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CHIPS 1920

College of Physicians and Surgeons

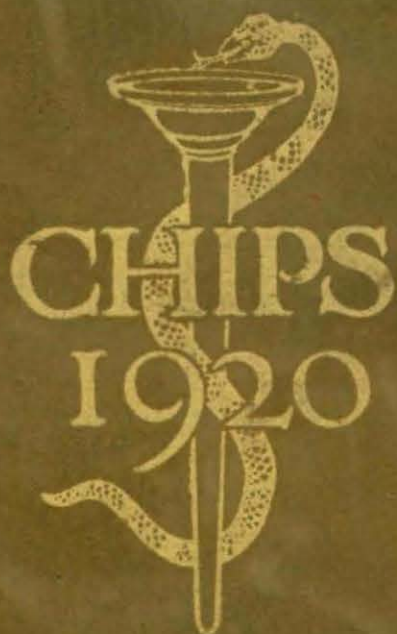
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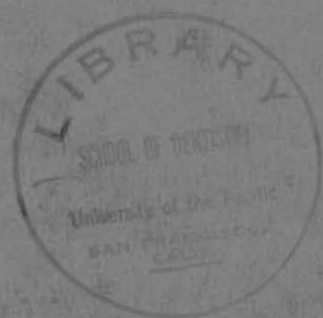
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1920

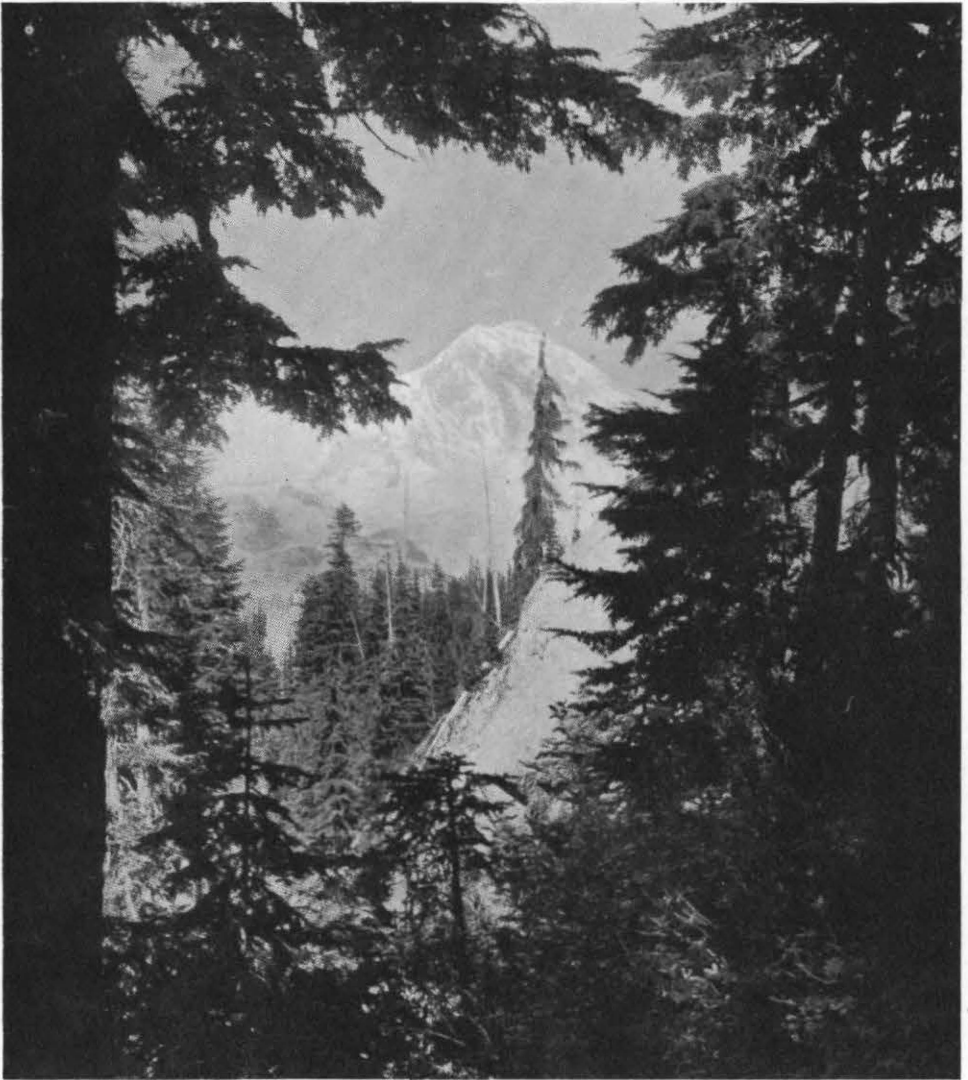


CHIPS
1920









A NIGHT'S RIDE FROM SAN FRANCISCO

CHIPS

SAN FRANCISCO, CALIFORNIA

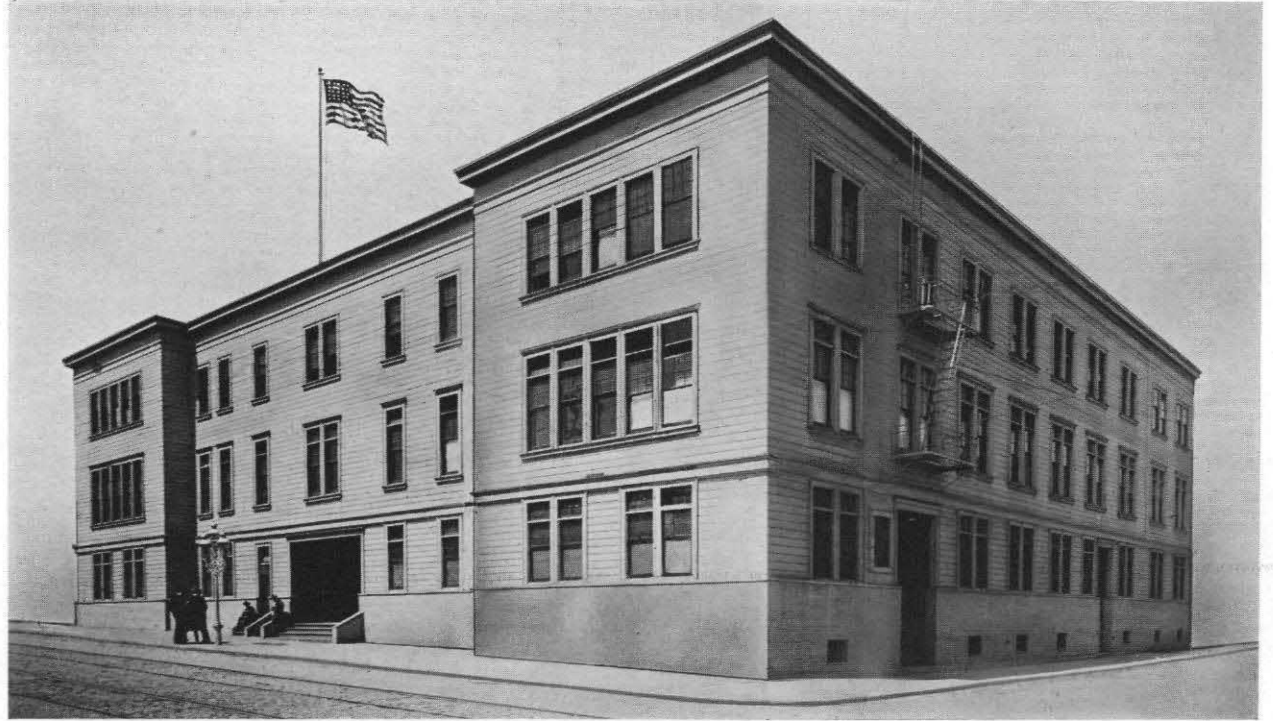
JUNE - 1920



Published by the Student Body of
THE COLLEGE OF PHYSICIANS AND SURGEONS

To ARTHUR R. McDOWELL, D. D. S.
AS A MODEST TOKEN OF APPRECIATION
OF HIS CONSTANT INTEREST, EARNEST
GUIDANCE AND JUDICIOUS COUNSEL,
THIS BOOK WE RESPECTFULLY DEDICATE.





COLLEGE OF PHYSICIANS AND SURGEONS



FOREWORD

TO THE STUDENTS, BOTH PRESENT AND PAST, OF THE COLLEGE OF PHYSICIANS AND SURGEONS THE VERY WORD "CHIPS" RECALLS TO THEIR MEMORIES PLEASANT HOURS OF RECREATION AND STUDY SPENT WITHIN THE COLLEGE WALLS. SO IT HAS BEEN THE ENDEAVOR OF THE EDITOR AND HIS STAFF TO MAKE THIS, THE TWENTIETH EDITION, A REAL SOUVENIR; ONE THAT WILL BE TREASURED AND WHICH WILL IN YEARS TO COME SERVE AS A REMINDER OF PLEASANT MEMORIES AND OLD TIME ASSOCIATIONS.

THEY HOPE THAT THE MATERIAL IN THIS BOOK WILL BE OF INTEREST AND VALUE NOW, AND, LIKE FAMILY HEIRLOOMS, IT WILL BECOME OF MORE VALUE AS TIME ROLLS ON.



DENTAL INFIRMARY

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In Memoriam
To
J. Wilbur Purrington
Died
Jan. 20, 1920

Who knows what the next day brings—
As on life's path we tread—
Today we live amongst beautiful things—
Tomorrow we are dead.

—R. V. BURK, '22

FACULTY



JOHN H. PESCHONG.

FACULTY

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President

CHARLES BOXTON, D. D. S.
Dean
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Professor of Materia Medica, Therapeutics and Pharmacology

MARTIN DEWEY, D. D. S., M. D.
Professor of Comparative Anatomy

ELIZABETH E. RICHARDSON, D. D. S.
Professor of Orthodontia

FACULTY—CONTINUED

JAMES D. MCALPIN, D. D. S.
Clinical Professor of Minor Surgery and Radiography

BERNARD C. KINGSBURY, D. D. S.
Lecturer and Instructor on Crown and Bridge Work

ABE EPSTEIN, D. D. S.
Lecturer on Operative Technic

JOHN H. PESCHONG, D. D. S.
Instructor and Lecturer on Technical Drawing, Dental Anatomy and Operative Dentistry

HENRY CLAY VEATCH, M. D., D. D. S.
Adj. Professor of Clinical Anesthesia and Oral Surgery

JACK WERNER, D. D. S.
Lecturer on Prosthetic Dentistry

SADI B. FONTAINE, D. D. S.
Adj. Professor of Oral Surgery

ARTHUR R. McDOWELL, D. D. S.
Lecturer on Anatomy of Head and Neck and Dental Histology

ADOLPH GOTTSCHALK, M. D.
Lecturer on Physical Diagnosis

E. R. ANDREWS
Adjunct to Chair of Bacteriology

ORTHODONTIA STAFF

Advisory Head of the Department
MARTIN DEWEY, D. D. S., M. D.

Chief of the Clinic
ELIZABETH E. RICHARDSON, D. D. S.

INFIRMARY STAFF

Superintendent of Dental Clinic
BERNARD C. KINGSBURY, D. D. S.

Instructors in Clinical Operative Dentistry

MAURICE J. SULLIVAN, D. D. S.	FRANKLIN H. LOCKE, D. D. S.
ARTHUR R. McDOWELL, D. D. S.	G. BORDEN YOUNT, D. D. S.
WALTER E. HOLL, D. D. S.	EUGENE NICOLAS, D. D. S.

Radiologist and Exodontist
JAMES D. MCALPIN, D. D. S.

Secretary of the Faculty
MISS JESSIE G. INGLIS

Operative Secretary
MISS GLADYS E. BOXTON

House Surgeon
EDWARD P. GENOCHIO, M. D.

Librarian
MRS. EDW. P. GENOCHIO

Social Service Worker
MRS. G. THOMPSON

Faculty Note

The past year has been rather uneventful considering that the excitement incidental to war activities has ceased and students and faculty have gotten down to business and system.

One of the events following the great war has been the vocational training offered by the Government and a number of disabled service men have expressed their desire to take up mechanical dentistry.

Our college is one of the few which has been selected to give these men their training and the faculty feels highly honored for an opportunity to give our heroes a thorough mechanical education in dentistry; so they may earn a good livelihood even though they are disabled.

All departments have been in operation at full tension and on a systematic basis and the faculty feel that the four-year course has been one of the greatest strides dentistry has made in many years.

SENIORS

'27



H. X. Smulson '22

SELF-DETERMINATION

"CHIPS"

“Senior Farewell”

The end of a long trail is here. The class of 1920 goes forth adding one more class to be recorded as graduated, which means that the days of guidance are over and that we are now thrown out into the world on our own resources, to do our own thinking with experience, as our teacher, to point out the possibilities that lie ahead.

It certainly has been a trying four years with many obstacles, yet, as we look back in the past, there are many pleasant memories which we shall always cherish.

In the Junior year the class became divided on account of the great war, as some of the boys answered the call of their country for active service in the Army and Navy, and not until after the struggle was over did the remaining members once more get down to the study of their chosen work.

It is with undying memory of the never tiring patience and willingness of the faculty, who have co-operated with us during these four years, and above all the fatherly advice and support of our esteemed leader and Dean, Dr. Charles Boston, that we will go out into this world and make a name for ourselves as members of our profession.

May we always bring honor and respect to him and our Alma Mater.

A. CARLSON, '20.



HARRY S. WITTKOPP ("*Cutie*") San Francisco
Psi Omega Fraternity

A fair example of shyness yet a cyclone among the women. ("When you want to find Mickey look for Harry.") As a student par excellence, and as an operator no praise need be said.

Your success is assured.



WILLIAM F. KOGEL ("*Bill*") San Francisco

The real old originator and pinch hitter. If the class has the blues, Bill is sure to pull a laugh out of the bunch some way or another. If you keep it up, Bill, you're a sure winner.



WILFROD R. FLEISCHER ("*Duke*") San Francisco

One year with us and we have learned that you know them all. "She's my sweetie." A wizard when it comes to playing billiards; which art you have acquired from working on people's "Ivories." You sure called your shot this time, Duke, and now you're a Dr.



JOHN D. ATKINSON ("*Tony*") San Francisco
Editor in Chief of CHIPS
President of Senior Class
Psi Delta Fraternity

Here we have a man we will never forget. A good fellow and a capable student, always ready to help the other fellow out of some difficulty. "Whata you tink?"

Go to it, Tony, the best of luck be with you.



ANTHONY GONSALVES ("Tony") Honolulu, H. I.

Our future representative to the Islands of the Pacific. You sure will "knock 'em dead, boy." We hope to see you when we step off the boat on a trip to your summer shores; and hope to get the old glad hand and success.



