					19
PSI UPSILON,						32
DELTA PHI,		101				26
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PHI GAMMA DELTA,						
DELTA KAPPA EPSILO	ON,	740	21.70			42
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BETA THETA PI, .						14
DELTA TAU DELTA,						
PHI DELTA THETA,						10
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· bocal Societies ·

35



### CYCLOPES

#### · Undergraduate Members ·

ERNEST JULIUS HYACINTHE AMY,
CHARLES BURTON CROWELL,
RANDOLPH EUGENE FISHBURN,
CHARLES FREDERICK LACOMBE,
LÉON MARIÉ,
EDWARD NEWENHAM VAN COURTLANDT,
JAMES JACKSON ORMSBEE,
STAUNTON BLOODGOOD PECK,
HENRY DUNNING CONANT,
HENRY SNYDER KISSAM,
JOHN TEMPEST WALKER, JR.,
LEA MCILVAINE LUQUER.

### · Graduate Members ·

MICHAEL JOSEPH O'CONNOR, GEORGE SHARP RAYMER, ARTHUR CARR ROBERTS, THOMAS BEALE STEARNS, ALVAN HOWARD VAN SINDEREN, WILLIAM HAMILTON COOPER, THOMAS DEVLIN O'CONNOR, FERDINAND SANDS, WILLARD ADAMS SHUMWAY, DONALD BUTLER TOUCEY, JAMES BROWN, JOHN EDWARD CALHOUN, THOMAS JOHN BRERETON, GEORGE EDWARD PAINTER, GEORGE RENAULT, ALBERT EDWARD TOWER, ARTHUR LUCIAN WALKER, GEORGE ERNEST FAHYS, SAMUEL STEWART FOWLER, JOHN WILKESON McGENNIS, JR., CHARLES ALBERT PAINTER, FRANK DEMPSTER SHERMAN, HENRY MEIGGS CORNELL.

### · Mines Glub ·

FOUNDED APRIL 5TH, 1881.

JUNIOR.

#### · Undergraduate Members ·

CHARLES A. REED,

RANDOLPH E. FISHBURN.

#### · Graduate Members ·

WILLIAM H. COOPER,
OSCAR DOUGHERTY,
HENRY FEUCHTWANGER,
C. FREDERIC PARRAGA,
CARLOS F. FERRER,
EDWARD L. YOUNG,
EDWARDO OCTAVIANO,
GEORGE ENDICOTT,

GEORGE RENAULT,
BEVERLY R. VALUE,
JOHN W. MCGENNIS, JR.,
WOLCOTT E. NEWBERRY,
JOSEPH H. FITCH,
ROBERT MULFORD,
W. HARRY SINGER,
ROLAND G. ROOD.

· Glass Organizations ·



## · Glass of '85 ·

#### · Officers ·

CHARLES FREDERICK LACOMBE,	. President.
IRA HARVEY WOOLSON,	Vice-President.
CHARLES EVERETT GRAFF, .	. Secretary.
LÉON MARIÉ,	. Treasurer.
ARTHUR SMITH DWIGHT.	TTistania

VOLUTION is a law of nature, and eyen as the crude, half-witted quadrumana becomes transformed into a rational being, learned in the sciences, so we, in one short year, have been metamorphosed into fourth year men with heaps of information about the undulatory theory of light, and many other similar subjects upon which the science of mining engineering is founded. See you yonder man pacing with dignity the halls, his brows knitted with thought as he works out the problem of problems, what to take for his thesis? His mind is deep, his head is big. Big also are those books, pseudomorphs after "Webster's Unabridged," which he consults from time to time and appears to take delight in. When I tell you that he was once in the third year, and a "MINER" editor, do not be surprised and shudder at the thought, but try and forget it, for he will never do it again.

Our third year with all its trials and pleasures passed quickly, and summer with its duties came. The "civils," instead of going, as is usual, to the romantic Lake Otsego, were consigned to the gloomy fate of remaining in the city to do "office and observatory work." The "civils" are quite reticent about this period of their existence, and, in consequence, the historian is unable to record the details, and is left to wonder whether the "office and observatory work" consisted in dusting the professor's desk and polishing up the brass work in the observatory, or in gazing longingly through the telescope at the electric lights at Coney Island, and calculating their orbits.

The mining engineers, about forty in number, were sent off to the Lake Superior Copper Mines. The westward trip was delightful. We had a special sleeper to Niagara, where we visited the Falls, inspected the Cantilever Bridge, bulldozed the hackmen and "did" things generally. At Buffalo, we boarded the "China," the steamer which was to take us up the lakes to the copper region. The China proved to be a most accommodating craft, for we stopped at every city of any importance on our way. But, oh! that day of misery on Lake Huron, when all but four of the class retired with various excuses to their staterooms. "Not sick, only tired." Next day, the sorrow was all forgotten in the excitement of run-

#### THE MINER

ning the rapids at Sault Ste. Marie with our Indian guides. It is probable that the China never before carried such an uproarious crowd. The climax was reached on Saturday night when we cleared the cabin and had a great promenade concert, the only drawback to the gaiety being the fact that "they were all fellers." The rejoicing was turned into mourning, when the boat stopped at Marquette, and our party was broken up, some remaining on the steamer, and others having to pack their trunks in the dark and go to the hotel to remain over Sunday at Marquette.

The class was divided into three divisions going to separate mines. Who of us will ever forget his first impression on stepping on the "man engine," or seing the hardened miners tramping about with their boots full of dynamite cartridges? Oh! those never ending ladders to be climbed with the mud dropping down your neck from your neighbor's boots! How romantic "sketching in oils" or rather in tallow, with mezzotints of mud! And the grub! The beautifully colored saffron cake and the boiled milk! which form the staple articles of food in that region. It would require several editions of the MINER, with all the secret societies left out, to describe in detail the many interesting experiences at the various mines, the elopement from Central to escape a "conference," the fishing excursions, serenades, etc., etc. So they must remain in unwritten history, but they will always be remembered by the participants.

After several weeks of this life, the class again met at Hancock, in the lower part of the copper region. Most of the class remained here about a week, studying the mines, stamp mills, and smelting works. The stay was enlivened with sundry practical jokes, the memory of one of which was perpetuated by a very remarkable photograph taken on the spot. (Copyright secured.)

From Hancock, the class dispersed, the majority, however, going to visit the iron regions near Marquette, and returning to New York by rail, stopping at points of interest on the way, Milwaukee for example.

On returning to work in October, our class was somewhat diminished in numbers, but stronger in purpose than before. We were met by our old friends Messrs. Stoney and Rankine, who seemed to rejoice that we were again in their power. Our pilgrimages to Pelhamville were resumed, the result of which was that a whole grove of white wooden stakes, with cabalistic signs thereon, appeared in the cornfields, which called itself a railroad. But we bid adieu to Pelhamville forever. Never again shall we imbibe the hard cider, or be chased by the warlike Mrs. Murdock with one of her pet bloodhounds. Mrs. Murdock, farewell!

This is positively our last appearance in the "MINER." Before many months have elapsed, we shall be thrown, each upon his own resources to carve his way to fame. Some out west prospecting for bonanzas, some in the east prospecting for situations, but all bound together by that tie of fraternity and friendship, that we were classmates together in '85.

### · Fourth Glass ·

#### · Course in Mining Engineering ·

ERNEST JULIUS HYACINTHE AMY, LÉON MARIÉ, HOWELL FINCH BARCLAY, FREDERICK P. BEMIS, A.B., WILLIAM FAULKNER BUSH, FRANKLIN SMITH CLARK, HARMON COZZENS, CHARLES HORACE DOOLITTLE, ARTHUR SMITH DWIGHT, EDWARD CRITTENDEN EDDIE, EUGENE N. ENGELHARDT, CHARLES EVERETT GRAFF, EMIL MACDOUGALL HAWKES, RUSSELL W. HILDRETH, HENRY LEONARD HOLLIS, FREDERICK W. HUNTINGTON, ARTHUR GALE JOHNSON, CHARLES FREDERICK LACOMBE, GEORGE BARSTOW LEE, PAUL AUGUST LOUIS MANNHEIM, ERNEST ABRAM WILTSIE,

HERMAN HENRY B. MEYER, CHARLES LEWIS MILLER, RICHARD GEO. G. MOLDEHNKE, LEWIS SPENCER NOBLE, ROBERT VAN ARSDALE NORRIS, GEORGE STEVENS PAGE, HARRY NELSON PIERCE, YSIDORO YGNACIO POLLEDO, BENJAMIN RIPINSKY, WILBUR EDGERTON SANDERS, EMIL STAREK. FREDERICK MAYHEW THOMAS, WARREN HARRIOT TITUS, EDWARD N. VAN COURTLANDT, CLINTON BRAZIL VAN TUYL, FREDERICK MORGAN WATSON, EDMUND PINEO WHITMAN, IRA HARVEY WOOLSON.

#### · Course in Civil Engineering .

ANDREW JOSEPH BRENNAN, BURNHAM HART,

EDWARD LOVERING INGRAM, HENRY CHARLES LEE.

#### · Gourse in Geology ·

FREDERICK JAMES HAMILTON MERRILL.

#### · Gourse in Ghemistry ·

CHARLES BURTON CROWELL,

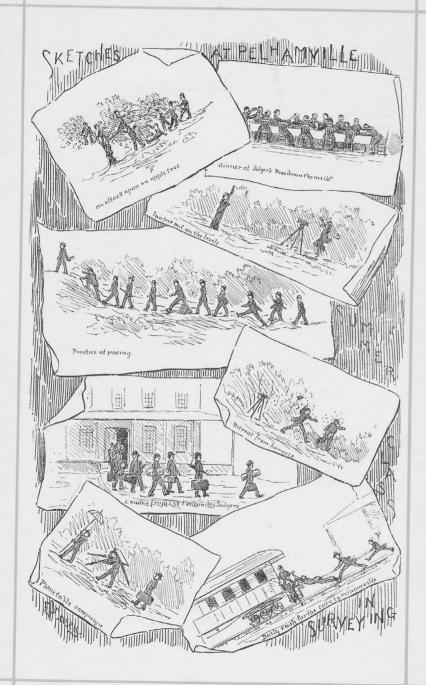
JOSEPH STRUTHERS, JR.

#### · Gourse in Architecture ·

GEORGE CARY, CHARLES HENRY DETWILLER,

di

HENRY BRENGLE SHOPE. SAMUEL BRECK P. TROWBRIDGE.



### · Glass of '86 ·

#### · Officers ·

FTER postponing the dreaded day as long as possible and sitting up every evening for a week (the charitable reader is to infer here that he was working up this narrative) the historian of '86 is obliged to come to the scratch. Every joke ever contained in him, and a good many which were not, have already been filtered out of him and he fears he has been evaporated literally or literarily to "dryness." If the class of '86 had only done something like the old kings and nations we read about in history, such as having six wives and beheading them, or making war upon something more formidable than '87, the historian would n't growl; but beyond electing him, they have n't done anything worth mentioning.

This functionary finds that his memory kicks—to use *forcible* language—when he suggests it go back to last spring's (it would rather go to Saratoga or Richfield Springs) events and see what it can find for these pages. He has a confused recollection of sitting on a roof,—before the "Campus" had gone to grass, and all spare time was spent in the library; of wandering wearily upstairs into a large room and being bellowed at by an old man with a white mustache, who was so infinitely big, compared to his victim, that it was difficult to realize he was infinitely small as regards the distance to the nearest fixed star; of looking at pickled devil-fishes, and casts of Labyrinthodontiasaurus and Lamellibranchiatapoda; of trying to make greasy crystal blocks spin, after first "settin' 'em up;" and finally he has a very vivid remembrance that one day in June, vacation commenced.

#### THE MINER

The beginning of vacation which was the signal for the lazy Artsman to commence his summer flirtations, found a little band in blue overalls with small note books and large lunches and two-foot rules "preferably folding," assembled at the Delamater Iron Works, to see what they could pick up about machinery. The first things they picked up were the iron shavings which did n't look a bit hot. Only eight men of the fifteen who first appeared "stuck it out" the three weeks. Those who did remain and who daily poised themselves on the ends of rusty nails or half-inch gas pipe during a two hour lecture, won golden opinions from all the men by asking questions about everything except machinery, drawing pictures nobody could understand, and impartially promising their overalls to half a dozen men apiece.

The next topic upon which the historian feels he must waste ink, is the invasion of Pelhamville. Even if he could write twice as fast as a certain professor talks, he could be months exhausting this famous subject. If there were not so many "claims" on this little place, we should suggest that the college buy it and set it down in a corner of the campus. Our professor of Chemistry could then illustrate his lectures on H<sub>2</sub>O without expensive pictures with movable bottoms. By referring to the middle of the page of the Plane Table map of Squad G for 1884, we find a real gold mine where there was never any gold found. Our professor of Metallurgy could discourse upon this. We-er-could n't say for certain whether-er-there were any-er-fossils there, but-erwhen three men began to work together in Plane Table squads we thought we saw some Tri-ass-ic groups that might serve to enliven the lectures in Geology. The historian does not wish to dwell on Pelhamville; he knows too many who have tried it. Sufficient to say that the inhabitants hailed our advent with delight; for they all eagerly await the time when all the town shall be Fifth Avenue corner lots, worth \$100,000, and the School of Mines is fast rendering the land suitable for building purposes, by driving hundreds of piles annually.

Returning to college after our commutation tickets had expired, we found that Prof. Van Am. had determined by Calculus that a good many of us belonged in '87; though several of this number, through persuasion or some other "Faculty" managed to get back to '86, by the side door as it were. Our annual class meeting was held and as most of us had been engaged in some "little rock" operations upstairs, and had also had financial dealings with Mr. Fisher, there was some doubt who would be president. The present distinguished chemist who holds the office, having a furnace in the Assay Laboratory, was presumably better able to "burn his letters" than the rest of us and so carried the day. Of his reign there is little to record as yet; and as the historian has now approached infinitely near the limit set for his performance, he simply wishes the class prosperity and makes his bow.

### · Third Glass .

### · Gourde in Mining Engineering ·

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ALLEN NEWHALL SPOONER, WILLIAM HENRY STUART, HENRY CLARK THOMPSON, JOSEPH YENDES WHEATLEY.

### · Gourse in Geology ·

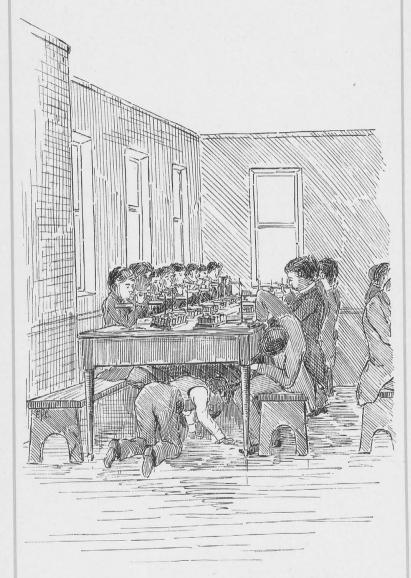
RICHARD HAYES MCDONALD SPENCER.

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WHERE'S MY PLATINUM TIP?

## · Glass of '87.

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IGHTY-SEVEN in its turn falls into rank as second class. A year of college life has refined the crude material which came to the School of Mines in the Autumn of 1883, and although time and the examinations have been ruthless in tearing from our midst several well-known faces, they have, on the whole, dealt kindly with us, and have brought the class to that happy state of perfection in which it glories and of which it is so justly proud.

This chronicle is the second chapter in the history of the class. It covers the period from the semi-annual examinations to the Christmas holidays of 1884. During these ten months much has happened. Space is not permitted to more than catalogue the chief events.

Eighty-seven has from the first taken a prominent place in athletics. The success of the class in that field of endeavor cannot have failed to have satisfied the hopes of its most enthusiastic and sanguine well-wishers. After the semi-annual examinations a series of lesser triumphs prepared the class by a gentle *crescendo* for the climax of its success at the end of the year—the race with the Harvard freshmen at New London. It was a happy time for us. Examinations were over, and one was not yet compelled to think of "summer work." The college world was free and bent on amusement. One must read between the lines to understand all the hilarity of the occasion. Our crew was victorious; needless to say more. The incipient sophomores who wore the blue and white could not but be proud of their class and their colors. Their cheers were those of triumph. With such an overture began the long vacation.

#### THE MINER

October and the beginning of the term brought to college a bevy of boys. They styled themselves college men of the class of Eighty-eight. The upper class-men smiled indulgently and called them young—"A fault they will soon outgrow." Eighty-seven, justly impatient, thought to accelerate the slow processes of Nature, and as a swift means to a desirable end, engaged these "college men" in combat. The struggles were not very great. Eighty-eight was soon demoralized. Rushing languished, and Eighty-seven turned its activity to contests more worthy of its attention.

The autumn regatta came off before the new term was many weeks old. Again our crew showed their strength and skill by an easy victory. The Eighty-seven foot-ball eleven gained the class championship. In the athletic games the class has done well, taking several first as well as second prizes. Certainly our record is one to be proud of.

We no longer work together as a class. Each man has begun the technical studies of his profession. The chemists are isolated in the laboratory, and the architects in their drawing room. Thus change creeps in unperceived. The weeks glide over us, and soon we shall have finished our second year. Some of us shall succeed, and some of us shall fail; but surely our future is bright. May the last chapter in the history of Eighty-seven end like the fairy tales of old: "And they lived happily ever after."

### · Second Glass ·

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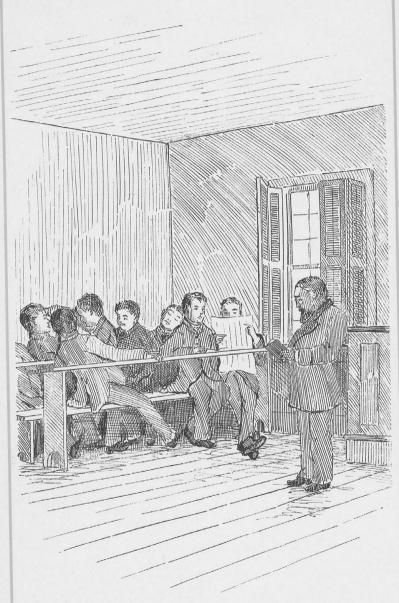
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PST! Now! Now! STOP THAT—ELSE I SEND YOU TO THE FACULTY—CONTINUE!

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IGHTY-EIGHT! How euphonious when spoken, how soul inspiring when shouted, and when written in Arabics, where can one find a more perfect combination of graceful curves? With all these distinctive qualities of our name, what wonder that we should consider ourselves justified in indulging in glowing hopes!

As most material ground for our hope, let us instance our phenomenal love for Mathematics, it being already whispered about the college that we have the material to produce Isaac Newtons, Blaise Pascals, et al. of similar renown! Manfully, too, do we apply ourselves to solving the intricacies of "Das Buch der Natur," a most difficult task. What stronger proofs are needed to show that, mentally considered, we excel? Fully realising, however, the unhealthfulness of one-sided effort, we at times turn our thoughts from the serious to the mirthful: witness our antics in the German class.

Our bump of combativeness, although present, thus far lies undeveloped, for we have had no rushes to speak of; but lay not the fault at our door; to "our friends, the enemy," the class above us, attaches the blame. Fearlessly did we challange them, and fearfully did they *not* respond.

In Athletics we are stalwarts. True, our tug-of-war team was not victorious, our foot-ball eleven did not kick a goal, our crew crossed the wire behind the leaders, but these so-called defeats are really the opposite, when we contrast the hard fought victories of our opponents with their far greater experience.

Another of the many distinguishing features of our class is our preponderant civility, the plurality among us having chosen to fight the battle of life as the standard bearers of Civil Engineering.

As to our further abilities, nothing but our native modesty, which shrinks from even the appearance of boastfulness, restrains our pen. But we would be recreant to our task as the truthful historian of a class whose leading characteristic is truthfulness, were we to close this sketch—made brief, because however long no sketch can do us justice—without recording the fact that by all odds we are the finest class over which the protecting ægis of Alma Mater has ever been extended. We will not dazzle the eyes of a possibly incredulous generation by unfolding what we will be when, in the regular course of a collegiate evolution, we shall have arrived at the respective degrees which we will condescend to accept from the Faculty.

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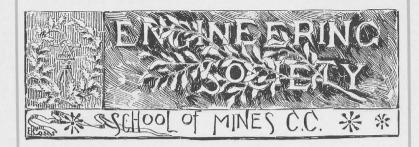
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### · Meetings in 1884 ·

Feb. 17. LECTURE. "The Unknown and Unknowable as Factors in Scientific Conclusions."

PROF. I. S. NEWBERRY.

Feb. 21. PAPER. "Construction and Management of a Charcoal Blast Furnace in Maryland."

MR. A. J. LAMB.

Mar. 7. PAPER. "The Interlocking Switch and Signal System." M. J. T. HORN.

Mar. 21. DEBATE. "Resolved, That Belting is preferable to Wire Rope for Transmission of Power for distances of from 50 to 60 feet."

> PAPER. "Leaching for Silver Ores in Nevada." MR. C. F. PEARIS.

April 4. LECTURE. "Treatment of Gold and Silver Ores." PROF. P. DE P. RICKETTS.

April 25. LECTURE. "Mining Law of the United States." DR. R. W. RAYMOND.