OTTO E. REICHENBACH ("Pep")

Guttenberg, N. J.

The originator of pep and a smile a mile long. Pep has been with us only a year but he came when we needed him most. Success is yours, Pep, everything comes to him who waits.



WALTER E. ANDERSON ("Andy") Alameda, Cal.
Assistant Editor of CHIPS
Psi Omega Fraternity

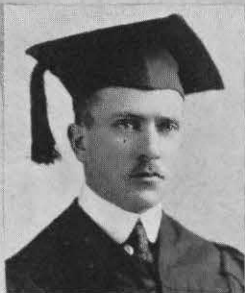
A representative of the "City of the Dead," but here is one real live one, and full of jazz, too. As an operator O. K., and as a good fellow K. O.

Success to you, Andy; we sure will miss you.



ALBERT O. CARLSON ("Al") Oakland, Cal.
Psi Delta Fraternity

"How's the old man today?" Al is the man who upholds the standards and traditions of our class. As an operator your success is assured. "Good-bye, Al, old boy." May you ever have success.



WALTER C. McADOO ("*Mac*") San Francisco
Psi Delta Fraternity

Mac has done wonders this last year by showing what is really in him. The pep you've shown, Mac, will never be forgotten by the rest of the bunch. May you have the best of luck and lots of gold fillings.



JOSE N. LERMA ("*Joe*") Manila, P. I.

The old adage, "Big things come in small packages," holds good with you, Lerma. As an operator you certainly have made good. We expect big things from you, Joe, and hope to hear from you in the future.



DANIEL J. SULLIVAN ("*Dan*") San Francisco
Psi Omega Fraternity

Hey, Swede! Have you seen Zuke? We will never forget your roundhouse patient. Dan has staged a mighty good come-back and has shown what one can do if he so desires. We know that you have two desires, so wish you success with both.



EDGAR L. SMITH ("*Ed*") Tulare, Cal.
Psi Omega Fraternity

We haven't seen much of Ed this year but we know what to expect from him in the future. As a good fellow, nuff said. You can't beat him, not alone tie him. Good luck, Ed.



IRA CHARMAK ("*Ira*") Woodland, Cal.
Alpha Omega Fraternity

In an argument for the good of the class or fellow students, Ira is always on deck. You have the right spirit, and success is surely yours. Go to it, Ira, and ride 'em to death.



OLIN M. WILSON ("*Woodrow*") Berkeley, Cal.

Woodrow has been with us a year but you would hardly know it. A quiet chap who sets a pace and keeps it. It now leads to success. Good-bye, Woodrow, old boy.



RALPH A. PENIA ("*Goo Goo*") San Salvador, C. A.

Whenever you want Penia, look for Amaya. Here is the other "Gold Dust Twin," and a dapper little fellow at that. They will have the town's brass band out to meet you when you arrive home. Success to you, Penia.



ROSCOE W. NICKERSON ("*Zeke*") Rico, Colo.
Psi Delta Fraternity

"Where's your horse," Zeke? Here is our "Country Cousin" and small town greatness. Not only as a dentist, but as a politician you have made good. Here's hoping you show the folks a thing or two, and success is yours.



ALBERT J. WHITFIELD ("*Bud*") San Francisco
Psi Delta Fraternity

"Now who in the devil's got my gadgets?" Bud's thundering voice and physique will not be forgot, and as for a gladiator he has no equal. With all these qualities, Bud, you certainly will make them sit up and take notice.



EMMETT D. TROTT ("*Auntie*") Santa Maria, Cal.
Psi Omega Fraternity

Our future shining light of Santa Maria. Too bad they don't need a lighthouse there, 'cause you could sure fill the bill.

We expect you to be Mayor in a short space of time, "Auntie."

The best of luck be yours.



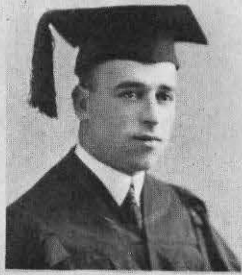
EDWARD H. OHILEMUTZ ("*Ole*") San Francisco

"You tell 'em, boy," and Ole sure can tell 'em. You sure have proven yourself a good operator as well as a good fellow. Good-bye and good luck, "Ole," old boy.



ROBERT E. TAFFEE ("*Bob*") San Francisco
President of Student Body
Psi Delta Fraternity

"I'll betcha." Right away you know Bob's around. Bob will take a chance on anything, even the weather. As a student you're there, Bob, and may you have every success in the future.



PETER ANGEL ("*Peter*") Athens, Greece

"Our Grecian Athlete." Any time you want to test your strength look up Peter.

Go get 'em boy, and pin their shoulders to the mat.



LEON KLEIN ("*Gosha*") Warsaw, Poland

Gifted with a wonderful voice is our Oriole. Klein sure can sing. If you sing to your patients while working and they still have "patience" with you, Klein, your success is assured.



ARTHUR J. BIRD ("*Art*") San Francisco

Art is a man whose untiring efforts have carried him right along and success is assured. His greatest saying was, "Will you repeat the question, Doctor?"

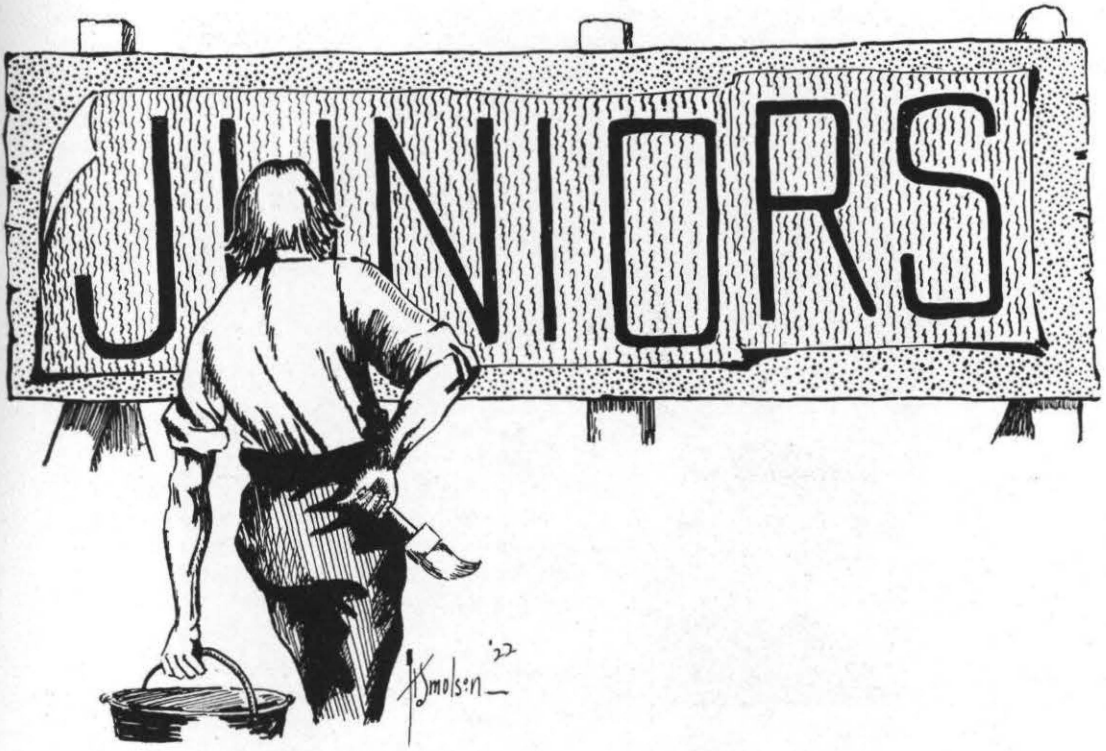
Good-bye, Art, and good luck.

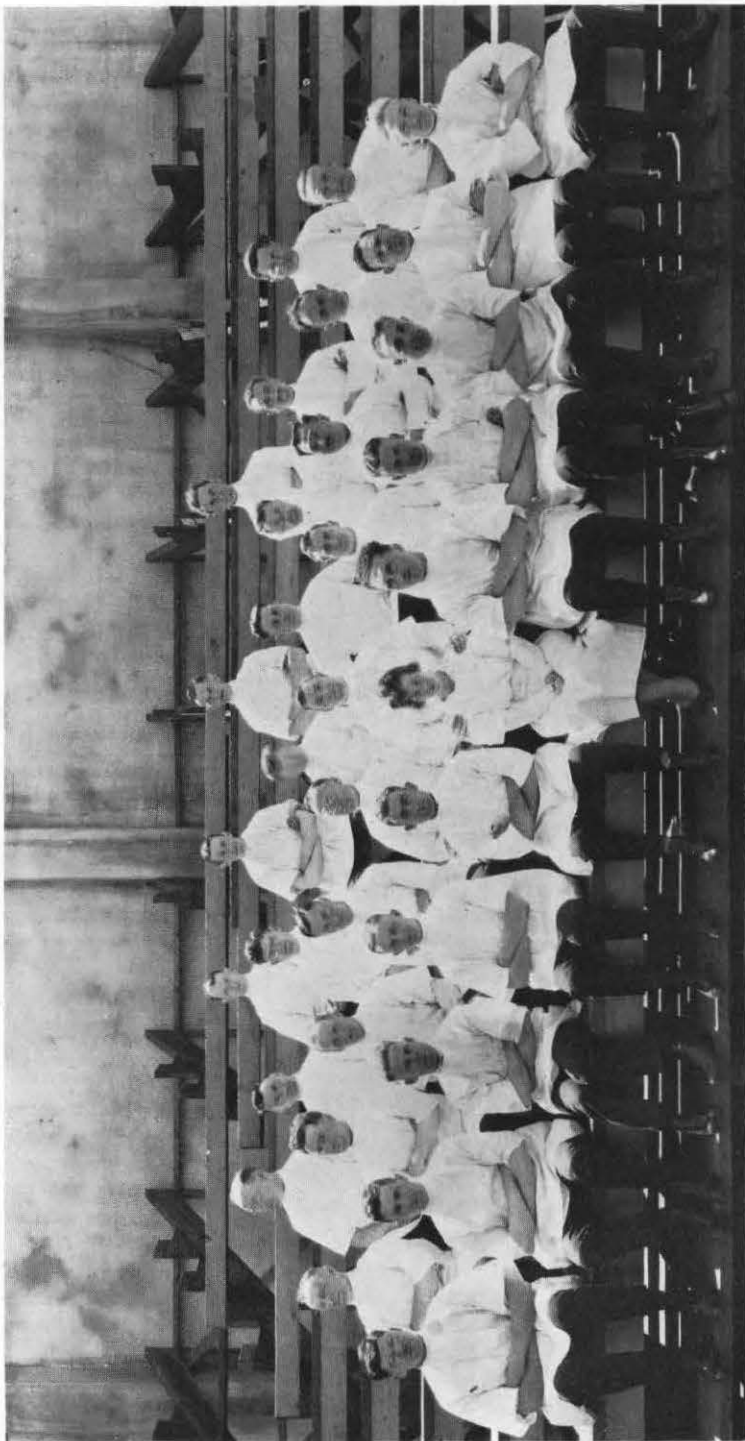


ALBERTO S. AMAYA ("*Amonia*")

San Salvador, C. A.

One of our "Gold Dust Twins." A happy little fellow from the tropics. You certainly have proven yourself a good fellow and we are sorry to lose you. Good luck, Amaya.





JUNIOR CLASS

Juniors

I lay awake, and there did seem,
Thoughts came to me as in a dream;
Thoughts of the class of "Twenty-One."
We knew to college they had come
To realize their life's ambition,
And gain for them a great position
Amongst those in our profession
Whose work has taught us this great lesson:
"For our success we all must pay
With good hard work every day."
As I thought there seemed to be
Something urge me to write class history.

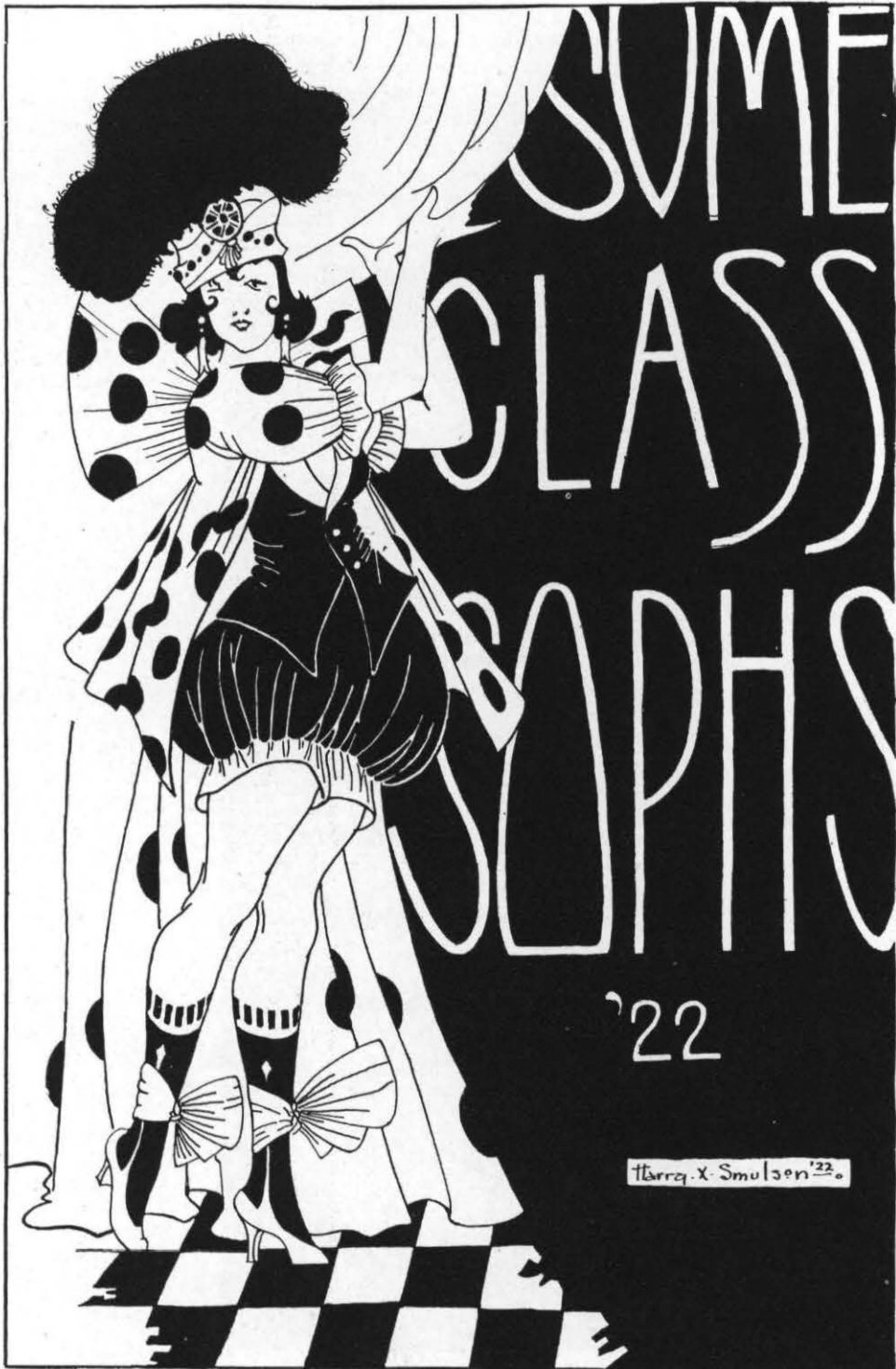
I see Jack Ayers with his winning smile,
To help a friend he would walk a mile.
And now Bill Auslin comes into sight,
Always late but gets in class all right.
Then Ben Barry with his Irish grin,
Yelling, "Get the wagon and put Ayers in."
Now I see two bootblack stands,
No, I'm wrong, they're Fred Bley's hands.
Ah! Harry Bernard comes upon the scene,
With his hair of gray and his suit of green,
Trying to convince Ray Bassett
That Aqua Regis is not a strong acid.
Now what's that? A Malaria Chill?
No, it's just De Rose, he's shimmying still.
Here's Smoke-tack Ernest, whom next I see,
Who buys his cigars is beyond me.
Ah! Charles Ertola and his noble ways,
He's never knocked and always praised.
I see Falconer, the demon prof.,
Telling the doctors how to teach their stuff.
Now I see handsome Tom Fitzsimmons,
Being chased by pretty women.
And who is this familiar face?
Ah! It's Friedenbergh, the handball ace.
Here's Grimwood, who's in an awful plight,
Since over his beauty the women all fight.
Next I see Bill Hanahan,
Asking, "Doctor, state that again."
Now, I see Hills, he cannot keep still,
He's shouting, "We not only can, but we will."
And Doris Hutchinson, our Co-ed, not bold,
She wears vamp stockings so I am told.
Next I see appear upon the scene
Horse-Collar Jameson, with his diamond pin.
Here's Harry Jacobs, he stands some chance