Nov. 21. PAPER. "The Bower-Barff Process for making Rustless Iron." MR. A. S. DWIGHT.

Dec. 5. PAPER. "The Roasting of Iron Ores in the Gjers Kiln." MR. H. L. HOLLIS.



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## · Papers Read Since Oct., 1884 ·

Nov. 20, "Open Hearth Steel," . . . . R. VAN A. NORRIS.

Dec. 4, "Preservation of Food," . . . . W. P. MOORE.

#### · becture Gourse of 1884-5

Dec., 1884, "Glucose and Grape Sugar," P. DE P. RICKETTS, E.M., Ph.D.



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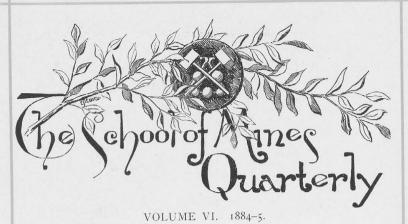
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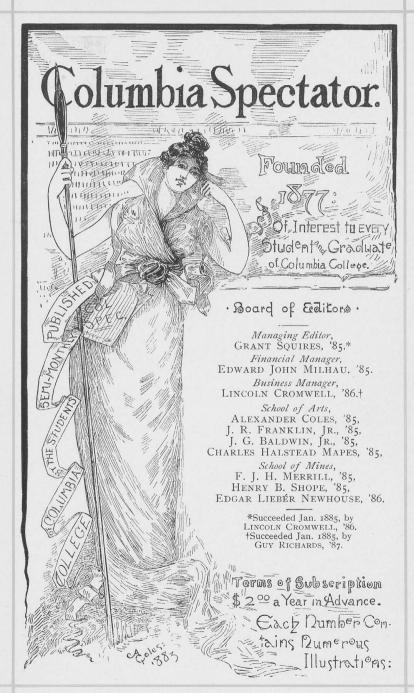
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JOHN VERNOU BOUVIER, JR., '86, EDWARD FRANKLIN COLE, '86, SAMUEL C. HERRIMAN, '88.

· School of Miner.

ARTHUR McJilton Cox, '85, JAMES JACKSON ORMSBEE, '86, PEREZ HASTINGS FIELD, '87, STEDIFORD STAGG, '87, JOHN TEMPEST WALKER, JR., '87.

TERMS OF SUBSCRIPTION, \$2.00 PER ANNUM, IN ADVANCE.



·Athletics·



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R. T. WILSON, JR., '87,

E. S. APPLEBY, '87, S. OF M.,

H. N. TIEMANN, '87, S. OF M.

· owenty-Jourth Field Meeting ·

# Columbia College Athletic Association

· N. J. A. G. Grounds, Mott Haven ·

#### SATURDAY, MAY 17TH, 1884.

	Winners. C. H. Mapes, '85	Time, Heighth or Distance.
0 M - W - 1	R. V. A. Norris, '85, S. of M S. Le Roy, '87.	7 m., 52½ sec.
3. Running High Jump	Guy Richards, 87,	5 ft., 5 in.
4. Half Mile Run	E. S. Appleby, '84	2 m., 9 <sup>2</sup> sec.
5. 220 YARDS DASH	S. Harris, '87	24 <sup>2</sup> sec.
6. RUTTING THE SHOT	D. W. Reckhart, '84, S. of M J. E. Fitzgerald, '84, S. of M.	34 ft., 9½ in.
7. 120 YARDS HURDLE	R. Mulford, '84, S. of M. (W. O.).	18½ sec.
8. Running Broad Jump	. C. H. Mapes, '85 O. Bodlesen, '84, S. of M.	19 ft., 2 in.
9. POLE VAULT	. G. H. Taylor, S. of L . C. Stevens, '87, S. of M.	8 ft. 7 in.
TO. THROWING THE HAMMER	W. A. Meikleham, '86 E. H. Lines, S. of L.	70 ft., 8 in.
II. Two Mile Bicycle	. C. A. Reed. '85, S. of M F. Thayer. '86, S. of M.	7 m., 59 sec.
12. ONE MILE RUN	. R. G. Rood, '84, S. of M	4 m., 56 sec.
13. *QUARTER MILE RUN	. C. Randolph, '86, Dead Hea	t59 sec.
14. Tug of War $\left\{ \begin{smallmatrix} 1\\2 \end{smallmatrix} \right\}$	. '84 . '86.	ı ft. 6 in.

<sup>\*</sup> Won by tossing up a cent.

G. H. TAYLOR, S. OF L.

## · @wenty-Fifth Field Meeting ·

OF THE

# Columbia College Athletic Association

· R. J. A. G. Grounds, Mott Haven ·

#### SATURDAY, OCTOBER 25TH, 1884.

		Time, Heighth
Events.	Winners.	or Distance.
1. 100 YARDS DASH	S. B. Marks, S. of L. (6½ yds.) C. H. Mapes, '85, (scratch)	10½ sec.
2. ONE MILE WALK	. R. V. A. Norris, '85, S. of M. (W. C	0.)8 m., 19 sec.
3. THROWING THE HAMMER	. C. E. Beckwith, '87, S. of M. (20 ft. C. M. Donnelly, S. of L. (20 ft.)	). 89 ft., 2½ in.
4. QUARTER MILE RUN   1	. E. A. Richard, S. of L. (W. O.)	59½ sec.
5. 120 YARDS HURDLE	S. B. Marks, S. of L. (6 yds.)	18 <sup>2</sup> sec.
6. Two Mile Bicycle }	D. H. Renton, S. of L. (230 yds.) E. A. Hoffman, Jr., S. of L. (scratch	7 m., 34½ sec.
7. RUNNING BROAD JUMP	H. N. Pierce, '85, S. of M. (3½ ft.). E. A. Richard, S. of L. (3 ft.).	18 ft., 2 in.
8. Putting the Shot { 1 2	F. P. Bemis, '85, S. of M. (18 in.) J. F. Bacon, '87, (2½ ft.).	33 ft., 8 in.
9. 220 YARDS DASH	H. N. Pierce, '85, S. of M. (20 yds.). S. Derickson, '85, (scratch).	24 sec.
10. ONE MILE RUN	F. A. Ware, S. of L. (10 yds.). W. C. Herring, (15 yds.).	
II. RUNNING HIGH JUMP	Guy Richards, '87, (scratch) J. D. Berry, '86, S. of M. (6 in.).	5 ft., 5½ in.
12. HALF MILE RUN	E. A. Richard, S. of L. (scratch) G. C. Dempsey, S. of L. (60 yds.)	2 m., 10 sec.
13. POLE VAULT	P. V. Caesar, '88, (1 ft.) H. S. Schriver, '87, S.of M. (scratch	7 ft., 6 in.
14. TUG OF WAR	'86	6 in.

# · Best Golumbia Gollege Records ·

Event.	Holder.	Time, Height or Distance.	Made.
220 Yards Dash	S. Derickson, '85	235 sec	Nov. 3d, 1883
440 Yards Run	G. M. Hammond, '78, SR. R. Colgate, '80	of M54 sec	.July 6th, 1877 .May 5th, 1877
One Mile Run	W. R. Travers, Jr., '82.	5 m., 5½ sec	May 1st, 1880
One Mile Walk	C. Eldredge, '79 eguR. Mulford, '84, S. of M	*7 m., 4 <sup>2</sup> sec	May 24th, 1884
lation).			
	J. P. Conover, '80 O. Bodelsen, '84, S. of I		
Standing High Jump.	J. F. Jenkins, Jr., '84	4 ft. 4¾ in	May 7th, 1881
Standing Broad Jump	Martinez, '75, S. of M lbs).D. B. Porter, '83		May 23d, 1874
Putting Shot (16 lbs )	A. T. Moore, '84, S. of	M35 ft., 10 in	May 20th, 1882
	F. H, Lee		
I wo Miles Bicycle Ra	ce K. G. Kood, 64, 5, 61		

<sup>\*</sup> Best American College Record.

# · Ninth Field Meeting ·

OF THE

# Inter-Gollegiate Athletic Association

		Time, Heighth
Events.	Winners.	or Distance.
1. 100 YARDS DASH	. H. S. Brooks, Jr., 85, Yale, W. Baker, '86, Harvard.	10 <sup>1</sup> sec.
2. 220 YARDS DASH	W. Baker, '86, Harvard, H. S. Brooks, Jr., '85, Yale.	*225 sec.
3. QUARTER MILE RUN	. W. H. Goodwin, Jr., '84, Harvard C. Smith, S. of L., Columbia.	<sub>52</sub> sec,
4. HALF MILE RUN	. W. H. Goodwin, Jr., '84, Harvard C. Smith, S. of L., Columbia.	2 m., 5½ sec.
5. ONE MILE RUN	R. Faries, '85, Univ of Penn H. L. Mitchell, '85, Yale.	4 m., 45½ sec.
6. 120 YARDS HURDLE RACE) 1 (10 hurdles, 3 ft., 6 in. high.) 2	R. H. Mulford, '84, S. of M., Colum J. D. Bradley, '86, Harvard.	bia17½ sec.
7. ONE MILE WALK	E. A. Meredith, '85, Yale R. V. A. Norris, '85, S. of M., Colum	7 m., 33½ sec. mbia.
8. Two Mile Bicycle Race	. L. P. Hamilton, '86, Yale	6 m., 48½ sec.
9. RUNNING HIGH JUMP 1	. C. H. Atkinson, '85, Harvard H. L. Clark, '87, Harvard.	*5 ft., 9¾ in.
10. Running Long Jump	O, Bodlesen, '84, S. of M., Columbia A. G. Fell, '84, Princeton.	121 ft., 3½ in.
11. POLE VAULTING	. H. L. Hodge. '86, Princeton H. F. Mandell, '84, Harvard.	
12. THROWING THE HAMMER	. A. B. Coxe, '86, Yale	83 ft., 2 in.
	D. W. Reckhart, '84, S. of M., Columbia, J. H. Briggs, '85, Yale.	mbia 36 ft.,3¾ in.
	Harvard	τ8 in.

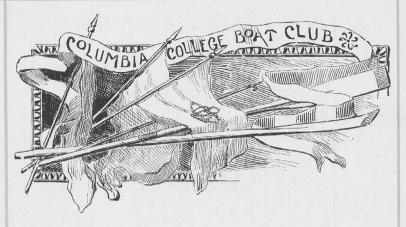
<sup>\*</sup> Best American Amateur Record.

#### RECAPITULATION.

College.	First Prizes.	Second Prizes.
Harvard		5
Yale		
Columbia		
Princeton		
Univ. of Penn		
Lehigh	0	I

# · Amezican Collegiate Best-on-Records ·

Event.		Time, Height or Distance.	Winner.	College.	Where Made.	When Made.
100 Yards Dash		10 sec	E. J. Wendell	Harvard	Harvard games, Cambridge, Mass	May 24, 188
220 Yards Dash		222 sec	W. Baker	Harvard	Inter-collegiate games, New York	May 24, 188.
Quarter Mile Run		50g sec	H. S. Brooks, Jr	Yale	Yale games, New Haven, Conn	May 19, 188
Half Mile Run		2 min., 4 sec	W. H. Godwin, Jr	Harvard	Harvard games, Cambridge, Mass	May 19, 188
One Mile Run		4 min., 375 sec.	T. De W. Cuyler	Yale	Inter-collegiate games, New York	May, 29, 188
Two Mile Run		It min, 2 sec	E. C. Stimson	Dartmouth	Inter-collegiate games, Saratoga Springs	July 20, 187
Three Mile Run		16 min., 2x2 sec.	E. C. Stimson	Dartmouth	Inter-collegiate games, Saratoga Springs	July 20, 187
One Mile Walk		7 min., 45 sec.	C. Eldredge	Columbia	Columbia games, Mott Haven	May 5, 187
Two Mile Walk		16 min., 24 sec	C. Eldredge	Columbia	Inter-collegiate games, Mott Haven	July 7, 187
Three Mile Walk		25 min., 164 sec.	M. Caulmann	Cornell	Cornell games, Ithaca, New York	May 25, 188
Seven Mile Walk		r hr., 5 m , 154s.	W. R. Taylor	Harvard	Inter-collegiate games, Saratoga Springs	July 15, 187
120 Yards Hurdle Race	3e	17½ sec	R. H. Mulford	Columbia	Inter-collegiate games, New York	May 24, 188
Two Mile Bicycle Race	3e	6 min., 48 sec	R. G. Rood	Columbia	Columbia games, Mott Haven	May 11, 188
Running High Jump		5 ft., 9% in	C. H. Atkinson	Harvard	Inter-collegiate games, New York	May 24, 188
Standing High Jump		5 ft., 1½ in	W. Soren	Harvard	Inter-collegiate games, Mott Haven	May 29, 188
Running Long Jump		21 ft., 3½ in	O. Bodelsen	Columbia	Inter-collegiate games, New York	May 24, 188
Standing Long Jump		10 ft., 33 in	F. Larkin, Jr	Princeton	Inter-collegiate games, Mott Haven	May 9, 187
Pole Vaulting		10 ft., 1 in	H. P. Toler	Prinecton	Princeton games, Princeton, New Jersey	May 10, 188
Throwing the Hammer	er	88 ft., 11 in	C. H. Kip	Harvard	Inter-collegiate games, New York	May 26, 188
Putting the Shot		37 ft., ro in	M. Cuzner	McGill	McGill games, Montreal, P. Q	Oct. 24, 187
Throwing the Base Ball	all	379 ft., 6½ in	R. H. Treman	Cornell	Cornell games, Ithaca, New York	May 7, 187
						-8



#### · Officers ·

President. A. B. SIMONDS, '73.

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> Treasurer, JASPER T. GOODWIN, '76.

Captain, WILLIAM A. MEIKLEHAM, '86.

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A. B. SIMONDS, '73,	C. H. Mapes, '85,
E. S. RAPALLO, '74,	Н. К. КNAPP, '85,
R. C. CORNELL, '76,	C. B. Crowell, '85, S. of M.
J. T. GOODWIN, '76,	J. Lawrence, '86,
C. M. WARD, '77,	* W. A. MEIKLEHAM, '86,
R. H. SAYRE, '81,	G. RICHARDS, '87,
W. S. SLOAN, '82,	C. E. BECKWITH, '87, S. OF M.

# · Rowing Season of 1884.

#### · Department Eight, Harlem River ·

MAY 5TH, 1884. 2 Miles.

- 1. MINES, '87.—Washington Hull, Bow; W. L. Tyler, 2; W. C. Butler, 3; F. M. Simonds, 4; C. M. Donnelly, 5; C. A. Ferriss, 6; C. E. Beckwith, 7; G. S. Rice, stroke; E. D. Church, coxs. Time, 14 min.
- 2. ARTS, '87.--R. T. Wilson, bow; J. F. Bacon, 2; W. H. Browning, 3; Guy Richards, 4; W. W. Buckley, 5; W. F. Ward, 6; S. Harris, 7; B. Lockwood. Jr., stroke; A. B. Gardiner, Jr., coxs. Time, 14 min.

## · Spring Regatta of G. G. B. G., Harlem River ·

MAY 10TH, 1884.

- 1. '87.—F. M. Simonds, bow; J. F. Bacon, 2; W. C. Butler, 3; Guy Richards, 4; S. Harris, 5; G. S. Rice, 6; C. E. Beckwith, 7; B. Lockwood, Jr., stroke and captain; A. B. Gardiner, Jr., coxs. Time, 12
- 2. '86.—S. Stagg, bow; R. M. Edwards, 2 and captain; E. B. Hart, 3; A. Turnbull, 4; C. Randolph, 5; J. Lawrence, 6; E. DeWitt, 7; W. A. Meikleham, stroke; W. C. Stout, coxs.

#### · Harlem Regatta ·

JUNE 3RD, 1884. 1 Mile, Straightaway.

I. METROPOLITAN R. C. Time, 5 min. 194 sec.

- 2. COLUMBIA COLLEGE.—C. B. Crowell, bow; A. W. Berkins, 2; G. C. Dempsey, 3; W. A. Meikleham, 4 and captain; E. B. Hart, 5; J. Lawrence, 6; E. DeWitt, 7; W. B. Peet, stroke; H. S. Dormitzer, coxs. Time, 5 min. 191 sec.
- 3. N. Y. R. C.—Time, 5 min. 331 sec.

#### · University Race, New Dondon ·

JUNE 18TH, 1884. 4 Miles, Straightaway.

	I. HARVARD.			
2. W 3. J. 4. F. 5. E. 6. S. 7. R Strol Coxs	1. HARVARD.  Auge. W. W. Mumford, '84	Wgt. 170 170 159 170 168 185 182 163 104 165	Hgt. 5.09 6.01 5 5.11 5 5.09 6.00 5.11 5 5.03 5 5.09 3 5 5.09 3	
Subs	titute. J. R. Yocum, '85.22	171	5.10	
	Average228	1704	5.112	
	Time of min ar3 coo			

Γime, 24 min. 313 sec.

2. COLUMBIA.	
Age. Bow. E. B. Hart, '86, S. of A19 2. A. W. Berkins, '85, S. of L20 3. E. DeWitt, '85, S. of A21 4. W. A. Meikleham, '86, S. of	Wgt. Hgt. 139½ 5.08 156 5.11 142¼ 5.11½
A., Captain	158½ 5.10 190½ 6.00 158½ 5.09¼ 156 5.09½ 145 5.08
S. of A	$107   5.02$ $142\frac{1}{2}   5.09$ $155\frac{3}{4}   5.10\frac{1}{2}$

#### · Freshman Race, New Dondon ·

JUNE 26TH, 1884. 2 Miles, Straightaway.

#### r. COLUMBIA, 87.

Bow. F. M. Simonds, S. of M. 18	140	5.08
2. Guy Richards, S. of A18	146	5.07
3. W. C. Butler, S. of M18	143	5.002
4. G. S. Rice, S. of M	140	5.11
5. C. M. Donnelly, S. of M19	162	5.102
6. Sidney Harris, S of A18	166	5.11
7. C. E. Beckwith, S. of M20	155	5.001
Stroke. B. Lockwood, Jr., S. of		
A., Captain	153	5.093
Coxs. A.B. Gardiner, Jr., S. of A. 18	107	5.02
Substitute. W.F. Ward, S. of A. 18	1603	5.11
Substitute. W. Hull, S. of M. 18	135	5.06
Average of crew181	1508	5.00%
Time, 9 min. 432 sec. Best Colle	ge re	cord
TOT 2 IIIICS.		

#### 2. HARVARD, '87.

Age	. Wgt.	Hgt.
Bow. R. F. Fiske19		5.09
2. C. F. Ayer		5.09
3. J. Russell, Captain	169	5.082
4. T. P. Burgess		5.10
5. W. A. Brooks	1792	5.115
6. A. R. Baum	182	5.Io2
7. H. W. Keyes20		5.101
Stroke, G. S. Mumford19	152	5-07
Coxs. W. McWoodworth18	115	5.07
Substitute, J. S. Russell	-	

Average for crew.....187 1678 5.092

Time, To min. T sec.

#### · Intercoffegiate Regatta, Saratoga Dake ·

JULY 7TH, 1884. 11 Miles, Straightaway.

- 1. University of Pennsylvania. Time, 8 min. 35 sec.
- 2. CORNELL.
- 3. PRINCETON.
- 4. COLUMBIA.

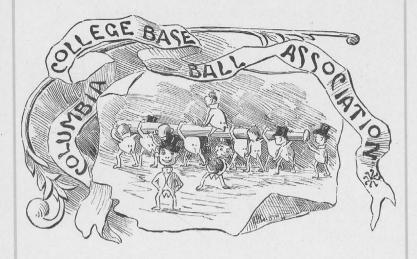
Age.	Wgt.	Hgt.	
Bow. E. B. Hart	1402	5.08	
2. W. A. Meikleham, Captain. 18	1582	5.10	
3. C. E. Beckwith20	1582	5.092	
Stroke. W. B. Peet23	1422	5.08	
Port Substitute, J. Lawrence18	1582	5.094	
Starboard Sub. E. DeWitt21	1424	5.TI2	
Average 20	150	5.087	

5. BOWDOIN.

## · Jaff Regatta of G. G. B. G., Harlem River ·

Nov. 5TH, 1884. 1 Mile.

- 1. '87.—F. M. Simonds, bow; J. F. Bacon, 2; G. Richards, 3; W. F. Ward, 4; C. M. Donnelly, 5; S. Harris, 6; C. E. Beckwith, 7; G. S. Rice, stroke; Coxs, A. B. Gardiner.
- 2. '88.—Parsons, bow; Moore, 2; Gould, 3; Bunzl, 4; Dimock, 5; Little, 6; Puttle, 7; Perkins, stroke; Villa Verde, coxs.



#### · Officers ·

President.

N. B. WOODWORTH.

Vice-President.

J. W. McGennis.

Secretary.

GRANT NOTMAN.

Treasurer.

LINCOLN CROMWELL.

#### · The Rine · 1884 ·

COBDEN,

LYONS,

GARTH,

MATTHEWSON,

GEARON,

PINNEO,

Lyon, W. H., Jr.,

SMITH, R. DE B.,

WHEELER,

LYON, M. T.,

WOODWORTH.

BATTING.

FIELDING.