Of collecting any dues before a dance.
 And Pat Kilkenny, the Irish Champ,
 Who claims Lloyd George should be put in camp.
 Morton now comes into view,
 He's a likable fellow, and new to us, too.
 Here's Rider Manuel, the traveler bold,
 Who thinks sea tales never grow old.
 Now I see Melendez, late to a class,
 He must not know when they start, I guess.
 Tell me, what is that funny noise,
 It's just Michaud playing with the boys.
 Now Frank McDade with his ready wit,
 Always willing to do his little bit.
 Here's Pera with his winning ways,
 Do him a favor and he always repays.
 And Lou Puccinelli, alas, I do fear
 He's captured Mickey's heart, he's now Hubby, dear.
 Now I see Saalfield, our good natured friend,
 Trying from Schwartz, some compound to land.
 Of the Sinai brothers, I can't say enough,
 For one of the Sinais is writing this stuff.
 Here comes Sloman, hail the new dean,
 He's bound to succeed, there's something in his bean.
 And here's Senator Smith, that lovable soul,
 To win a technical point is his chief goal.
 Now Doctor Togo, direct from Japan,
 He's an excellent dentist, and a splendid man.
 Now I see Warren, an ambitious boy,
 Sleeping late in the morning is his great joy.
 I see Lou Wiseman, the class high flyer,
 There's none in our class can beat him perspire.
 Now I see Johnnie Wolf, the old dancing master,
 If he would dance now it would cause disaster.
 And now Floyd Wilson, the class's lost man,
 Who'll get out of work if anyone can.

Now this has been done in the spirit of fun,
 I hope none take offense at what I have done,
 I cherish you all, but must now say adieu,
 So, friends of my class, I now salute you.

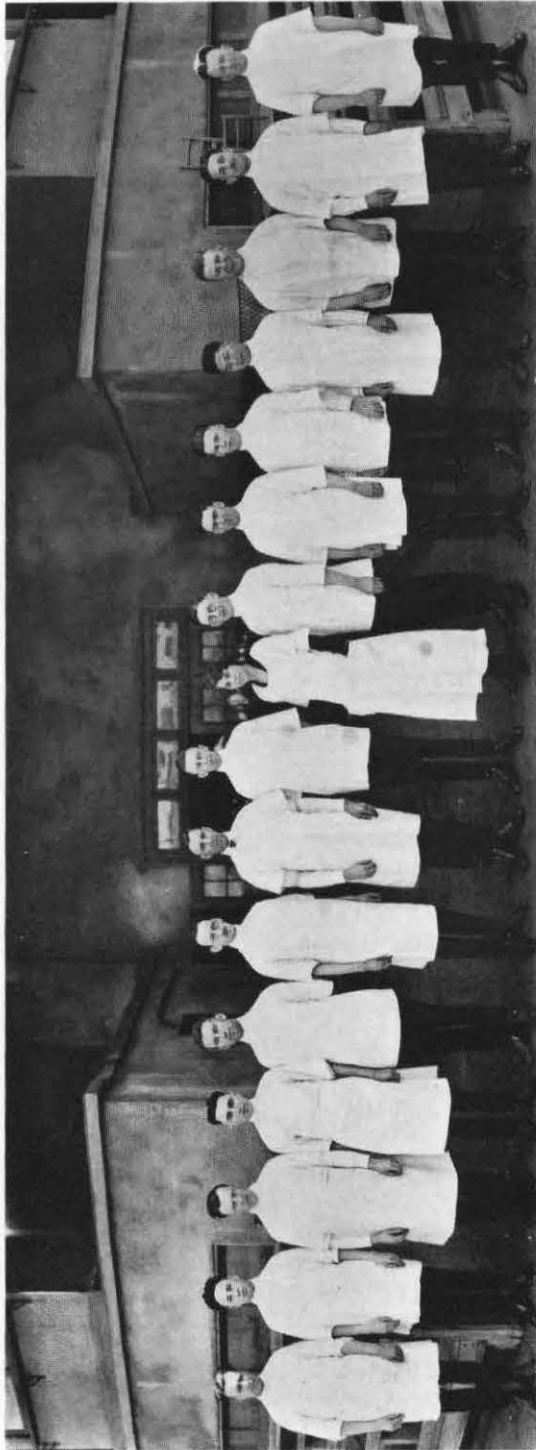
WM. W. SINAI, '21.

President	G. B. Falconer
Vice-President	Doris Hutchinson
Secretary	F. T. Smith
Financial Secretary	J. Ernest
Treasurer	H. Jacobs
Sergeant at Arms	R. Saalfield



"CHIPS"

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SOPHOMORE CLASS

Sophomore Class

Returning to college at the start of the present school year the Sophomores started the ball rolling in the line of school activities by holding a whooping initiation for the incoming Freshmen. They were relieved of most of their clothing, decorated in a suitable manner and forced to entertain the rest of the student body with a number of songs and dances. Following the entertainment we took them for a ride to the beach, at least all of them that we were able to handle, and left them there to find their way back.

The E. N. M. T. banquet was held in September and turned out to be a success in every sense of the word. The majority of the students and members of the faculty were there and all enjoyed a good time at the expense of the Freshmen.

Towards the end of the school term, the class began to lose its pep. We failed to uphold our rights and dignity such as expected of a Sophomore class. Whether the following instance occurred intentionally or ignorantly is a subject much discussed about the college.

One bright, sunny morning we noticed that two of the members of the Freshman class were beginning to grow rather a bushy clump of thistles on their upper lips. We knew that it was entirely up to our class to remove the "eyebrows" and reprimand the Freshmen in order that we might uphold our dignity. Notices in writing failed to have the desired effect and so we were compelled to use force.

Our first attempt in this line proved a failure, owing to the strategic methods employed by the Freshman class. On the following morning a general student body meeting was called and the Juniors and Seniors threw their hats into the ring to help us out. After a battle that afternoon that lasted more than an hour one of the Juniors finally succeeded in getting one of the guilty Freshmen and did the job. The other law-breaker escaped our guard and found it wiser to do the job himself.

The free-for-all fight that preceded the trimming of the "upper lip" so amused the anxious crowd that the police were called to the scene but were unable to prevent the outcome.

The following were the officers of the Sophomore class for the year:

E. F. Wroten, president.

G. G. Gallagher, vice-president.

N. T. Bacigalupi, secretary-treasurer.

Our School

Old P. and S. has stood the test,
For many and many a year,
Her men can stand up to the best,
With never a single fear.

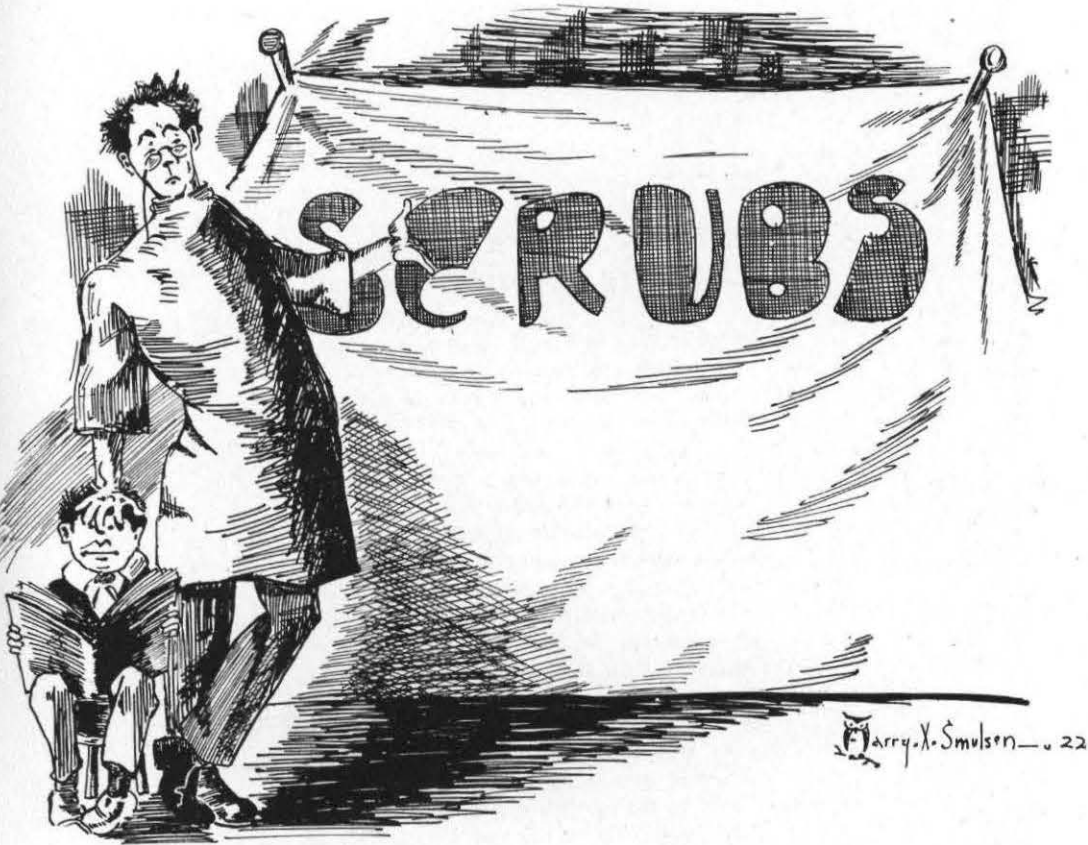
Of course her walls are not of stone,
No, nor does she inherit
A pattern after stately Rome
From which to pick her merit.

She's just a good old fashioned school
Of redwood, and of pine,
Yet there within her walls, no fool
Need go to waste his time.

We love this building made of wood,
Wherein we well may learn
Just how to do mankind some good,
And an honest living earn.

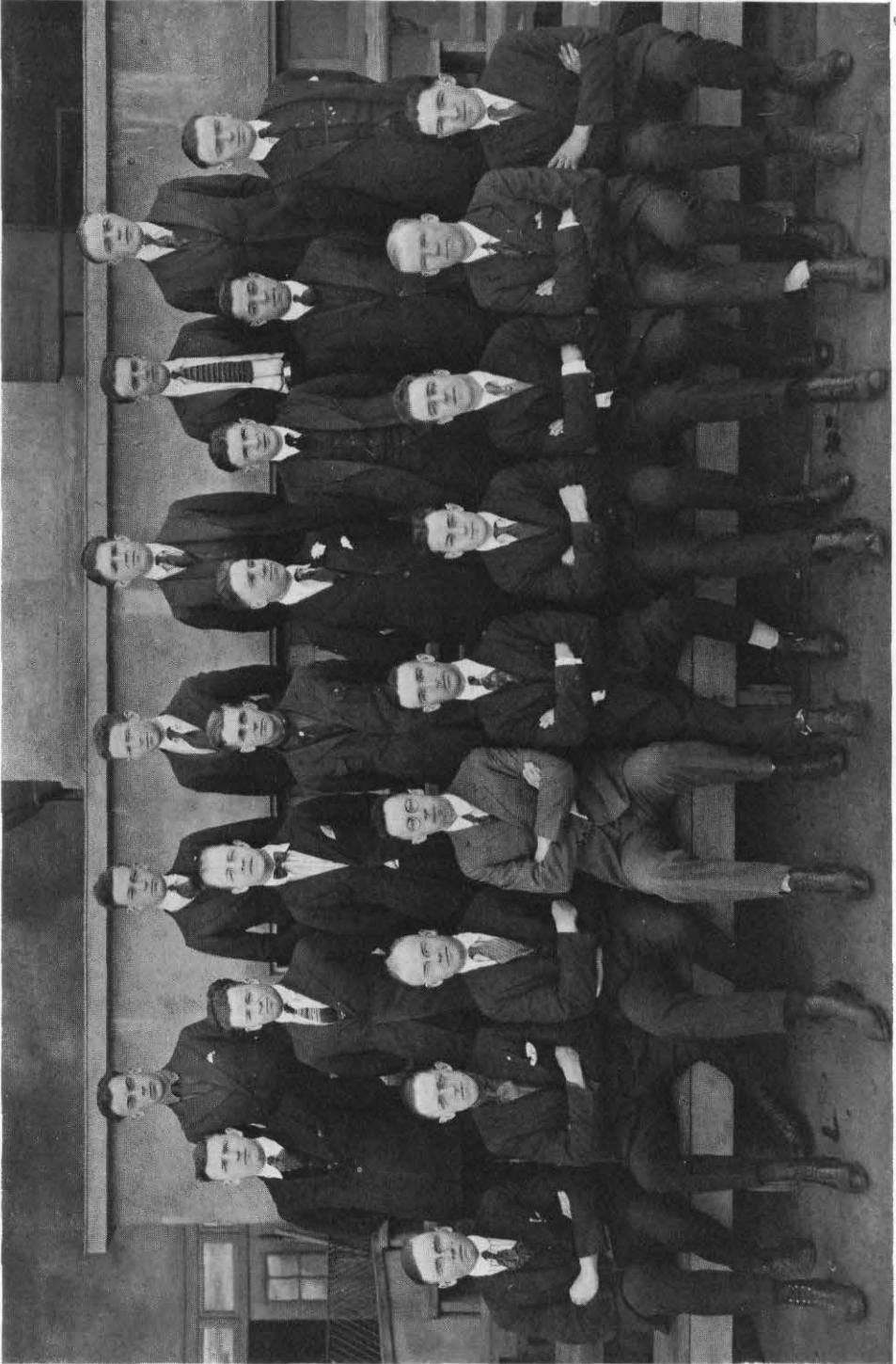
So hail we all, dear P. and S.,
And may she always clearly
Show the way to all the rest,
And make *them* love her dearly.