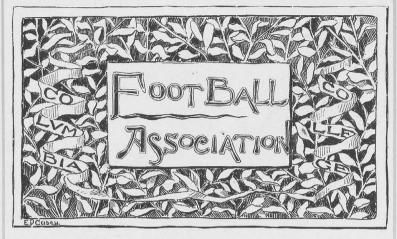
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Name.	Games Played.	Position.	Base Hits.	Total Base Hits.	Average.	Runs.	Put-outs and Assists.	Average
Lyons	9	L. F	15	22	.306	16	46	.807
Lyon,W.H.	16	3d B	19	25	.297	22	67	.753
Smith	14	C. F	18	24	.295	16	27	.771
Gearon	14	1st B. 2d B.	15	τ8	.283	10	106	.854
Cobden	9	R. F	8	10	. 267	5	7	.571
M. T. Lyon.	14	C. F	13	18	.250	14	26	.896
Wheeler	7	1st B	5	6	.205	4	69	.808
Garth	9	S. S	8	9	.203	6	18	.666
Woodworth.	14	2d B.; S. S.	10	11	.188	10	47	.839
Matthewson	12	C	7	7	.175	13	63	.851
Pinneo	14	P	4	5	.071	8	44	·75 <sup>8</sup>

#### · Games Played ·

COLUMBIA	9	vs.	DAUNTLESS (champions of L. I.), 6			
COLUMBIA	5	vs.	DELAWARE (Professionals) 4			
COLUMBIA	4	vs.	ALERTS (Seton Hall), 8			
COLUMBIA	8	vs.	ROSE HILL (St. John's College)14			
COLUMBIA	12	vs.	LAFAYETTE COLLEGE10			
COLUMBIA	5	vs.	DOMESTIC (8 innings), 6			
COLUMBIA	8	vs.	RUTGERS,			
COLUMBIA	5	vs.	ELIZABETH A. C21			
COLUMBIA	14	vs.	Rose Hill			
COLUMBIA	13	vs.	LAFAYETTE COLLEGE			
COLUMBIA	3	vs.	STATEN ISLAND17			
COLUMBIA	16	vs.	NEWBURGH (Professional)21			
COLUMBIA	7	vs.	TROY POLYTECHNIC (morning) 8			
COLUMBIA	30	vs.	TROY POLYTECHNIC (afternoon). 7			
COLUMBIA	5	vs.	UNION COLLEGE12			
COLUMBIA	7	vs.	RUTGERS			
Games played, 16; games won, 4; lost, 11; drawn, 1.						
Total No. of runs: Columbia, 151; Opponents, 183.						



#### · Officers ·

President, RANDOLPH E. FISHBURN. Vice-President,

WILLIAM H. LYON, JR.

Treasurer,

CHARLES RANDOLPH.

Secretary,

HENRY K. KNAPP.

Captain,

WILLIAM A. MEIKLEHAM.

#### · Directors ·

1885.

G. M. THOMSON, R. E. FISHBURN, S. OF M. H. K. KNAPP,

1886.

C. RANDOLPH,

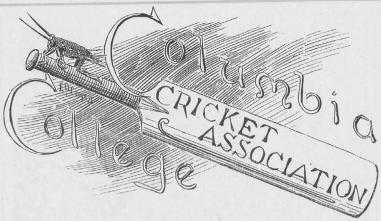
W. A. MEIKLEHAM, A. N. SPOONER, S. OF M.

1887.

B. Lockwood, Jr., C. A. Stevens, R. de B. Smith, S. of M.

#### · Gladd Ghampiondhip Gamed ·

'87 vs. '88. Score: '87, 36 Points; '88, o. '85 vs. '86. Score: '86, 15 Points; '85, 5. '86 vs. '87. Score: '87, 16 Points; '86, o.



· Officers, Spring Jerm, 1884 ·

President,
N. B. WOODWORTH.
Vice-President,
S. P. GRIFFIN.
Secretary,
A. Mc J. Cox.
Treasurer,
GRANT SQUIRES.
Captain,
S. P. GRIFFIN.

#### · Members

1885.

E. J. H. AMY, TEMPLE BOWDOIN, J. L. BROWNING, A. MC J. COX, J. P. FRANKLIN, G. M. GRAY, H. V. R. KENNEDY, J. L. POOL, J. H. RYERSON, A. M. ROBBINS, G. S. ROBBINS, GRANT SQUIRES.

1886.

C. CARRERE, P. H. FIELD, J. H. JANEWAY, JR., C. V. V. SEWELL,
J. J. ORMSBEE,
R. MAC D. SPENCER,
F. P. SHERWOOD.

1887.

C. M. DONNELLY,

B. LOCKWOOD, H. T. SHRIVER.

#### · Spring Eleven ·

W. F. MORGAN, S. P. GRIFFIN, A. M. COX, W. T. LAWSON, N. B. WOODWORTH, J. S. COX, L. CARRERE, ED. KELLEY.



#### · Officers ·

President,
GEORGE E. WOOD.

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HENRY K. KNAPP.

Secretary, Edward J. Milhau.

Treasurer,
JOHN H. RYERSON.

#### · Membezo ·

GUY AYRAULT, 86, E. F. AYRAULT, S. of L., J. F. BACON, '87,

H. A. BOSTWICK, '85,

J. S. COX, JR., '87, S. OF M., C. B. CROWELL, '85, S. OF M.,

C. M. DONNELLY, S. OF L.,

H. K. KNAPP, '85, E. J. MILHAU, '85,

G. NOTMAN, '86,

J. J. ORMSBEE, '86, S. OF M.,

J. H. RYERSON, '85,

F, M. SKELDING,

R. DE B. SMITH, '87, S. of M.,

H. STREBEIGH, '87,

W. H. TITUS, '85, S. OF M.,

J. T. WALKER, JR., '87, S. OF M.,

W. WILLIAMS, '85,

G. E. WOOD, '86, S. OF M.

# · Hitormissit Tennis Glub.

OF

# · Golumbia Gollege ·

#### · Officers ·

President,

ARTHUR SMITH DWIGHT, '85, S. OF M.

Vice-President,

WALTER LINCOLN TYLER, '87, S. OF M.

Secretary and Treasurer,

JAMES JACKSON ORMSBEE, '86, S. OF M.

#### · Members ·

1885.

ARTHUR SMITH DWIGHT, HENRY L. HOLLIS, EDWARD JOHN MILHAU.

1886.

JAMES JACKSON ORMSBEE, STAUNTON BLOODGOOD PECK.

1887.

WALTER HULL ALDRIDGE, STEDIFORD STAGG,

GEORGE LOUIS BAKER, HERMANN NEWELL TIEMANN,

PEREZ HASTINGS FIELD, WALTER LINCOLN TYLER.

1888.

WALTER A. DODSWORTH, W. D. JONES.

· Miscellaneous ·

· Organizations ·



President, I. T. WALKER, JR.

Secretary and Treasurer, ARTHUR M. COX.

> Warbler, L. SMITH.

#### · First Jenor ·

· Second Jenor ·

J. T. Walker, Jr., '87, S. of M., G. Hyatt, '85, W. P. Moore, '85, S. of M., H. T. Shriver, '88, S. of M.

R. McD. Spencer, '86, S. of M., F. P. Sherwood, '86, S. of M., G. E. Wood, '86, S. of M.,

#### · First Bass .

· Second Bass .

E. M. PERRY, S. OF L., E. F. AYRAULT, S. OF L., W. R. CHAMBERLAIN, '88, S.OF M., L. CROMWELL, '86,

C. A. REED, '85, S. OF M., J. MIDDLETON, '86, S. OF M., H. L. McCune, S. of L., L. S. CARRERE, '86, O. L. ROGERS, '88, S. OF M.

## · Concerts given Juring the year '83-'84.

STEINWAY HALL, NEW YORK,		Oct. 27, '83.
TOWN HALL NEW ROCHESTER, N. Y		reb. 15, 04.
WARBURTON HALL, YONKERS, N. Y., .	3.0	Feb. 20, 84.
V M C A NEW YORK	5.00	reb. 25, 04.
COMMUNITOR HALL BERGEN POINT, N. I.		reb. 20, 04.
COLLEGE CHAPEL,		Walch /, 64.
OPERA HOUSE STAMFORD, CT.,		Maich 10, 04.
HISTORICAL HALL, BROOKLYN,		April 30, 64.
CHICKERING HALL, NEW YORK,		May 9, 04.
LAFAYETTE HALL, WHITE PLAINS, N. Y.,		May 29, '84.

# · Golumbia Gollege Banjo · · Glub ·

#### · Officers ·

President. ARTHUR MCJILTON COX.

Sec'y and Treasurer. RANDOLPH EUGENE FISHBURN.

#### · Members ·

R. E. FISHBURN, S. of M., A. M. Cox, S. of M., J. R. FRANKLIN.

1886.

WILLIAM MANICE. F. P. SHERWOOD, S. of M.,

1887.

J. R. PLUM, C. V. V. SEWELL,

A. M. REQUA, J. T. WALKER, JR., S. of M.

# · Delta Phi Quartette ·

JAMES THURSTON HORN, LÉON ALDAMA DEL MONTÉ, GEORGE MOUNT GRAY, WILLIAM MANICE.

# · Da Bourdonnais Ofess Olub ·

OF

# · Golumbia Gollege ·

#### · Officers ·

ALEXANDER D. KEYES	,				President.
ARTHUR P. HEINZE,				Vz	ce-President.
L. H. JACOBY,			Re	ecordi	ng Secretary.
JOHN H. TOWNSEND,		C	orres	pondi	ng Secretary.
TEMPLE BOWDOIN,					Treasurer.

#### · Members ·

HEILBURN, '86,
VON TAUBE, '87,
H. FRIES, '85, S. of M.
RIPINISKY, '85, S. of M.
B. PECK, '86, S. of M.
H. PORTER, JR., '86, S. of M.

# · Record of Gorrespondence Games

University of Pennsylvania vs. Columbia, U. of P. resigned, Jan'y 9, 1880. Harvard vs. Columbia, Harvard resigned, Nov. 22, 1880. Haverford vs. Columbia, Haverford resigned, April 6, 1881. Yale vs. Columbia, Yale resigned, Dec. 15, 1882. Bowdoin vs. Columbia, Bowdoin resigned, Oct. 30, 1883.

Games played, 5. Games won, 5.





C-ERS-N.—"That unfeather'd two-legg'd thing, a son." AGR-M--TE, E. \ "And both were young and one was AGR-M--TE, J. C. \ beautiful."

B-K-R.—"'T is the last rose of summer, "Left blooming alone."

B-LL.—" He was in Logic a great critic, "Profoundly skilled in Analytic."

B-RRY, J. D.—"Better to reign in hell than serve in Heaven."

B-RRY, W. G.—"He was the mildest manner'd man

"That ever scuttled ship or cut a throat."