R. V. BURK, '22.



“CHIPS”

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FRESHMAN CLASS

Freshmen

One bright September morning, nineteen nineteen, birth was given to the class of 1923. Some thirty fellows held "eyes front" in the historic and weather-beaten portals of the college. They were armed with diplomas, high school credentials and a host of handed down dental books, the gifts of former graduates who were glad to rid themselves of a bunch of theory. Thus the army of "scrubs" made their annual entry into the college.

Our first call for attention was commanded by Dr. Charles Boxtton, Dean. Assembled under his wonderful control, he imparted to us various hints as to how to conduct ourselves while attending college. In fact, we suppose, it was just what he had told every class that had preceded us in the history of the college.

We were officially welcomed to the college by the student body on about the coldest morning in that month of September. Rushed into the back laboratory as we arrived at college we were stripped of our clothing, tortured in a mild manner and daubed with artistic painting. As we paraded into the auditorium for our third degree we were greeted with a whooping and laughing audience and an abundant supply of polluted water. The effect of our entertainment was great, for the walls shook with laughter from the Seniors, Juniors, Sophomores, members of the faculty and those who did not pay their way. Oh! a chemical laboratory with soft sweet aromas of chlorine gas and hydrogen sulphite had nothing on the odors that permeated the auditorium.

It did not take long for the class to become organized and soon after we offered the E. N. M. T. banquet. Some hundred and fifty members of the college, faculty and alumni attended and every one had a wonderful time.

The Senior class honored us with the Freshman Reception given at the Fairmont Hotel on Tuesday evening, February third. The affair was a great success and was enjoyed by every one because of the fact that it was the last dance the old timers could offer to the "babies."

But listen, dear readers, the greatest and crowning event of the season was featured on April seventh at the Fairmont Hotel when we gave the "grownups" their farewell. Even though we regret to see our good pals, the college Seniors, leave us, we extended every effort to make the affair a success in every way.

We have greatly appreciated the college feeling extended to us by the departing Seniors and we extend to them our earnest wishes for their success. To the upper classmen and faculty we extend our deepest thanks for their encouragement and perseverance.

A. B. CARFAGNI, '23.

CLASS OFFICERS FOR THE YEAR

<i>President</i>	. . . . .	John Bray
<i>Vice-President</i>	. . . . .	Mecum
<i>Treasurer</i>	. . . . .	G. N. Wilson
<i>Secretary</i>	. . . . .	Mather
<i>Sergeant-at-Arms</i>	. . . . .	C. S. Sydenstricker

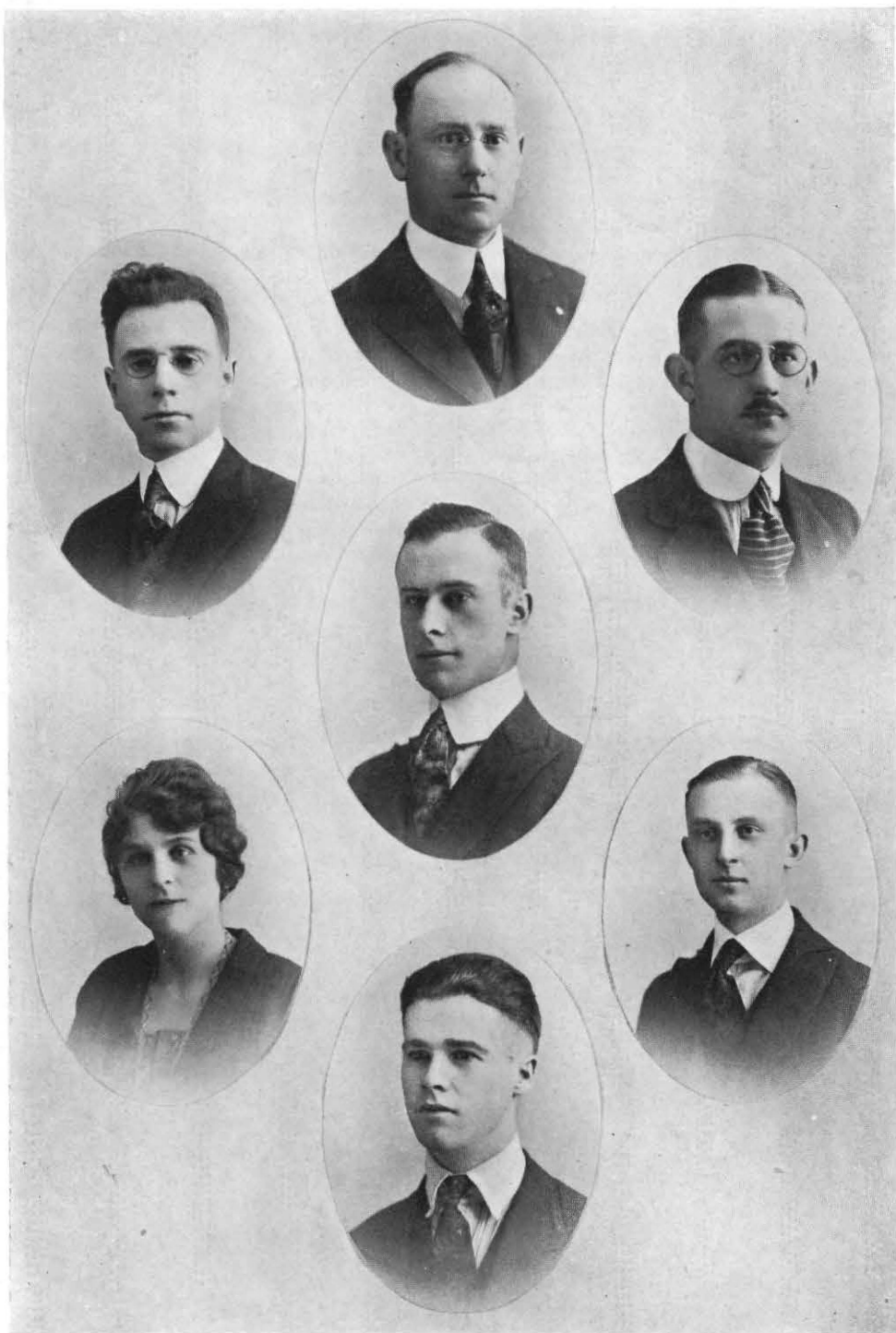
Student Body

The college year of 1919-1920 has been one long to be remembered by all classes. First, the Freshmen make their entrance to be greeted by the new born Soph., while the first regular four-year class, the Night Juniors, start by figuring their eventful year of college life, the Seniors beginning their last year, and as this year is nearing the end each man is preparing himself for the big place he is to occupy in the old world.

The war is over, bringing many men back to fill the ranks of the various classes with the same efficient service they gave to "Uncle Sam" in the great crisis of this world war.

Later in the year came the second attack of the Spanish influenza, which with mighty strokes swept many of our friends from us. But only one of the students was taken into the Great Beyond by this mighty monster. Others, both of faculty and students, were confined to their beds for a short time but it was not long before we again saw them about their daily duties.

The end of 1920 is near at hand and it is at this time the Student Body wishes the graduating class all the success that can be heaped upon them for we know them as regular students and fellows and can only wish them success for we know it is certain to come to them, as it has to all the graduates of our Alma Mater.



OFFICERS OF STUDENT BODY

W. J. Hanahan, *Vice-President*
 N. T. Bacigalupi, *Trustee*

W. J. McDade, *Treasurer*
 R. Taffee, *President*
 L. W. Commius, *Trustee*

G. B. Falconer, *Secretary*
 Gerald Warren, *Trustee*

?

Did you ever stop and wonder,
How many hours are spent
In getting out a book like this,
While you, on pleasure bent,
Would not a single minute ponder,
Or care a snap which way it went?

Did you ever once consider
That the staff was working hard,
Writing and correcting verses,
While you wouldn't once retard
Your pleasures, but with all your vim and vigor
Pass us up without regard?

Pause and listen, now my brothers,
While I ask you straight and true,
Place yourself with me and others,
What would you think, what would you do?

RAY BURK, '22.

LITERARY



Dentistry of Today and Its Future



THE science of the dentistry of today may be differentiated from that of yesterday; for, in the years gone by, there were mostly mechanics. Little did they know of the major subjects. As long as they could fill, extract, make dentures, bridges, and money, everyone was happy. But today, with the rapid advance of the science, we can realize that soon "Tooth carpenters" will be obliterated.

Today we have our Exodontists, Prosthodontists, Orthodontists, and in fact, every kind of specialty that there is, in regard to individual dentistry. So will it be in the future, only dentistry will be more and more specialized.

For these reasons we should prepare ourselves in college, take every opportunity offered us by our Alma Mater, for in the long run the college only teaches us the fundamental principles, and we just begin to learn when we are graduated. Therefore do not cast aside your Anatomy, Pathology, and Physiology, the major subjects, upon graduation.

The time is not very long before the dental student will be compelled to interne in a recognized general hospital. In fact, many hospitals today are carrying dentists on their staffs, the object being to turn out a new type of dental operator, one weaned from the strictly mechanical and more towards the diagnostic and watchful of the pathological conditions.

When such men with the standing in medicine, as Mayo, Billings, Rosenow, and Craig, each contribute a paper on "Oral Hygiene" at one meeting of the American Medical Association, as they did in 1918, the importance in the eyes of the medical profession is clearly indicated. This proves that the physician and surgeon are willing to co-operate with the dentist.

The importance of dentistry during the war was amply illustrated when President Wilson made the following statement: "The dental profession forms one of the greatest resources for making our army and navy efficient."

The dentist promptly responded to the call, and the result was that the United States Army and Navy had one of the best equipped dental corps, including field ambulances and hospitals, in the allied armies. Now since these have proven the importance of maintaining a dental unit, and have placed it on the same plane with medicine, it is up to the dental profession to seek a broader field of knowledge.

The practice of dentistry has assumed such proportions and the variety of cases so many, that no one practitioner can be expected to successfully undertake, alone, the treatment of every case.

If the members of the dental profession have been backward and narrow in any particular, it has been in the matter of calling in a fellow practitioner for consultation on difficult cases, in which there might be doubt, or which has not responded to the prescribed course of treatment. But we are at the parting of the ways, and now is the opportune time for the profession to take a sane and broader view in the matter of consultation.

If you have a difficult case and you are not sure of the diagnosis, or if the case does not respond to the prescribed treatment, do not hesitate to call in a fellow practitioner, or physician, for consultation. By so doing the intelligent patient will not accuse you of lack of knowledge or skill, but on the contrary will rightly conclude that your aim is to render the best possible service, under

the circumstances. You have also, by following such a course, legally and ethically placed yourself in an unassailable position.

In conclusion I beg to state, that as big as is the field of dentistry today, the bigger will it be in the future, and again I predict that it is only a matter of time when the physician and dentist will be under one head. But the dentist who has his eyes open, his brain working, and who is not afraid of work, cannot fail.

WILFRED R. FLEISHER.

Judgment

Halt thy tongue of blasphemy!
If hate is judgment, thou convey'st
To weigh the rank of fellow men;
I beg thee turn'st thy sails; for may'st
Find truth upon another course.

Vile thoughts re-echo, time shall reap
For thee, frost bitten grains thou sow'st;
Yea, even this; if winds bring storms,
Destruction rules; then thou may know'st
Thy failure, wrought by weakly reasoning.

Hold thy madness, clear thy bosom!
Art thou supreme that thou deceiveth
The human element its joy?
Beware thy step! I beg receiveth
Full counsel from a better mind.

L. V. PUCCINELLI, '21.

Daredevil Ike



SIDNEY PHILLIPS DEERING, or S. Phillips Deering, as he would have chosen to call himself, had it ever come to the lot of that individual to choose things for himself, was an industrial misfit; he didn't fit anywhere. Most important of all, and what was concerning him most now, he didn't fit into a job. Somebody once said that Sidney had all the attributes of a genius, except the ability. How on earth he ever came to marry Agnes, or Agnes to marry him, was more than any of his neighbors could tell; for, if it must be admitted, Sidney lived in a district where neighbors were prone to concern themselves with, and upon occasion, to discuss, the more intimate conditions of any domestic situation that might interest them.

Indeed, Agnes had lent a certain color and impetus to their indulgence one day by admitting that the reason must have been that he asked her the night following one upon which a certain previously highly esteemed James Reilly had evaded an engagement with her, upon a plea of "overtime" at the tannery, only to appear later in the evening escorting Mari Gundel, from the "Bijou Dream Motion Picture Playhouse," in a manner that was altogether too attentive for the taste of Agnes.

But we must not tarry too long with the idle talk of the Deering neighborhood. Let us rather turn our attention to the events within the household.

Sidney was seated on the edge of the kitchen rocking chair, his body bent forward, his elbows resting on the arms of the chair, and his fingers interlaced. His lips were pursed in that worried manner that had come so to disturb his wife. It was an expression she knew to mean that he had come to his wit's end; an end he reached altogether too often for his wife's comfort. She was clearing the table of the dishes that had contained their meager breakfast. She glanced at him from time to time, as she worked. Once he looked up, and met her eyes.

"Why don't you try Stryden's?" she asked, stopping, with a dish in her hands, to emphasize her question. "You worked there before."

Sidney winced. He had worked there before. The memory of it was painful to him. In fact, the memory of nearly every job he had held since he had grown up was more or less distressing to him, but none hurt him as did the memory of his stay at, or more particularly, his departure from Stryden's Tannery.

If Sidney Deering objected to the physical discomfiture of manual labor, it was very seldom that he admitted this even to himself. His employers had never found serious fault with his work. He was pained by the memory of many jobs, if it must be admitted, because he was afraid, mortally afraid, of physical combat. It was this more than any other thing in his makeup that made Sidney a misfit, in his own environment. He lived, with the hope near his heart, that some day he might find a job that would carry with it a safe seclusion from the rest of the world.