C-RT-R.—"'T is not alone my inky cloak, good mother,

"Nor customary suits of solemn black;

"But I have that within which passeth show."

C-S-Y.—" Our artist, if on Albion's soil,

"From honors would be forced to flee; "And though he should from most recoil,

"He never would our K. C. B."

CH-MB-RL-N.—"Lord, how it talked!"

C-N-NT.—" For I am nothing if not critical."

"Oh, what may man within him hide, "Though Angel on the outward side."

C-NW-Y.—" Westward the Star of Empire takes its way."

ED-A-DS.—" I am not in the roll of common men."

EL-IS. ) "How happy could I be with either, F-ELD. \ "Were t' other dear charmer away."

FR-NKF-ELD.--" I wept when I was born, and every day shows why."

G. McC. H. G-op. -- "He was a man of an unbounded stomach." "The French would call him 'Monsieur Bon,'

"The Germans, 'Mein Herr Gut';

#### THE MINER

"But at the Mines l'enjoué enfant

"Is now addressed as 'Hoot.'

GR--N.—" Even his failings leaned to virtue's side."

G-D-M-N.-" I have not loved the world nor the world me."

H-RN-,-" Deep vers'd in books."

H-WE.-" A thing devised by the enemy."

I-N-W-Y.—"Considers himself a greater favorite with the ladies than the faculty.'

I-NKS-.—" His tawny beard was th' equal grace

"Both of his wisdom and his face;

"In cut and die so like a tile,

"A sudden view it would beguile;

"The upper part thereof was whey; "The nether orange mixed with grey."

K-ss-m.—"So wise, so young, they say, do never live long."

K-EN.—" They say best men are moulded out of faults."

L-IST.—" There was a sound of revelry by night."

"Full many a flower is born to blush unseen."

L-D-R-L.—" Is this that haughty, gallant, gay Lothario?"

M-NN-EIM.—"Placed by a mirror he starts, barks, and bites at his own image."

M-DD-T-N.—"A little [Parliamentary] learning is a dangerous thing.'

M-LL-R.—" None but himself can be his parallel."

N-WH-USE.—"Great editor, a blank to thee."

"I have immortal longings in me."

"For most men—till by losing rendered sager— "Will back their own opinions, with a wager."

N-R-T-N.—" Nature has framed strange fellows in her time." OR-SB-E.—"I never dare to write as funny as I can."

OST-RH-LD.—"Had sighed to many, though he loved but one."

"Osty is our dude and care,"

"His sweethearts more than many;

"For one alone he's in despair

"And that fair one is Jenny."

OST--RH-LD / —"The reason why they are not friends

WH-R-TN \ -" Will scarce be understood,

"Until one learns that each contends

"For the office of class dude."

P-CK, S. B.--"I am not only witty in myself

"But the cause that wit is in other men,"

P-CK, W. H.—" Talks as familiarly of roaring lions,

"As maids of thirteen do of puppy dogs."

P-RT-R.—"A babe in a house is a well spring of pleasure."

"And still his tongue ran on the less of weight it bore, with greater ease; and with his everlasting clack set all men's ears upon the rack."

R-ON.—"One entire and perfect chrysolite."

S-L-G-M-N.-"Though I am not splenitive and rash,

"I have something in me dangerous."

#### THE MINER

SH-RW-D.-"Brain him with his lady's fan."

"I have that glib and oily art

"To speak and purpose not."

SM-TH, R. DE B.—" Hails you Tom or Jack,

"And proves by thumping on your back,

"His sense of your great merit."

SP-NC-R.—"Corporations have no souls."

"O, that this too, too solid flesh would melt."

SPO-N-R.—" A delusion, a mockery, and a snare."

ST-GG.—"Blushed like the waves of hell."

ST-DD-R.—" To hear him sing you would believe

"An ass was practicing recitative."

ST-ART.—"Bid me discourse, I will enchant thine ear."

TH-MPS-N,—"That which ordinary men are fit for I am qualified in; and the best of me is diligence."

TR-PP-R,—"In olden times when "deals" were planks,

"The pine was named coniferous;

"But 'deals' are now John Kelly's pranks,

"And 'Trip' calls pine conchiferous.',

V-N BR—T.—"A man who has arrived at such a pitch of selfesteem that he never mentions himself without taking off his hat."

V-N N-RDR-FF.—"I charge thee, fling away ambition; "By that sin fell the angels."

W-MP-LD.—"'T was ever thus, from childhood's hour
"I've seen my fondest hopes decay."

W-LL-CE.—"Whence is thy learning? Hath thy toil "O'er books consumed the midnight oil?"

WH-RT-N.—"'Augity' wears that stove-pipe hat

"From one years end to t' other—"Strip off your fur, O city cat,

"And furnish him another."
WH—TL-Y.—"Learned in those arts that cheat the fair."

WH—TL-Y.—"Learned in those arts that cheat the fair."
"There was a laughing devil in his sneer."

W-LS-N.—"Go, poor devil, get thee gone; why should I hurt thee?"

D-PART-D.—"Peace to your ashes, comrades, dear,

"Who from our ranks, through deadly fear

"Of Calculus and Analytics tough "And other unintelligible stuff,

"Had taken flight, we hoped, to Heaven— "Alas! you're damned to Eighty-Seven."

CALCULUS.—"The damned use that word in hell."

EIGHTY-FIVE.—"There's small choice in rotten apples."

EIGHTY-SIX.—"Thy modesty's a candle to thy merit."

EIGHTY-SEVEN.—" Hell is empty,

"And all the devils are here."

EIGHTY-EIGHT.—"What though the generous cow give me to quaff

"The milk nutritious, am I then a calf?"



A BLITHESOME youth with chestnut hair

Far out in the West did go;

A-seeking his fortune, if you will,

But better than that, I know.

A maiden fair, with flowing hair,

Gazed out at the western sky;

A-watching the setting sun, you think,

But better than that know I.

For he was poor and she was rich,

And he was a miner bold;

Guess now, if you can, why both looked West,

If you can't, you sha'n't be told.

Long years he labored in the mine,

Long years did she look in vain

To see if from out the western world

Would come her faithful swain.

At last he came from out the West,

Came back to the maiden fair;

Laid down at her feet his hoarded gold,

As she kissed him kneeling there.

# · Our better Box ·

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DEAR EDITORS OF THE MINER :--

SUPPOSE you will think I am a bold, bad, disgusting girl for writing to you this way when I have n't ever been introduced. I know it is perfectly awful and I oughtent to, but my brother Jack says you are so nice (is n't that a nice way to bring in a little flattery?) and he thinks you'll put this in, and I have always wanted so much to see something I really wrote myself in print, and he says it is such an honor to have something in the MINER and you are hard up for something—oh, I should n't have said that and—dear me, I think there ought to be a period somewhere in that sentence. I'll show it to Jack when he comes in. Jack is in the School of Mines, you know. This is his first year, though he tries to make everybody think he has been there 2 or 3 years, and pinches me if I give him away. O there, I didn't mean to use such horrid slang but it slipped right out. Jack says such awful things; he says it is a beastly grind and that Trig is rank and makes him root; do you know what he means?

Now, I know you can't guess what I am going to tell you. Just think, one of the fellows in the School of Mines came to see me the other day and took me all through the College. Was n't it simply enchanting! So I can say I have been through college. Dear, this seems as if it must be an awfully old joke; I do n't think it can be original for I do n't remem-

#### THE MINER

ber making it up. Well, I had the positively most *perfectly lovely* time you can imagine. I was *aw-fully* frightened at first when I saw what a *terribly* long way it was from the gate to the door and I squeezed Mr. C.'s arm (you see I am not going to tell you his *real name*, because you'll go and tease him about liking me so much); dear me, I'm afraid that's an awfully conceited remark, and you'll go and think I am perfectly horrid, but all the fellows I know, do n't think I—do n't know—I know—I guess I had n't better say anything more about it.

There, I've wandered from my subject, and I'll never make a good writer if I wander, besides people do n't like it. I know our *minister* wanders sometimes in his sermon and then we are *always* late to dinner; he calls it making a "digression." When I get to be a *real* writer I am *never* going to make a digression. You know I am going to write a novel sometime, a real *fascinating* one with such a *simply sweet* heroine and *exquisitely handsome* hero; they are going to be *desperately* in love with each other, and I am not going to have them breaking their hearts about each other through the whole book, but I'm going to have them married in the first chapter, so you wont have to look at the end of the book to see how it turns out. O dear, what a *fearful* digression I have made, *please forgive* me and I'll tell you something more about what I

Well, Mr. C. said for me not to notice the fellows and I would n't mind them. Horrid thing! Just as if I wanted to notice them! I told Mr. C. what I thought of him and made him beg my pardon. He took me into a big room first where there were ever so many funny desks and bottles and boys, all full—I mean the bottles, not the boys, and, oh, such an awful smell and smoke, and so hot I positively could have fainted, only I did n't want to make a scene. He said it was the Quallab. Is n't it a queer name? I don't know whether I have spelt it right or not. I meant to ask him what it meant, but Jack came up just then in a horrid brown workingman's suit, I mean a workingman's brown suit. Jack had some uncomplimentary remarks to make as usual and said he'd go with us. I don't believe Mr. C. wanted him a bit and I tried to give him a hint to go but he is so provoking and couldn't take it. So we went into a room with such lots of cases and such perfectly lovely bric-à-brac, you know I just dote on such things, but Jack said that was N. G. and hurried me along upstairs. He said Prof. Egleston had an enormous appetite—something, I forget what. Then we went into another room where there were lots of flat cases, and at the other end some boys blowing something, they looked so simply absurd I had to laugh, which Jack said I had n't ought to do, because it hurt their feelings. There was one pretty boy who he said was only making believe blow for fear he would spoil his looks. There was one old man with glasses on who talked so fast I was a little afraid, and was glad when we went out and upstairs. We passed by the Architects' floor, for Jack said they never did anything

#### THE MINER

but look out of the windows, and went into a big room on the floor above where there was *just* the *cutest*, *dearest* little engine, but of course you have seen it lots of times. There were ever so many young men up here who looked at me, I mean at us, some of them were real sweet looking. There was one named Jenny something-or-other Jack told me, I felt like kissi—oh, I did n't mean to say that; what would he think of me if you should ever tell him—you wont, will you? P-l-e-a-s-e do n't now. There was another fellow with brown eyes who kept winking at me and trying to get me to flirt with him, but I did n't, at least only a little. Jack said his name was Oysterbay, but you can't always believe Jack. Then we went upstairs and saw those *hideous* skeletons and turtles and things. There was another girl up there who was looking at some funny little stone animals; she said they were *Tribolites*. Jack said she was a co-ed., but I do n't believe him, for she was real nice.