It appeared that somebody always learned of that time at Stryden's when he had let a little fellow, not much more than half his size, administer a lively thumping, about and upon his entire anatomy. The ensuing embarrassment caused him to quit his job, and thereafter this information once set abroad very often aroused in the breasts of youthful Jack Dempseys a desire to "take a fall out of the big stiff with the yellow streak."

A reason was never lacking, but Sidney invariably forestalled an almost

certain beating by asking for his time before the threatened embroilment came. When he was overtaken by combat he always found himself unable to cope with his antagonist. Nevertheless he followed such occurrences with a request for what money was coming to him and departed, saying as little as was necessary about it to Agnes. But that little woman garnered sufficient information for her needs from her knowledge of his nature and from the appearance of his face.

Only she had understood her husband's unmanly meekness, and she could not find it in her heart to question him further. But now as she looked at him he thought he saw something of disdain for him in her face. He remembered that once before when he had found himself out of work she had spoken to him of Stryden's he had replied that he didn't like the place and that he could find work elsewhere. The same answer now he knew would fall far short of meeting her position, for he had already been jobless a week.

Sidney thought in vain for a reply that would not openly acknowledge his timidity. He looked up and saw that only a substantial answer would make his position secure.

"I'll go over to Stryden's now," he said with an attempt at decisiveness.

He got up, looked for his hat, and pressing a good-bye kiss on Agnes's cheek he made for the front door. He opened it but he did not go out. Agnes heard his returning footsteps in the hallway and wondered at his indecision.

"Think I'll go the back way and take the East Street car," he announced as he passed through the kitchen. "It's nearer."

It was nearer; but an explanation of Sidney's change of mind was not encompassed in the proximity of the East Street car line to the Deering back door. The reason was this: Ever since he had learned of Agnes's engagement following his lamented attentions to Marie Gundel, James Reilly, erstwhile amouurer of Agnes Deering, had nursed a contempt for Sidney that was not unmingled with a yearning to implant his fist somewhere about the person of our hero. Only a few nights before he had stumbled upon the desired reason to accomplish this. Sidney had inadvertently jostled him while getting off a street car.

Reilly followed his intended victim from the car and hastened to overtake him. Now Reilly was a man of few words, as everybody knew, and at the first gruff word from him Sidney sensed an unmistakable desire to absent himself from the forthcoming interview. With astute reasoning he appreciated that the only means then at his disposal to effect this desire lay in the strength and alacrity of his own legs. He turned on his heels and fled.

It was this rather than the nearness of the East Street car line that prompted Sidney to choose the rear exit of his flat; for he remembered that he very often passed Reilly at this hour as he walked to the car. He thought it best not to meet Reilly now, and accordingly decided that by going out the back way he would reach his destination sooner.

When Sidney announced his intention to seek work at Stryden's he knew that he would do this only in the event that he found at the end of the day that no work was available. As he walked through the rear lot he found himself be-moaning the almost ever-present embarrassment of asking for a job. He feared even the questions of a prospective employer almost as much as he feared a possible fistic encounter at any factory where his services might be accepted. But more than anything Sidney feared an empty-handed return to Agnes. He felt somehow that his wife would be prepared that night to render an unlovely if frank opinion of him should he come home jobless. This was Saturday, and they both knew that their credit with the grocer and butcher would terminate

that night unless those careful tradesmen were assured that Sidney was again working.

He considered all this as he walked. He crossed the lot behind his house at an angle, came out on the street to the right, and, crossing that, he started along the opposite sidewalk. At the corner his attention was drawn to the preparations that were being made for some sort of out-door show in the big lot there. His purpose was not so steadfast that he could overcome the desire to stay and watch the big tents being erected. For sometime he tarried there, watching and mentally commending the dispatch with which these men accomplished the setting up of such things as platforms, shooting galleries and the sundry things that go with the traveling carnival makers. But when he saw one man, whom he judged to be in charge of something he bethought himself of his purpose and of the possibility of respite from the necessity for asking again for work at the dreaded Stryden factory. He went up to the man and addressed him meekly:

"Got no work around here?"

The man eyed him for a long time. "Not unless you want to jump a parachute," he said finally. "If you kin do that," he added, indicating with a motion of his head a tall man with a straw hat, "see that feller over there." Then he turned away, laughing to himself at what he considered "a good one on the scared-lookin' ginney."

Sidney left the field somewhat more distressed than he had entered it. He felt then very much as he had felt when as a boy he had been called "fraid cat" by some little girls whose wish to have him set off a rather large firecracker he had denied in fear of the thing. The appellation with variations had followed him through life, but this, he thought, was the only time that anyone upon the first meeting had perceived and made fun of his timidity. He walked dejectedly to the car line but he did not wait for the car. Instead he turned about suddenly, and almost ran back to the lot he had just left. When he found the man in the straw hat he went up to him.

"Looking for somebody to jump from your balloon?" he asked, affording the man the experience of gazing into the boldest expression that had ever graced the countenance of Sidney Phillips Deering.

"Yep," the man answered rather quickly. "Can you jump a chute?"

"Used to do it regularly on the Western Front," lied Sidney. "I was in observation balloons over there, you know."

Now to tell the truth Sidney's military experiences were confined to four very scared and perspiring months in camp at home.

But he had read something about jumping in parachutes in kite balloons, and he remembered that the author had said that it was only necessary to fall out. Sidney was confident that he could do that part of it.

"I don't know much about the business," the tall man said, "but Hansen used to say it was easy enough. He's the man that does it regular for us, but he hurt himself the last day we showed at Warren and 'nless somebody jumps today we lose our best openin' stunt."

"How much will you give me if I take the job?" asked Sidney a little more nervously.

"Well," answered the man after thinking it over. "I guess I could give sixty dollars for today's jump, but if you traveled with us regular you'd only jump on openin' days and holidays and you'd hafta count on doin' some other things for the show along in the bargain."

"I don't think I'd care to travel with the show," Sidney announced quickly.

"Do you want to jump this afternoon for sixty?"

The meek one thought for a moment, swallowed hard, then blurted out "Yes."

That was all; he had said yes and now he was trembling.

The man introduced himself. "McCloskey," he said, "Al McCloskey, manager of the outfit." He then took Sidney over to show him a huge trunk and a number of smaller boxes—the balloon and equipment—explaining everything as he pointed it out. Later he called someone known thereabouts as "Abe." Abe proved to be a little man who, as the manager explained, always took charge of preparations before the flight.

"Abe'll take care of all them things," he said, looking at Abe.

Abe nodded his approval. "Hansen," he suggested, "always wanted to pack his own chute. Mebbe you want to pack yer own, too."

Sidney answered him with intended carelessness. "No, you can take care of everything for me. You say ascension is at three? I'll be on hand then."

With that he departed. He was eager for a moment by himself to think over what he had done. He walked about the streets hurriedly, his hands buried deep in his pockets, with the certain feeling in his heart that his hours were numbered.

He thought once or twice that for Agnes's sake he ought not to do it. But when he was confronted with the possibility of ending the day in the office at Stryden's he determined to go through with it. What would become of poor Agnes he wondered. Oh, well, there was that ten thousand dollar policy that he had so reluctantly carried ever since he was mustered out of the army. That, perhaps, would be of more real comfort and value to Agnes than ever he had been. And if he lived—if he lived! Well, maybe they wouldn't think he was so chicken-hearted after all! He considered going back to kiss Agnes good-bye. But then, he thought, she wouldn't let him go up in a balloon and come down in a parachute if she knew.

He returned to the field, found Abe, and pointing to some boxes at the farthest corner he said: "I'll be over there; send for me when you want me."

He left Abe and walked slowly over to the boxes and sat down.

Let us leave Sidney to his thoughts and review for a moment the nature of the part of the contract he had agreed to fulfill.

The "hot-air" or circus balloon when inflated and freed from its moorings makes at first a very rapid ascent, but its speed fast diminishes, and shortly after it reaches its zenith it start to come down rapidly and soon collapses. The parachute jumper, then, must quit the balloon before it attains its maximum altitude. The medium of his descent, as everybody knows, is the parachute. This has been termed the strangest contraption of fate evolved by man. If it opens properly the jumper comes down satisfactorily, but if it doesn't open properly he is free to do nothing other than comply with the laws of gravity; he comes down, but not satisfactorily. No one can pack a parachute and say definitely that it is going to open; that must always remain to the actual test. It may open; in the vast majority of cases it does, but then again it may not.

Sidney had read enough to know this, and it was with no meager degree of apprehension that he watched from where he sat the inflation of the big balloon.

Later in the day events at home conspired to bring about the presence at the ascension of no less an unwelcome spectator (in the eyes of Sidney) than Agnes herself. She had gone to the butcher's, and fearing the possibility of a

discussion with him as a result of her intention to ask once more that her meat be charged she waited until the last for the butcher's attention.

"Ain't you going over to see the balloon go up, Mrs. Deering?" asked a kindly neighbor, Mrs. Eisemann, who appeared also to be waiting longer than her turn. "It's going to be over in the big lot behind our flats this afternoon, and they say they's going to be an acrobat or something jump out of it."

Mrs. Deering had heard nothing about it, but she said she might go over and look on. She out-waited Mrs. Eisemann, procured her meat without question and went home. There she changed her waist, tucked a few strands of hair under her comb, put her face through some strange grimaces before the mirror as she touched it here and there with a piece of chamois skin upon which there appeared to be some powdery-looking substance and then, taking a last look over her shoulder at herself in the glass, she directed her footsteps towards the circus lot.

Sidney did not wait to be called to the balloon. He reasoned that there were were some things he might learn about what he was to do and went over to Abe.

"You better explain some of this to me, because hot-air balloons are different than the ones I used to go up in in the army," he suggested.

"Well," began Abe, "I got your chute packed, and I guess all you'll have to do is hang onto the trapeze. I never went up myself, but Hansen always said that it was easy enough if you'd just be sure to jump before the balloon starts to come down. I guess you better get into your harness now. It's nearly time to go."

Sidney felt that there were many more questions he might ask, but an all-gone feeling about his midsection made him uneasy and he concluded that it was about all over anyway as far as he was concerned. Life had been very hard with him, and now somehow he thought he was getting even with it; quitting thus in a way that would leave it to no one to say that he was scared all his days.

Abe came back with a tangled mass of leather straps in his hands. It was the parachute belt—a kind of harness from which there led a stout line that was later to be attached to the parachute.

"McCloskey wanted to know whether you was goin' to wear tights," he said laughing. "I tol' him that Hansen's old red tights would make you look like a skinned rabbit; they'd fit you awful quick."

Then after he had strapped Sidney's thighs, waist and shoulders and had tugged at each buckle to see that it was secure he announced:

"I guess this is all right, an' I hope you don't have no trouble."

Sidney wished that his assistant had been more reassuring. But while he was considering a reply McCloskey came up.

"How's everything? All right?" Sidney merely nodded.

"Come over to the platform," the manager said. "I got to speil about you for a minute."

Sidney followed him and the two mounted a small rostrum. The manager took off his hat and as he waved silence to the crowd that had assembled he turned to Sidney.

"What's your name?" he whispered.

"Call me—er—Daredevil Ike!"

"Ladeese and gentlemen," began the man; "I have the honor of introducing to you one of the great figures of the World War. A man who the Kaiser had a special price on his head. He jumped all over France, and onct nearly captured the Kaiser single-handed by jumping in his automobile from his balloon and barely escaped with his life. I take pleasure, ladeese and gentlemen, in intro-

ducing to you the man who will go up in the sky as far as the human eye will reach and then jump out of the balloon and attempt the perilous descent to earth in a parachute. Ladies and gentlemen, Daredevil Ike."

There was a little applause, and some murmuring among the spectators. Sidney saw that he was recognized by some and hastened to the balloon. He wished in his heart that the bag would burst before it left the ground or that someone would stop him.

"Is everything ready?" he asked Abe.

"Everything's ready if you are," Abe answered. "Just get on that trapeze and hang on when we let her go."

Sidney did as he was directed, gripping the side ropes as hard as he could.

"All ready?" shouted Abe, looking around at the bag, then at Sidney.

"All ready," Sidney whispered hoarsely.

"Let her go!" screamed Abe.

Four men pulled four slipknots and the balloon with a mighty sweep soared upward. The awed crowd took a last look at Sidney, just as a little woman came running into the lot crying frantically:

"Stop him! Stop him! He'll kill himself. He's my husband." It was Agnes.

The balloon went swiftly up. Higher and higher it went into a clear blue sky. And the crowd, now convinced by the remarks of certain of those among them and by the cries of Agnes that something was amiss watched the balloon as it grew smaller and smaller and thought of the little speck swinging beneath it, wondering whether or not the man called "Daredevil Ike" was bent on committing suicide.

The ball in the sky that had appeared to be so big just a moment before seemed to have slackened its speed almost to a standstill.

Abe watched it through questioning eyes.

"I wonder when that big boob thinks he's gonna jump!" he said nervously to someone near him.

The crowd gasped as it saw the speck fall beneath the balloon.

The speck was followed by something that looked like a wrapped rag, or a piece of string. Agnes's heart leaped with a mighty bound, but no more than did Abe's. This latter gentleman had ample cause for alarm. He had seen and helped Hansen pack his parachute time and again, but never before had the task been completely in his hands. He wondered, with jaws set tight, whether or not that thing was going to open.

The speck and the string following it fell fast, and a moment later the string seemed to waver and then, praise be, it opened, opened full and wide. The crowd, as one person, heaved a heavy sigh. Swaying to and fro like a pendulum the man and the parachute came slowly down. Soon he was so near the earth that those who watched thought they could distinguish his limbs. But he drifted far to the windward and disappeared behind some houses. Some boys left the lot on the run for the place where it appeared he had landed. An automobile started to leave the lot.

"Where are you going?" called a frightened woman as she ran to the machine.

"Over and get Daredevil Ike," the man answered as he put the gears in.

"Take me, take me, please; I am his wife!"

The woman was Agnes Deering, the man was Al McCloskey. She got in and they drove off at a lively clip.

Twenty minutes later the car came back bearing Al McCloskey, Agnes and

Sidney Deering. Agnes's cheeks were wet, whether from kisses or from tears nobody knew. They got out, and some of the stragglers crowded close to get a look at the man who had been up in the balloon.

"Here's some money," said the show manager, turning to Sidney. "I never knew that you never done no jumps before," he added as he handed Sidney three twenty-dollar notes.

Sidney took the money, and putting his arm in Agnes's he started to walk toward their flat.

They walked slowly, followed by some small boys of the neighborhood.

"Im going to do it again tomorrow, Agnes," Sidney said.