O dear! Jack has just come in and wants to know if I have taken a contract to fill the whole MINER, so I guess I had n't better write any more. Now you will *please* try and put this in, wont you, if you can't get any better, and you wont think me *perfectly awful* for writing to you, will you? for really and truly I feel *dreadfully* ashamed of myself. I am not going to let my real name go in the MINER, but am going to sign myself

SUSIE DIO.

P. S.—You must send me ever and ever so many MINERS when this comes out.

S. D10.

# · Eighty-Six ·

IGHTY-SIX—thy name be honored
In the years that are to pass!
Let thy name be known forever,
Praises to thee, noble class.

Lessened numbers raise thy banner, Many fell beside the way; But the remnant pushes bravely On through perils day by day.

Nothing daunted by the havoc That examinations spread, We are pressing ever onward With unceasing, fearless tread.

Freshmen, Sophomores, now Juniors,
College days are almost done;
Soon will books be left behind us,
And the race of life begun.

Then, oh, classmates, as we labor,
Let us turn again once more
To the days when we together
Searched the deeps of mystic lore.

Fill your glasses then to brimming,
Drink the Alma Mater dear;
May there be no darkening shadow—
Strong and merry be thy cheer.



A GEOLOGIST OF THE OLD SCHOOL.

# · Pelhamvilliana ·

BY AN ARTS-MAN.

ELHAMVILLE had become so famous as the location of the Summer School for Surveying that I decided, about the middle of September, to visit my old friends of the Mines. So, early one morning, in company with some of the Miners who preferred Croton water to its more active rival from Westchester County, I started from the Grand Central. We soon dashed into Mt. Vernon, at which place, I was informed, stayed those members of the class who could drink no water and needed a home near Joe's. As the train was moving out of the station, shouts from the rear startled me; nor were my fears of robbers allayed by the sight of half a dozen fantastically dressed individuals running for the last platform. All but one succeeded in boarding the train, and I was on the point of jumping from the window to save my money, when I recognized among the new comers an acid-slinging friend of '86.

The conductor then appeared, and remarked in a stentorian voice, TICKETS! But, to my surprise, none of the fellows seemed to know him or to understand what he said, sitting so unconcernedly in their seats that one might have thought they had been there a week. Baffled in his attempt thus to open the conversation, the official was growing very nervous, when the Yonkers dude came to the rescue by paying his fare, amid the scowls of his comrades. "For," he explained afterwards, "Victoria's father was on a railroad before he made his cash, and this man may have a daughter and be in need of a coachman some time. I don't get left twice."

In a very few minutes we were at Pelhamville and all dashed out, leaving the conductor in bewilderment. After a long walk along Fifth Avenue, which was lined with pig-pens and apple trees stripped of their fruit, we reached a house, into the attic of which I was ushered. There, in an eight-by-ten room, the class was assembled, waiting for the professor, who drove over from his country house. At 7:45 A. M., the roll was called,\* and then I was enlightened by a lecture on "Crooked Courses" and "Three Ball Problem," lasting for over an hour, and embellished with many unfinished phrases and "h'ms." In addition to the "hum"-ing

<sup>\*</sup> By what authority, my Mines friends did not know; only this, that if they exceeded the usual limit of cuts, ten per cent., they would be debarred from an examination in February!!!

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done by the Professor, there was considerable done by a colony of hornets who dwelt in the lecture room, and some also by Prof. Hard-Case, working down stairs.

Free at last, the instruments were made ready, and I, resolving to do it up brown, offered to carry a transit. A dozen were proffered immediately. Concealing my torture by a learned look, I managed to reach the woods and carefully deposited the transit on its side to keep it from being hurt. When I had been reproved in forcible language for so doing, the squad proceeded to work. "What is our first sight?" said one. "From Sta. B. to E. E. R.; and I'll see you later at the grocer's," replied the second, as he started off at full speed. "If Prof. comes, tell him we are locating distant stations. Take care of the tran.," and away went No. I.

After half an hour, I set out to find my friends and the grocery. I had not gone far when I beheld Squad H. building dams across the Huntington River and eating their lunch, though only ten o'clock. Further on, Q. was looking for a surveyor's compass, which he had left in the woods the week before. Scarcely had I left him, when a strange sight attracted my attention. It was N. dancing around A. as if insane, wildly gesticulating, and uttering words whose sacred import it would not be well to imply here.

"Well, I thought you had a turning-point," timidly put in A., as I came up.

"No, you (don't mention it), I was only clamping the rod, and you have taken up the level, and we have no turning-point, and you will have to go all over it again, you——"

At this juncture I left, to continue my search for the grocer's. Seeing O. and S., I stopped on O.'s invitation, to learn how to "close on a bench mark." So O. clamped the "target" at one foot, which he said would be just right, and cried "Roddup." S. squinted through a why level, and signalled "Down."

"All right," replied O., not moving it a hair's breath.

"Down, you numskull," yelled S. "I can't see the target at all."

"Shut up, you blamed idiot; it's all right," said O., faintly, for he spied an assistant approaching.

"All O. K.," cried S., his face for the first time lighting up as he caught on; but the assistant demanded a sight, and forthwith O. and S. started over the course again, and I kept on.

Without further mishap my goal was reached just in time to see emerging from it my two friends of the transit, who made for their station on the double-quick. Numerous other squads were at the grocer's, and with them I lunched on "crackers and cheese."

After lunch I started in search of more adventures. The first novelty I investigated being a pretty three-legged table with a stage-driver's umbrella over it. One man of the squad was spearing trees with a barber's pole; another was reading one of Ouida's latest in the shade of

#### THE MINER

a fence, and the third was drawing a picture of what he thought to be the pretty school mistress, as viewed through the "adelaide," beckoning to him.

"Move station," I heard him cry, and hastened to ask what the establishment was.

"Blaine-table," was the response, as they put it on my shoulder; and well-named, I soon found out. For certainly no Republican ever carried heavier load in supporting J. G. B. than I in carting that Jumboic instrument. Meanwhile, all three of them rushed forward to see the daught. Alas! "All is not gold that glitters." A small child had dressed up for the occasion and fooled them. I was about to leave them, when they said it was going to rain, and the instruments must be taken in. I saw not the slightest indication of bad weather, but yielded to their better judgment, and went to the boarding-house with them.

At six we went to dinner with a rush. Fly soup and boiled sole-leather, washed down by the far-famed mercaptanized water, constituted a meal fit for a king—of Timbuctoo. Politics kept one end of the table in an uproar, and Dick's stories the other, while there was a continual tussle for the milk. With a "grace" of college songs, we adjourned upstairs to the ancient piano. Soon Hoot and several others started for Mt. Vernon, while those at the house devoted their time to whist, poker, claret punches and other branches of surveying.

About eleven S.'s voice was heard singing, "I never drink," answered by a chorus, "Behind the bar," and it was not long before a jolly crowd broke into my friend's room. Some sailed into H. with pillows and dragged him out of bed; G. tried to level with a cane as a rod, and L. as a tripod; N., on the floor, tried to read the azimuth angle from his watch with a pocket looking-glass; and the dude was in the corner, his hat over his eyes, keeping time with his stick to "Wait till the clouds roll by, Jennie."

Hearing the landlady's voice and fearing trouble, I lit out and took the midnight train for New York, well satisfied with my knowledge of surveying.



A "PLAYIN' '-TABLE SCENE FROM PELHAMVILLE,

# · Inventions During The Past Year ·

BY THE

# · Glass of '86 ·

A Y LEVEL. Warranted to come out exactly right every time.

Invented by Wh-t-n.

\*A Method of coming out exactly without requiring a perfect level. Os-h-d and Sp-on-r.

 $\dagger PERPETUAL$  MOTION. A little clack-valve, easily carried in the mouth, run by gas. P-t-r.

A NEW and quick method of running a Traverse. Ag-m-e and N-t-n.

PERPETUAL MOTION. Our mustaches. O-b-e and J-n-y.

A CORK LEG. Works automatically. Special rates to the foot-ball team. P-t-r.

A Series of Questions, with directions how to apply to every Prof. at the end of every lecture; warranted to scoop a max. J—ks.

A NEW "MINES" NOTE for the Spectator. N-wh--e.

RESTORER OF YOUTH. The most antique joke treated with my preparation becomes as fresh as ever. C-n-t.

A SIMILAR preparation for pre-Delugistic stories. J. D. B---y.

 $\rm BLONDE\ HAIR.\ Magic\ elixir\ ;\ makes\ the\ mustache\ so\ light\ it\ cannot\ be\ seen.\ P–k.$ 

NEW and extra large plaid designs for clothes. Sh-w-d.

<sup>\*</sup> This method has been known to fail.

<sup>†</sup> Refer for recommendation to Prof. Tomi Rocques.

# · Golumbia by Night ·

Y hand trembles as I sit down to pen this narrative, for I know not what fearful course revenge may take, or what I may bring upon myself by the disclosure of a plot so quietly and desperately devised and so little suspected.

I was returning home about one o'clock in the morning—it may be just as well to say here that I had opened no doors with "Push" on them in the course of the evening—and was just crossing Fiftieth street



by the Villard settlement when I saw a bright light flash for a moment in one of the upper windows of Hamilton Hall and then disappear. I knew that studying by night was an occupation wholly unheard of in the Arts, and though the professors there often "cast their pearls before swine"—Pricely pearls, too—I knew that burglars cared even less for these pearls than the swine. So my curiosity was aroused, and I determined to investigate. The gate was closed but not locked, so I went in, and in a mechanical sort of way tried the door leading into the cloak-room. I was going away, when, to my dismay, the door opened a crack, and

voice that was meant to be fierce, whispered:

"Who's there?"

I prepared to measure the distance to the gate with my best "artificial pace," but the door was flung open, and a hand placed upon my throat and another over my mouth. I struggled with the vigor of a Freshman on a cane, and clutched savagely at my unknown assailant. I grabbed something which broke away from me with a shriek of "Oh, my back hair, my back hair! He's pulled it all down," and fled into the street, leaving me alone.

So, a female burglar, I thought. Wonder if there are any more inside? Do n't see what she wants. Can't be jewelry; Prof. Rees keeps Saturn's rings locked up, and it does n't seem as if there was any watch

#### THE MINER

here to-night. Turning to the door, I went in. To my surprise the cloak-room was lit up, and a goodly array of "hats, coats, umbrellas, overshoes, etc.," ornamented the walls. Evidently something was up. Thought I had better go up, too. I reached the top of the stairs, but paused, for right in the centre of the hall stood two full-fledged—girls! Accomplices, evidently. Before I had time to fall over backwards downstairs they parted, one going into the sacred class-room of Prof. Drisler, the other up-stairs. Must be desperate characters, I thought, for they wore blue and white striped dresses.

Following the latter as soon as she was out of sight, my footsteps, which were rather shaky by this time, took me where they naturally went when they were shaky—to a room at the head of the stairs on the third floor. I opened the door and peered in. O, lemon-squeezer of Jupiter, what a sight! The room was full of GIRLS. Each wore a white ribbon, on which were the mystic words, "C. C. Belva Campaign Club." A short, thickset, grayhaired woman stood with her hands in her pockets, glaring at them. "Go to the board, Miss Cornelia," it roared, "and prove by Calculus that a cylinder is equal to twice a sphere of half its size. Now, Miss Portia, how do you get the equation of an ellipse. Do n't know? Well, WHY do n't you know? Tell her, Miss Belle."

"The equation of a circle will be the equation of an ellipse because the ellipse is the general case of a circle." "Right; max. Miss Jenny, shut the door; it is just as bad to be in a draught as to have a draft in you." I had incautiously opened the door farther than I had meant to, and had to retreat hastily. I was not sorry, for I had seen what pained me very much in the room, an effigy of our beloved Prof. of Mathematics suspended by his heels from the gas jet. I saw a big notice on the bulletin board in the hall: "Freshwomen, beware! No Freshwomen will be allowed to wear her hair up. Grand Back-hair rush at 2:30 A. M."

Going down stairs I looked in at the different keyholes. In the North Hall, Prof. Short's room was unusually crowded. I was at a loss to account for this, till a familiar voice smote upon my ear and the professoress—no, the professor—stood in front of the keyhole. A white beard, a white head partly concealed by a brown wig, and a "divided skirt" made the "ensemble."

"I will translate the passage then myself." said an oratorical voice proceeding from the functionary.

"'At in immani atro vatis bacchatur.' He, the unmanly one, atrociously paid his respects to Bacchus at the vats." Ah, my precious dears—I mean—a—my respected young ladies, times then were very much as they are now and—" "But, Prof. Weaks, you don't mean—"

I heard a step coming down stairs and ingloriously fled towards the *Spectator* office. Alas! it, too, had not escaped the general invasion. A big sign on the door announced that the "*Columbia Spectatrix*, Vol. I, No. I, would be out at three A. M."

#### THE MINER

Ripples of laughter wreathed in cubeb smoke curled through the cracks of the door. "Oh, we'll get even with the horrid students who did n't want to be co-educated," followed the smoke in dulcet yet decided tones. "I've been up to the Astronomy room and set the 'Standard time' ahead half an hour, so the boys will all be late to-morrow." "Have you heard the latest," said another voice, "the Prof. of Rocks at the Mines' is going to let us in there every evening after to-night. He told Presidentess Lıllie Blake he would if we would buy his books. We are going to call it the School of Minds. Mrs. Lydia Pinkham is going to be professoress of Chemistry, and is going to take all the advertising pages in all the things we publish." More footsteps at this juncture, so I fled, not even daring to stop and hear what was going on in the office of the "Acta Feminea." The feet drift into familiar channels as well as the mind, and before I knew it I found myself at the door of a room in the south-east corner of the old building. "Pst! You must not talk, therefore it is an examination," proceeded through the open door. My courage mounted 250 per cent. as I heard the familiar voice. Alas! too much; for I protruded my head too far in. A small figure in black fled with an appalling shriek behind the stove while a chorus of

screams arose from the class. I was dazed and began, "Why, professor I didn't do a thing then—" before I had sense enough to retreat. But I had been recognized "Ha! das is der plackguard vat used to pring die dead mice in der room. Seice him, seice him, meine madschens." In a minute a dozen fair arms encircled me while the professor fled from the room. "Stop, I don't let girls hug me, "I gasped. Instantly every arm was removed, and the brilliant blushes told that the girls had not looked at it in this light. Before I

with three powerful viragos. I shall not detail what followed. It would be painful for me to record, and for anyone to read. Enough to say I was only allowed to live, on taking the most solemn oaths of secrecy. I was escorted to the gate, and made my way home as fast as possible.

Students of Columbia! Will you who have expressed your opinions on this subject of co-education through your Trustees and your journals tamely submit to this outrage? Will you go quietly on, day after day knowing as you now do, that night after night the solemn repose of these classic halls is profaned by unbidden presences. Nay! Never! Rise! gather to the support of your Alma Mater! Banish the Intruders, and preserve for your college the glorious name which has ever been hers, and without which she must, e'en as her foot-ball team, miserably perish.



# · Owenty Years After.

HAT, Jack! is it really you, old boy,
So brown and bearded, home at last?
'T is pleasure, old chum, without alloy,
To greet you of the cherished past.

Draw near your chair; the fire's warm glow Brings to your eyes the look of yore; By Jove! sweet chords in memory's flow Of music steal o'er my heart once more.

And so you've come from foreign lands, After these years since last we met, To test the strength of friendship's bands Forged in the days of our college set?

You see them, Jack, those chums of ours Through many vistas of years gone by; Little we recked, in the fleeting hours, Of care that would come to leave its dye.

A letter from George arrived to-day; Always a man of thoughtful mind, Steady and sure he's worked his way And won the success due his kind.

And what of Fred, careless and free, Always conditioned, yet loved the more? Sobered, yet cheerful, I'm told that he In life's mad race keeps well to the fore.

#### THE MINER

But poor old Ned! Among the best
Men of our class it seemed to me
He'd scale the heights—nor pause to rest—
To Fame's own peak; and where is he?

Speak softly, Jack; he's left us now, E'er true and brave he proved to be Down in the Isthmus; and I'll vow His memory is dear to me.

So Time, the grim old satirist,

Mocks at us as we speed away;

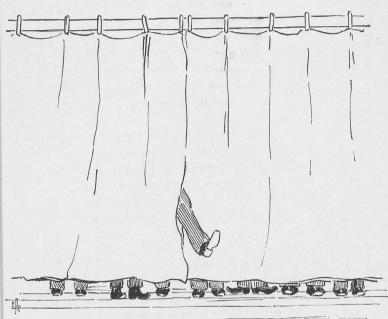
Now sunshine, now o'er shadowing mist,
The goal, an old stone slab of gray.

Come, Jack, fill up your pipe once more, To drive these gloomy thoughts away. What, going? Nonsense! well, before You leave in this too sudden way,

We'll pledge, old friend, a true loved toast, In this deep ruby-tinted wine; Columbia fair! who needs no boast Her well earned merits to define.

Long may she live! long may it be
Ere her loved walls fall in with decay;
And may her true sons ever see
Her fame grow greater day by day.

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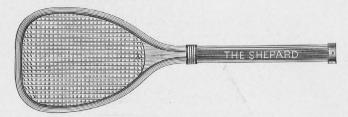
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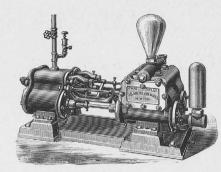
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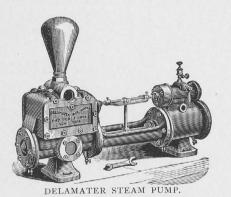
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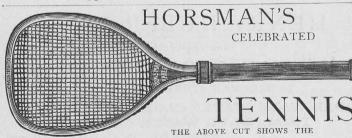
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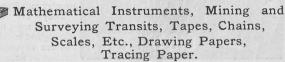
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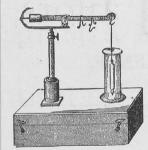


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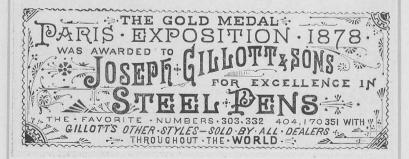
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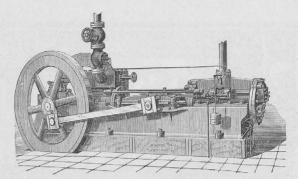
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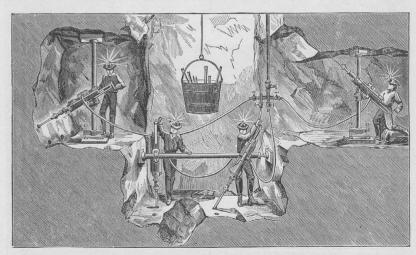
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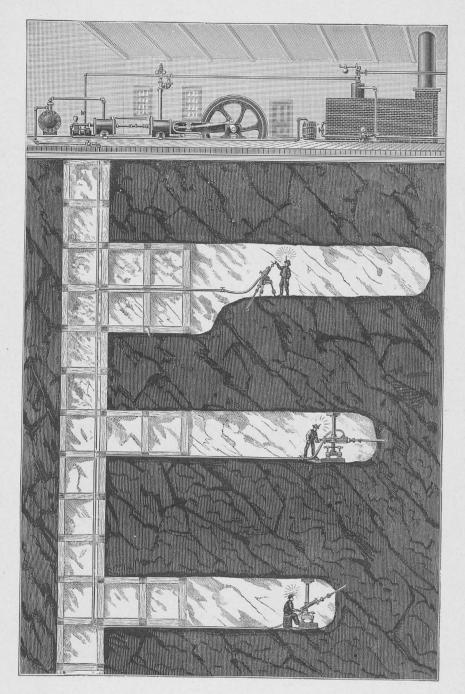
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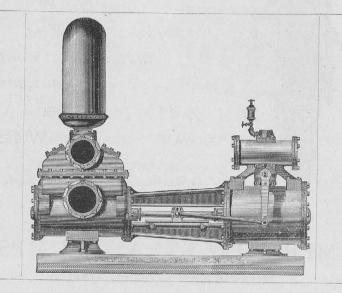
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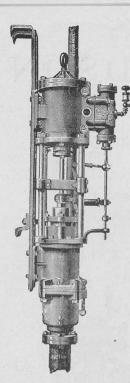


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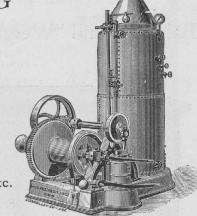
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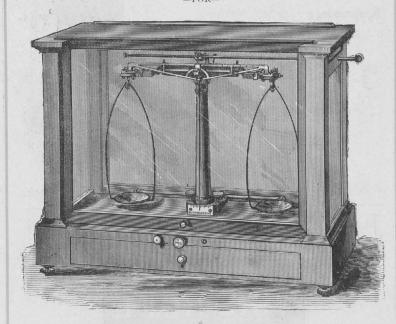
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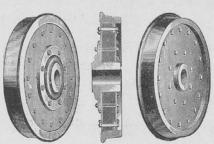
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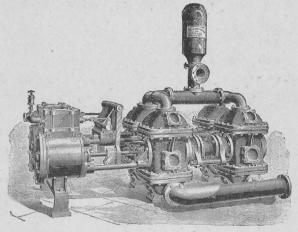
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T Squares, Triangles, Curves, Scales, Etc., Etc., Furnished at reasonable rates and at the shortest notice.