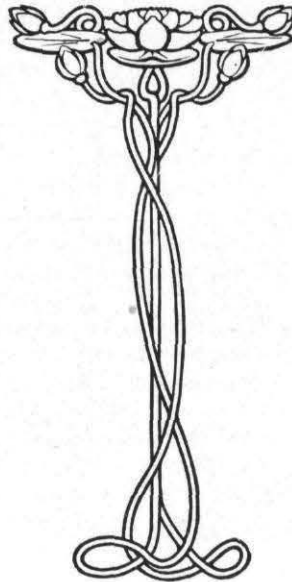
"Indeed, you're not."

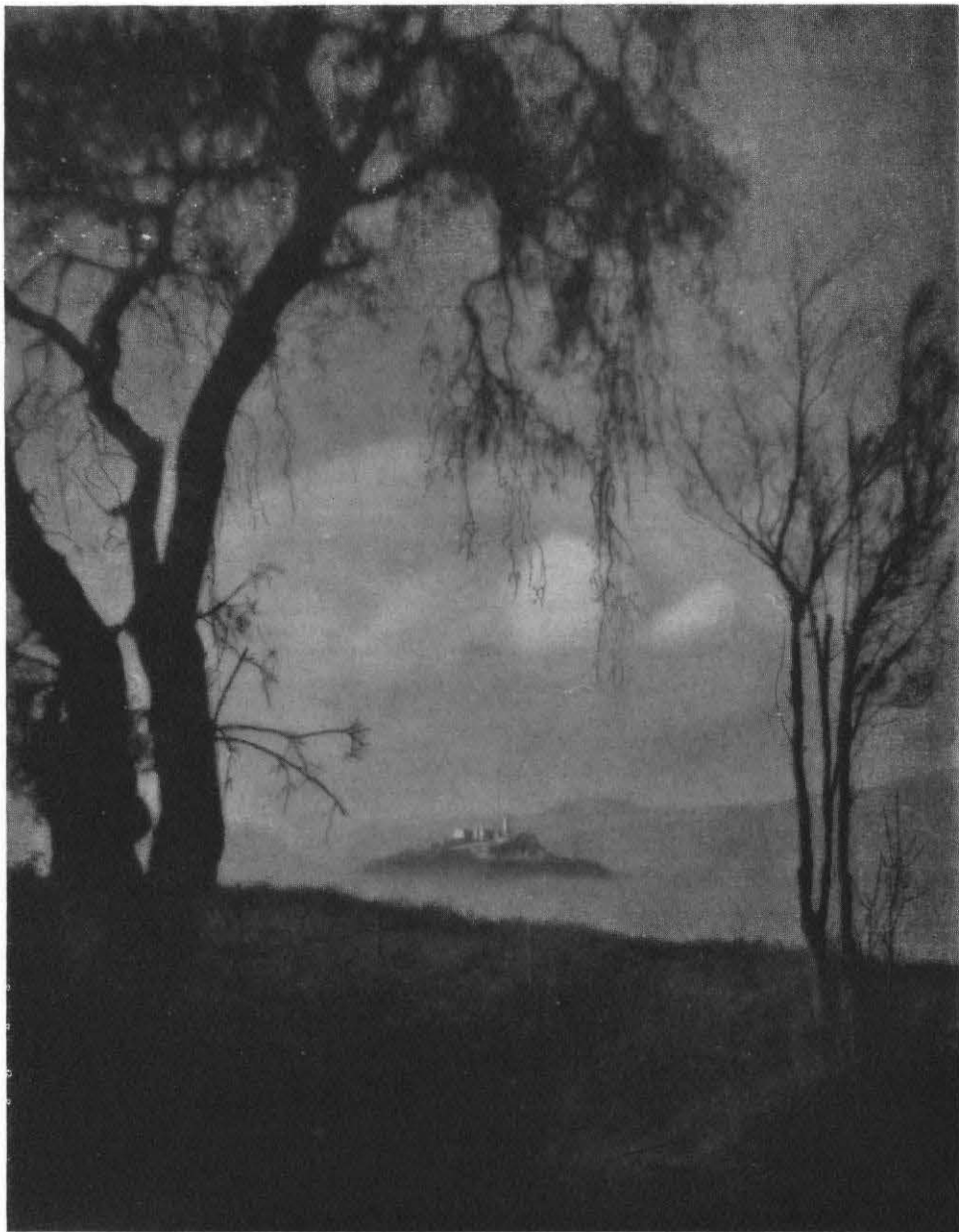
But their discussion was interrupted, for just as they rounded the corner of the street leading to the front door Sidney saw James Reilly across the way. Reilly started towards him, but Sidney met him before he reached the middle of the street. Reilly muttered something and drew back his hands. Sidney lunged forward and caught him on the jaw with a wallop that would have done credit to a professional. Reilly made a wild swing, Sidney ducked and then Reilly suffered a licking that was brutal only in that it was one-sided.

Sidney rejoined his astonished wife.

"Let's have supper and then go to the Bijou," he said quietly as he flecked some imaginary dust from his coat sleeve.

SLOMAN, '21.





ALCATRAZ FROM TELEGRAPH HILL

Dwelling Among the Tigers



ALL happened on Thursday afternoon at the hour of three. I left the chemical laboratory and proceeded through the library to enter the dissection room. As I approached the door in front of the bacteriology laboratory which was ajar I heard an awful rumpus. Being a very curious young man I decided to investigate and find out just what it was all about. Upon entering the room I expected to see arms flying about in all directions, but to my surprise and disappointment there was not a soul present. Still hearing the noise I insisted on tracing it to its origin. After carefully looking in every corner and nook in the room, I was about to give up in disgust when my attention was attracted by the movement of a slide under a microscope. Needing no second invitation I rushed to the instrument and gazed down through its lens. For a minute I could swear that my eyes had deceived me, but on a second look I saw boldly walking across the sands of Muscle Rock none other than Mr. Flagaletta. He seemed full of merriment for every glide or two he would shake the shimie and turn first to the right and then to the left. My interest being keenly aroused, I wiped the tears from my noble brow and gazed once more into the scene. This time I fell back with surprise for there stood Miss Spirochetta inhaling the balmy breezes of Stow Lake. That was not all, for there at the bottom of the cliff slowly climbing to his beloved one was Romeo, alias Mr. Amoeba. The love scene being too rich for my blood I was forced to give the slide a twist, which revealed to the right and in front of me Mycelium deliberately shaking his fist in my face. Being in no humor to pick a fight I quickly moved the slide again. My old friend Amoeba, who had been disappointed in his little love affair and who was trying to get up enough courage to try again, passed and poised as if to ask my advice. Alas, he did not trust me and went off as if lined with asbestos to keep from burning up in the air.

My eyes being a bit weary I gazed out onto the street. I was earnestly admiring the passers-by when revived noise warned me that the boxing match had started in its second stage. Like a flash I was there and just in time to see Chromatine burst into Nuclei's eye. Inquiring into the argument I found that it was all over Centrosom's daughter. Of course you know that neither one of them had a chance as the three Ray brothers, Spindle, Polar and Mantel, were the outshining candidates for her hand. During all this excitement who should pop out his head but Mr. Vorticella. Like a Jack-in-the-box he would unfurl his mighty stem and smile as the Styloncia family passed by.

As the sun was departing into the west and the day was about to close, a periscope could be seen in the distance. Slowly it made its way toward me and finally to my surprise I was looking down on the Paramoecium twins, who were taking their evening cruise on the briny deep. Like a flash they submerged. Before me stood a dark space and I knew that my work was done, and I can't remember the time when I spent a more pleasant hour.

JOHN E. GAVIN, JR., '23.

Organic Chemistry in a Nutshell



SCIENCE is not only the recognition and description of facts, but also their classification and interpretation, and when a student arrives at organic chemistry he is amazed and bewildered by the multitude of organic compounds. Often it seems impossible to see their relationship and to bring order in the galaxy of different compounds. To be practical a classification must be simple and exact, and this is accomplished by assigning each organic compound to a class and type. The class takes account of their structure or intramolecular arrangement of the atoms in the molecule, while the type tells of the chemical characteristic of the compound.

There are only four great classes, namely:

- A. Homogeneous Chain-compounds.
- B. Heterogeneous Chain-compounds.
- C. Homogeneous Ring-compounds.
- D. Heterogeneous Ring-compounds.

The structure of a compound determines its class, and the simplest way of illustrating the structure is by means of structure symbols. The key to the whole system of structure-symbols is found in the simple diagram No. 1, page 52.

With this simple principle all structure symbols can be formed, in other words millions of different geometrical figures representing the intramolecular arrangement of the compounds can be constructed. Structure symbols are the valance structures of a compound, in other words, the geometrical figures obtained by eliminating from the structure formula the symbols H, O, N, and C, and indicating those four elements by points from which one, two, three, four or five lines radiate. This notation has been first described as a chemical shorthand (Canadian Chemical Journal, Vol. 2, page 135, 1918), and later as structure symbols (Science, Vol. 48, page 333, 1918; Chemical Engineer, Vol. 26, page 377, 1918; Chemical News, Vol. 118, page 289, 1919). The various advantages are fully discussed and need no repetition.

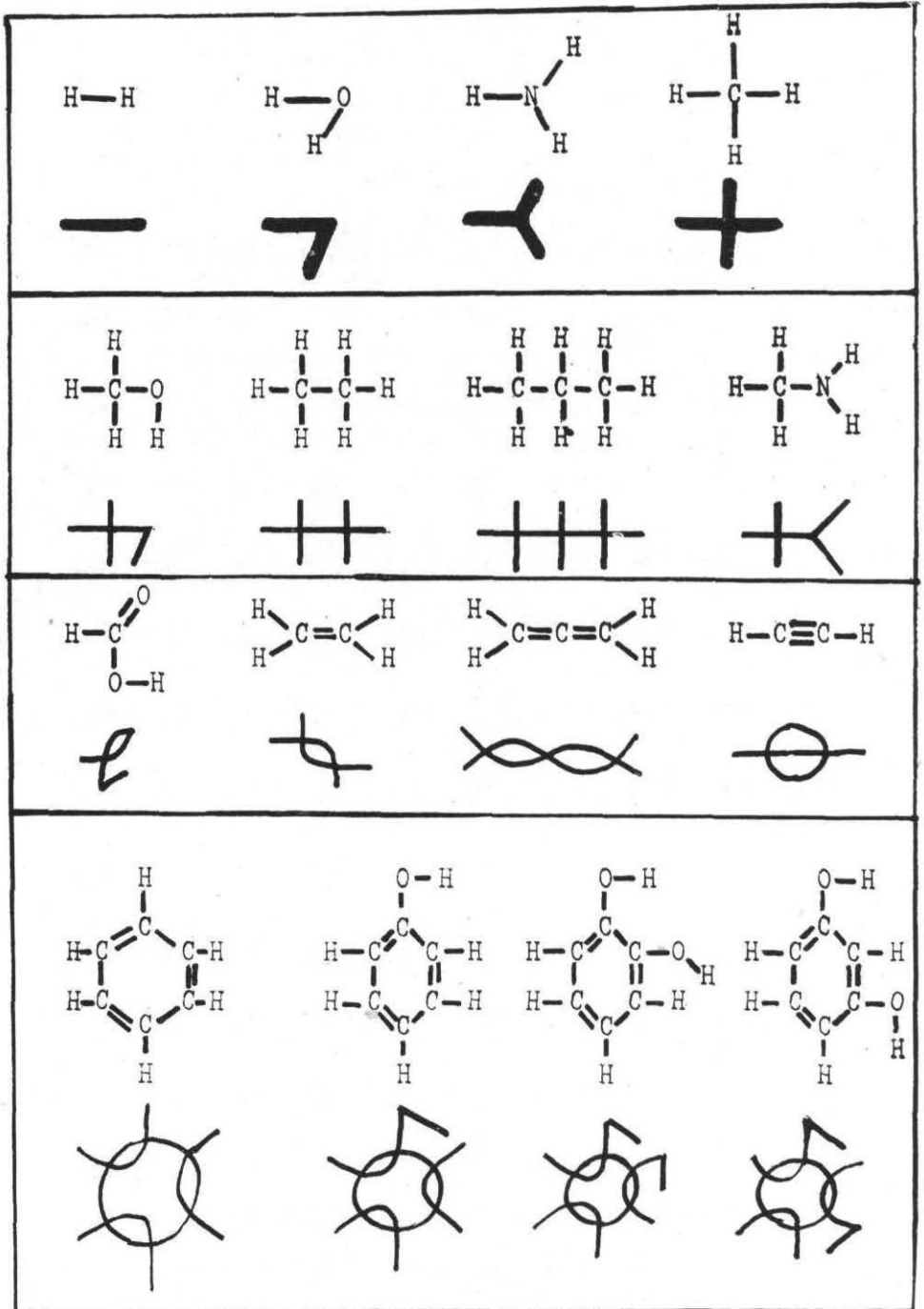
In the following table a number of homogeneous chain-compounds are represented by their structure symbol and classified as to class and type. A helpful exercise is provided, and much knowledge can be gained by arranging other organic compounds in a similar way; in fact, it is impossible to place every organic compound in a definite class and a definite type. The next step is then to designate the classes and types by numerals, a problem at which I am at present working, thereby enabling the chemist to indicate any structure by two numbers and thus affording a ready classification on scientific principles of all the organic compounds. The number indicating the type will give a clue to the characteristic reactions of the compound, while the number indicating the class will represent the fundamental structure and synthesis of the organic compound. Thus the bewildering multitude of organic compounds, seemingly different, will be arranged in a logical and genetic way, the outlines of which can easily be remembered, the details of which will offer unlimited work for future investigations. See diagram No. 2, page 53.

W. M. LING, 22.

		TYPES									
		Hydro-Carbons	Alcohols	Ethers	Aldehydes	Ketones	Acids	Esters	Amines	Nitro-	Cyanides
Paraffines	Hydrogen Series	-	7		f		l		<	l	o
	Methane Series	+	+7	+7	+f	+f	+l	+4	+K	+l	+o
	Ethane Series	#	#7	#7	#f	#f	#l	#4	#K	#l	#o
	Propane Series	##	##7	##7	##f	##f	##l	##4	##K	##l	##o
	Isopropane Series	#	#7	#7	#f	#f	#l	#4	#K	#l	#o
Olefines	Ethylen Series	7	77	77	7f	7f	7l	74	7K	7l	7o
	α-Propylen Series	7+	77	77	7f	7f	7l	74	7K	7l	7o
	β-Propylen Series	7	77	77	7f	7f	7l	74	7K	7l	7o
	trans-Propylen	7	77	77	7f	7f	7l	74	7K	7l	7o
	cis-Propylen	7	77	77	7f	7f	7l	74	7K	7l	7o
		7	77	77	7f	7f	7l	74	7K	7l	7o
Acetylenes	Acetylen Series	o	o7	o7	of	of	ol	o4	oK	ol	oo
	α-Allylen Series	o+	o7	o7	of	of	ol	o4	oK	ol	oo
	β-Allylen Series	o	o7	o7	of	of	ol	o4	oK	ol	oo

DIAGRAM NUMBER 1

DIAGRAM NUMBER 2



Crystal Gazing

If you think your future is covered with haze,
Look into my crystal and have a gaze,
For it tells of the Freshmen well and bold,
And describes the future they may hold.

The name of Shea is first to come,
So you probably think I'll predict him a bum.
You are all quite wrong; you've missed your bet,
As an undertaker he'll get you yet.

The next to come is Doctor Bray,
Who gained the name by his helping way,
And I hope some day that I will find
Him anatomy teacher of a son of mine.

The victim now is Mr. Chuk,
Who has more brains than common luck,
Should nothing wrong stop in his way
We predict him President some future day.

Next to Chuk, Prindle came.
At a soda fountain he won his fame.
Smiling at girls is his specialty,
So for him we predict a large family.

Mr. Bassett is next on my list,
And a day at school he has never missed.
We all predict a great dentist he'll be,
But it seems his ambition runs over the sea.

Mr. Shields, an honest Mick,
Has carried the hod and many a brick.
He uses a knife, but never a fork,
Which brings out the Irish from County Cork.

Carfagni, a name we all know well,
With his line of bull his business should swell.
So don't be surprised some morning quite late,
You should see him riding in a big Ford 8.

Wonderlich, a name of note,
Would take a swing at any bloke.
He's such a nery little bounder,
Some day he'll be the champ ten-rounder.

Mr. Mecum, our only boy,
Would put you in mind of Eddy Foy.
With his bell-sleeved coat and his English pants
He'll be seen as the owner of the Arcadia dance.

Next comes the name of Lucky Bickel,
Who by no means is related to pickle.
He's a man who will sure go to heaven,
If he only keeps from throwing eleven.

The name of Mather is next to come,
Without his aid we'd be on the bum,
So may the day come when we'll all be happy,
The day when Mather is mayor of Napy.

Our attention is drawn to Bert L. Thomas,
Who grew up quite a bit since he made his promise.
With the knowledge and material his brain is filled
We predict him inventor of a private still.

Sydenstricker, a peculiar name,
Is always grabbing the wonderful jane,
So instead of chasing to every dime hop,
He ought to open a swell fashion shop.

Next comes the name of McEvoy,
Who is always full of gloom and joy.
The call of the stallion he knows very well.
So a cow-puncher he'll be whooping like h—l.

Pashburg, a fellow who is brim full of fun,
A baseball player and a mighty good one.
We predict him a future in a very short time,
As the one star player of the White Sox nine.

Count Wassilko, who is very well known,
Especially in meetings his temper is shown.
As a prominent speaker he is very slick,
Some day you will find him a head Bolshevic.

Next to the Count comes Mr. Brown,
Who has always a smile and never a frown,
To hear him render a beautiful song,
You'd say on the stage he'd never go wrong.

Mr. Byrne, a cute little chap,
Can always be found with a girl on his lap,
When it comes to dancing he's some little papa,
With every movement for a window washer.

Mr. Brewer is next to come,
Has just returned from fighting the Hun.
We see him as the scroll of fate unrolls,
Collecting the rats from the street manholes.

Mr. McPherson, a Scotchman you know,
Who about his strength has something to blow,
When it comes to juggling this paperweight stuff,
Against him old Samson would look like a bluff.

Wop Molinari, a fellow first rate,
Goes down to push trucks in a big Cole "8."
So to help his father make things go round,
We'll get him a catcher's job in the pound.

Red McCurry, our chemistry shark,
Who swims like a rock and sings like a lark,
Should he study too hard on chemical analysis,
He will some day be struck with brain paralysis.

Mr. Foggarty, a man of wit,
To see him perform your sides would split.
If you follow him close you sure will know
That he'll be the star of the Lyceum show.

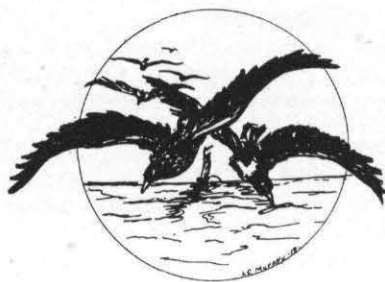
Mr. Jefferson who has made his name,
In the town of Alameda of great fame,
Some day on your back porch by the can
You will recognize Jeff as your garbage man.

Mr. Bartscher has finally come,
And away from a fight he'd never run.
To look at him once you would think him a Hoosier,
But some fine day he'll be captain of a cruiser.

Wilson, a student of industrial fame,
Who tries very hard to uphold his name.
His future will come but very slow,
As the chief announcer of a wild west show.

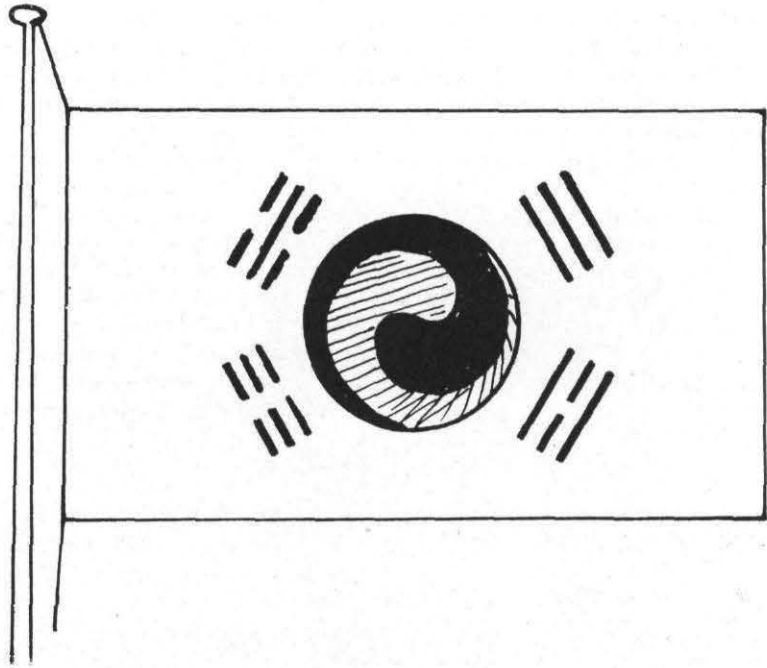
The name of Gavin is last on the list,
To brag of myself you'd hardly insist,
So I'll run along now and safely hide,
And leave my future for you to decide.

JOHN E. GAVIN, JR., '23.





JAPANESE GATE IN GOLDEN GATE PARK



The Philosophy of Flags



PRECIOUS pearls of wisdom are found in the symbology of flags. All know the meaning and the story of the Star-Spangled Banner and the sentiments, feelings and remembrances connected with it, but little is known of the flags and history of other nations, which are similarly interesting and which mean to other races just as much. No matter what the temporary feelings and irritations are between the nations, arising in the course of history and which leads in the hour of passion to temporary but intense hate and disregard, there ever is the Great Truth that man in his calmer, loving and considerate moods tries and aims to aspire to the lofty heights of peace, tolerance and understanding. In these loftier and lighter planes of human thought he formulates his optimistic philosophy and is reconciled to the shortcomings of daily life.

Of all the flags of other nations there is one which has a particular attraction, for it contains a system of philosophy. This flag belongs to Korea, and is at the present time under the political dominion of the red rising sun of Japan. Like all oriental nations the Koreans are mediative philosophers. In their flag they tried to embody a universal world philosophy, and to symbolize the eternal struggle of dynamic forces and static matter in the universe.

The decorative inscriptions near the four corners are old Chinese symbols for air, earth, fire and water. The four principles or elements of the ancient philosophers which we find again the Greek, Roman and Hindu philosophies. Air the gaseous, Earth the solid, Water the liquid state of matter, and Fire the symbol of force and energy. Furthermore these principles have developed during the alchemistic age into the mystic square with the adjectives "warm" for fire

and earth, "moist" for earth and water, "cold" for water and air, "dry" for air and fire; thus closing the cycle and symbolizing the everchanging nature from beginning to end, and where the end is the beginning of the new series again. "Nothing is permanent, all is transient," says Goethe of nature, and does not science prove the truth of this every day? Even the very chemical elements, as we now know them, are not indestructible and permanent, but transform and transmutate.

In the center of the flag is a blue and red ball. This sphere in its design symbolizes the struggle between the natural elements and forces. Both are equally large, but the upper blue (air and water) is intermingled with the lower red (earth and fire). The philosopher does not only see in it the struggle of material forces, but also the contest of the mental forces, love and hate, or the moral principles of Good and Evil. What suggestions for thought and pondering is contained in this flag, and what a world of meaning have its creators put into it!

MAGISTER IWEDDEHA.

The Clique

What is the Clique? 'Tis a body of men
Who attend every meeting, not just now and then;
Who don't miss a meeting unless they are sick—
These are the men that the grouch calls the Clique.

Who don't make a farce of the sacred word, "brother,"
Who believe in the motto "to help one another,"
Who never resort to a dishonest trick—
These are the men that some call the Clique.

The men who are seldom behind in their dues
And who from the meetings do not carry news;
Who attend to their duties and visit the sick—
These are the men that the crank calls the Clique.

We should be proud of members like these—
They can call them the Clique or whatever they please;
They never attempt any duties to dodge;
These are the Cliques that run 'most every lodge.

But there are people who always find fault,
And most of this kind are not worth their salt;
They like to start trouble, but seldom will stick;
They like to put all the work on the Clique.

—*Kansas City Grocer.*

Root Canals



FROM the amount of discussion, methods proposed, technic advanced, chemical reactions explained, pulp analysis worked out, bacterial experimentation going on, electro medication theories and what-not which are appearing in the current dental journals and have been incorporated in the standard textbooks, it seems rather presumptuous on the part of a student to handle this subject and shed any new light thereon. However, another discussion or two can do no harm.

In summing up the various methods in vogue and realizing that the average practitioner has a pet method of his own, by which he gets results which are to himself satisfactory, I believe that one of the methods I will try to discuss here, or a combination of some of them, will be found to give good results.

The following methods of root canal treatment have been advanced by different men well up in the profession, and I believe that any of them intelligently used will give good results:

1. Formo cresol treatment of Buckley.
2. Silver ammonio oxid and Formalin Sol. of Howe.
3. Dichloramine T. Chlorosane Sol. of Prinz.

In all these methods to be described it is understood that free and direct access must be obtained to the canals even to the extensive destruction of the crown.

FORMO CRESOL METHOD

This method depends upon the chemical combination of the formaldehyde of the solution with the gas formed in the putrifying mass. These gases are principally ammonia and hydrogen sulphide. The ammonia combines with the formaldehyde and forms hexamethylenamin, a harmless, soluble chemical. The hydrogen sulphide is combined with the formaldehyde, forming methyl or wood alcohol and sulphur. Any excess formaldehyde along with the tri-cresol acts as a disinfecting agent.

The success of this treatment depends on leaving the putrescent mass in the pulp canals, otherwise the formaldehyde will not have the proper chemical substances to react with. The result is that the formaldehyde becomes unlimited in its action, with severe irritation and destruction of the tissues in the apical area. It is better to apply small quantities frequently repeated, say every other day, in the pulp chamber and hermetically seal each time. This keeps the gases confined so they may react with each other.

The usual test for the completion of this reaction is the absence of the strong putrefactive odor, the sulphur being practically odorless and the hexametyleneamin having a mild odor somewhat resembling mouse urine, which is not noticeable owing to the cresol present.

We now have to consider the removal of the other organic constituents of the pulp, which are fats and carbohydrates and some protens which have not undergone putrification. Some use the sodium-potassium alloy to convert the fats into soaps, which easily dissolve and can be washed out of the canals. This alloy must be used in small amount and with extreme caution as it is very active and combines with water with violence and considerable heat. The same results may be obtained with a concentrated solution of potassium hydro-

oxide introduced into the canals, and which is easily made, keeps well and is safe.

The carbohydrates are very small in amount and easily removed, being soluble, as are also any remaining protein substances.

We now must open the canals to the apex and enlarge them to a size sufficient for the introduction of a filling material. This may be done by what is sometimes called the mechanico-chemical method and consists of opening the canals by spiral broaches with the aid of an acid which will dissolve the dentine and so assist in reaching the apex.

The acids of choice are phenol sulphonic, sulphuric and hydrochloric, either of which will do the work. Phenol sulphuric acid is good and has the least effect on the broaches. Sulphuric acid 50 per cent is good, has some effect on the broaches, but forms an insoluble compound with the calcium salts of the dentine. Hydrochloric acid 15 per cent is good, has some effect on the broaches, but forms a soluble compound with the calcium salts of the dentine. (Ca Cl_2).

All these acids require neutralization to limit their action. This may be done by introducing a 10 per cent solution of sodium bicarbonate (NaHCO_3). This liberates CO_2 gas which has a tendency to help clean the canals.

The canals are now washed out thoroughly and dried with absorbent points and hot-air blast with the aid of acetone. This latter chemical is miscible with water and is volatile, two properties which are very desirable in the final drying of canals.

The next step is to apply a solution of rosin in 3 per cent chloroform or acetone to each canal, to be sure of closing the pulpal ends of the dentinal tubuli. After this is dry, chloropercha is applied and the canals well lubricated so as to allow the introduction of gutta percha points by a pumping motion, and finally the points are pressed to position one after another until the canal is well filled.

Before the final filling as above described, it is sometimes recommended that an antiseptic dressing be sealed in the canals for a day or so in case of any soreness in the apical region. I can see no good reason for this, as the canal may become infected through the apex if left open for a few days, even with a mild antiseptic treatment, and also if the canal is not sterile after the strong chemical treatment it has received how are we ever going to make it sterile? Another point to be mentioned is that a tooth so treated should show some soreness, as we may then be sure the apex has been reached and some irritation caused beyond. It is quite impossible, I believe, to stop at exactly the root apex in every case. If the apex has not been reached we are not likely to have soreness. The soreness is caused by the body trying to make a repair to any damage done by our treatment. It is the absence of soreness which should tell us that our treatment has not been complete.

To find out just what point apically we have reached, a fine sterile diagnostic wire is introduced into the canal and a radiograph taken. From this we can tell the canal length, how far we have reached, and a good idea of the canal breadth mesiodistally. Of course, this should be done in every case previous to the rosin-chloroform treatment, so that we may open the canal to the desired point if not already reached.

SILVER AMMONIO-OXIDE METHOD

This method depends upon the deposition of metallic silver in the root canals.

The canals are opened as in previous method and thoroughly dried. A solution of silver ammonio-oxide is introduced into the canal and allowed to

remain five to ten minutes, to give it time to permeate the dentine. After this a 25 per cent solution of formaldehyde is introduced, which causes a precipitate of metallic silver. This coats the walls of the canal and probably closes the small accessory foramina near the apex.

The formaldehyde often causes severe irritation to the apical tissues if the canal has been opened to the apex. By substituting eugenol, an aldehyde occurring in the oil of cloves, for the formaldehyde the same results may be had without the irritation. This must be given longer time to act, and is usually applied and sealed in for twenty-four to forty-eight hours.

The moisture is then removed in the usual way and the filling completed with chloro percha or euca percha and gutta percha points.

The silver solution causes a very black stain which is undesirable in the pulp chamber, especially in anterior teeth. This may be largely prevented by closing the orifices to the canals with a small pledget of cotton and coating the pulp chamber with a thin layer of paraffine. To do this, a small amount of paraffine is put into the pulp chamber and liquefied by applying a heated ball burmsher, when the paraffine may be made to flow around the chamber. The cotton covering the orifices of the canals is then removed. The paraffine is removed by scraping, any small amount remaining may be taken out with chloroform or xylol.

The silver solution is made in the following manner: To a saturated solution of silver nitrate in distilled water is added enough stronger ammonia water to cause a precipitate; more ammonia water is cautiously added to just dissolve the precipitate, leaving a clear solution.

CHLORINE METHOD

This depends on the sterilization effect of chlorine, which is given up in small but continuous quantities from a solution, the formula of which is:

Di chloramine T, 5.0. Chlorococane, 95.0. Mix.

It is a yellowish oily liquid, which must be kept in perfectly dry amber-colored bottles, in a cool place out of the light. The canals are opened and cleaned as before described and dried. A few drops of the solution is put on a sterile watch glass and sterile absorbent points are saturated with the solution. One of these is applied to the canal and pumped up and down in order to apply the liquid to all parts. This is taken out and another saturated point is introduced and sealed in the canal. The sealing must be perfectly tight to confine the gas, and may be accomplished by moistening the pulp chamber with a small amount of chloroform and packing in gutta percha, stopping and finally covering with oxychloride cement.

This treatment should be renewed at twenty-four-hour intervals for four or five changes. The last treatment is allowed to remain for about two days, by which time the solution has given up all of its chlorine. This point is carefully removed with forceps which have been flamed and gently rubbed over the surface of a blood serum agar culture media and incubated for twenty-four to forty-eight hours and the growth observed. The growth on the culture media is your guide as to the sterility of the canal.

Usually after the fifth treatment the canal will be found sterile, but one should never rely on this. The culture media should always be inoculated and incubated, as further treatment may be indicated.

As soon as the canal is found to be sterile it should be filled as before described.

HANAHAN, '21.

The Stiff

They were all young lovely fellows
In the dissecting room that day.
Their heads were full of lessons
And their work was under way.

The stiff was nice and juicy,
And the skin was slipping fast,
The fascia was next in sight
And through they were at last.

I wonder what this fellow was
Before they brought him here.
He must have been a wild one
And probably fell for beer.

"The only ones we get here,"
Another fellow cried,
"Are the ones who go the booze route
Or whose friends and folks have died."

Ah, when they were young like we,
It's too bad they couldn't see
The glory of the future
With a D. D. S. degree.

Too bad the stiff couldn't speak
While the boys were standing round,
He could have told them of his troubles,
How he'd been lowered to the ground.

He'd been a man once, you know,
Although he didn't look it now,
With his needle-pitted arm,
And his deeply wrinkled brow.

He wasn't of the common herd,
He, too, had a degree,
But instead of carrying him to land
It carried him to sea.

He fought hard the temptations
That were thrown in his way,
And each year saw him less equipped
To battle with the fray.

At last his honors were forgotten,
And the county took him in.
Here he spent his last few fleeting days,
Atoning for his sin.

His life had been a failure,
From beginning to the end,
And he didn't realize his sadness,
Until too late to mend.

Now, that he might receive some honors,
To replace the ones he couldn't class,
He may serve the world with knowledge,
On the table topped with glass.

Remember, all you fellows,
He came from Oxford in his day.
The degrees we attain in life
Don't protect us on our way.

G. N. WILSON, '23.

The Dental Muse

(From *Dentologia*—A Poem on the Diseases of the Teeth and Their Proper Remedy, published in 1840)

Whene'er along the ivory discs are seen
The filthy footsteps of the dark gangrene,
Brook no delay, ye trembling, suffering fair,
But fly for refuge to the dentist's care.
His practised hand, obedient to his will,
Employs the slender file with nicest skill;
Just sweeps the germin of disease away,
And stops the fearful progress of decay.

And yet of all the evils that accrue
From loss of teeth, though neither small nor few,
The chief is this, 'tis nature's general plan,
That all the solid aliments of man,
Before admission to the secret shrine,
Where vital chemistry, with skill divine,
Transforms the cruder mass to milky chyme,
By nature's metamorphosis sublime—
Should suffer comminution—hence we find
The dental organs formed to cut, and grind,
And masticate the food—this rightly done,
The process of digestion well begun,
Results in health to each dependent part,
That feels the living impulse of the heart.

Oral Hygiene in Relation to Health



THEORETICAL dentistry is today a great power in the world of health; thus every dentist should consider himself responsible for the health of his client. He should also willingly devote his spare moments in educating those who do not know the use of prophylactic measures in preventing disorders within the oral cavity. Over ninety per cent of the children of our country have decayed teeth, simply on account of lacking oral hygiene.

If the mouths of these children were properly cared for they would be healthier, happier and brighter, thus enabling them to grow up robust men and women, surely a benefit to the community.

A clean mouth means a great deal to everyone. A healthy mouth, if properly cared for, will improve the general appearance of a person as well as his health.

Unhealthy mouths are subject to dental caries, which is caused by a colony of micro-organisms which grow in contact with the enamel in a secluded place, covered in and protected by a gelatinoid substance which they form, or by debris or other similar coating which will seclude the colony from disturbance and allow continuous growth. In this seclusion they form acid products which are protected from the washings by the general fluids of the mouth which would dissipate them. This latter is a necessary condition in order that the acid formed may act upon the calcium salts of the enamel and destroy it. In acting upon the enamel, micro-organisms never enter the tissue, but remain on the surface. The acids act by percolation into the enamel from the surface. The enamel is a solid, having no natural openings into which micro-organisms can grow. They cannot enter the substance of the tooth until the enamel has been penetrated by the solution by the acid. Thus far micro-organisms and their acid products must be protected by some kind of covering. After they have entered the dentinal tubules they form their acid products within the tissue itself and finally destroy the dentine, and in some cases destroying the pulp, causing the death of the tooth.

Pernicious mouth conditions are unnecessary, and it has been proven that eighty to ninety per cent of dental decay can be prevented by a system of extreme cleanliness and correct diet, especially in the elimination or at least restriction of the consumption of free sugar.

We know first that the bacterial plaque is the initial stage of dental caries, and that frequent removal of these plaques from all the surfaces of the teeth by hand polishers is the most sufficient means, aside from a correct diet, for the prevention of dental caries. Second, that the frequent removal of all calcareous deposits around the necks of the teeth by the use of instruments is most effective in the prevention of infection and destruction of the dental tissues surrounding the roots of the teeth. Third, that the faithful use daily of the toothbrush and floss silk and of a mouth wash such as limewater made from coarse calcium oxide is the best means for the thorough removal of food debris and dissolving the plaques. Fourth, that nearly all micro-organisms in the human mouth are harmless if deprived of a pabulum such as food debris, upon which to feed, develop and multiply.

A well-balanced diet with special emphasis on calcium content foods and the elimination of free sugar would result in practical immunity from dental caries, even in the absence of a rigid system of cleanliness.

The early loss of teeth is due mostly to decay for as a rule, a person prolongs the filling of his teeth until there is no possible chance of adjusting them, thus the result is the teeth must be extracted.

Malocclusion is bound to develop whether the teeth have been lost by decay or by some constitutional disease, such as rickets. The early loss of a deciduous incisor above or below will produce a lack of development in the region of the incisors. The loss of the force of the approximating teeth will permit them to drift together, thereby causing malocclusion, and many more deformities.

Owing to the early loss of the teeth, one becomes unable to masticate his food properly, thus inhibiting digestion, which causes expense for a physician must be consulted and medicines prescribed for.

Decay of the six-year-old molar very often occurs due to a lack of cleaning. Sometimes this tooth can be filled but very often it cannot owing to its abscessed condition, thus it must be extracted, causing sooner or later a malocclusion of the teeth, which can be corrected with expense in young children and not in older people.

Some of the teeth are attacked by decay to such an extent that the pulp becomes irritated, setting up a hyperemia in the vessels and later causing a strangulation of the pulp. This later results in an abscess formation causing great suffering.

The bacteria constituting these abscesses may be carried by the bloodstream to various parts of the body and there become localized and produce various kinds of infections.

Diseased mouths are also the cause of many throat and mouth infections. They may bring about any of the following diseases such as diphtheria, Vincent's angina, thrush, mucus, syphilitic patches, follicular tonsilitis and parasitic stomatitis.

Bacteria are always present in the mouth and when the resistance of the body is lowered the bacteria become invasive and attack the body, causing great destruction, suffering and sometimes death. Therefore if conditions of cleanliness were observed these diseases could be eliminated because the bacteria would be reduced in number.

Another disease occurring from the unhealthy condition of the teeth is pyorrhea. This is one of the most dreaded diseases of the mouth as it causes the loss of all of the teeth. It comes about by the accumulation of calculus on the necks of the teeth. It continues accumulating until it passes beneath the gum causing a gingivitis. This keeps on accumulating until it reaches the different fibres of the peridental membrane, causing them to become diseased, liberating large quantities of pus and later causing the loss of the teeth themselves.

The correct alinement of the teeth is also a very important factor in the health of the individual as well as in appearance for it brings correct occlusion which enables the proper mastication of foods, thus avoiding stomach disorders.

Prophylactic measures should be given to children while attending school, thus instructing them before reaching the stage of manhood that the teeth are of vital importance and must be properly cared for in order that good health may be insured.

L. V. PUCCINELLI, '21,
Junior Dental.



ORTHODONTIA CLINIC

Orthodontia

In days gone by the dentist was supposed to treat every type of dental disease which was brought to him for consideration. In this age of advancement, preparation for the profession of dentistry necessitates the study of many subjects, so complete in every detail and so thoroughly covering all phases of the work that specializing has become the rule and not an exception.

An education extending far beyond the knowledge that every normal human being has twenty teeth in the temporary set, and thirty-two teeth in the permanent set, and that a certain amount of cleanliness must be practiced in order to keep them as nature would have them, is now demanded of every student, and in fact when his degree is obtained he has as thorough a knowledge of the anatomy of the human being as one who has pursued the study of medicine. He has learned that the teeth play an important part as far as the health of a person is concerned and that neglect of them and their associated structures may be the cause of various ailments to which the human system is liable. The dentist is enabled to overcome many pathological conditions because of his wide field of study and research. Because these conditions are so numerous and variable, certain of them constitute valuable fields for the attention of the specialist. An old adage says that "Every man has his hobby." Call it a hobby if you wish, for every dentist has his hobby, else there would be no specialists. So we find this, the age of the Orthodontist, the Prosthodontist, the Exodontist, the Periodontist, and various other skillful workers in the line of dentistry who are faithfully serving the public, by bringing health and happiness through the correction of imperfections found in the mouth.

The aim of every dentist should be to give the best service possible. Accurate technique can be obtained by constant observation, by comparison, reflection and research.

Orthodontia is one of the important branches of dental service and carries with it great responsibilities. With the proper correction of malocclusion the forces of nature are inclined to work in perfect harmony. Proper methods of correction are essential and methods are as variable as the cases which come for treatment.

The skilled practitioner knows just what the particular appliance which he employs will accomplish because the time is past for merely hoping that it will make the correction, and he has the satisfaction of knowing that his work is not purely experimental.

The fact that experience counts in all lines of work, dental or otherwise, is true and it is a "good teacher." What has been already said does not mean that one should never enter the experimental field, for every new idea which is worked out for the first time is an experiment, and one learns and grows through experience. Failure in this line comes through exerting the wrong mechanical forces against the laws of nature, and discouragement comes alike to dentist and patient. Time and money are among the losses of both.

Modern day ethics forbid the practitioner to do his work in any but the most thorough manner, according to his experience and best judgment, obtaining the results consequent upon treatment.

Let us consider for a moment the courses of reasoning employed in diagnosing a case of needing the attention of an Orthodontist. The first step is to make a thorough examination of the mouth, note the condition of the teeth regarding the

shape, size and position. The pathological value of which qualities are to be considered separately.

First, as to shape.—The teeth may be found normal, physiologically abnormal, or pathologically abnormal. Under the head of normal teeth will come those which are perfectly formed, but which are in malocclusion. Cases of this kind which have no general disorder caused by rickets, tuberculosis or other diseases will prove to be the most perfect types after correction, as the teeth have not lost their proper shape, and normal proximal contact may be established as well as proper occlusion with reference to the inclined planes.

Abnormal physiological shape.—Under this head appear teeth which have been abnormally formed and for no apparent reason. This type includes peg-shaped teeth, five-cusp molars, bicuspid and molars which have exceptionally high or pointed cusps, and those having large necks and small crowns. Cases under this head when treated, with no general disorder present, may have to be retained in position for a longer period as the proximal contact and the forces of the inclined planes will not be of value as an aid to retention.

Pathological shape.—This includes teeth which are due to systemic disorders, such as rickets or tuberculosis before mentioned, syphilis or eruptive fevers, also teeth of which the normal contour has been so destroyed that correction would be made difficult. The normal proximal contact and the forces of the inclined planes have been completely destroyed as a rule in teeth of this type and steps must be taken to correct this condition before orthodontic treatment can be effective.

An important factor which must not be overlooked in the treatment of these cases is the force of the inclined planes referred to above. It has been found that when a case is corrected and soreness arises in one or more teeth after they have been moved into their proper positions in the arch, it is usually due to the fact that they are higher than the rest and more pressure is brought to bear upon them during mastication than to other teeth. It so follows that this condition must be corrected in order to bring about proper occlusion. High spots may be found by having the patient work the jaws laterally after placing a piece of carbon paper between the occlusal surfaces, the high spots will appear dark. These spots may then be ground off until proper occlusion occurs. Usually very little grinding is required. This should be followed by a thorough polishing of the surfaces ground. If this condition is not corrected the constant irritation may in time produce periodontoclasia. When speaking of this we must not lose sight of the important part which proximal contact also plays. The loss of this gives rise to "drifting," which will occur if there is no support mesially or distally, and "drifting" leads to the condition described above. So in the first step of diagnosis all these factors must be taken into consideration that one may better form a prognosis of the case.

The size, shape and relation of the arches should next be considered, also their condition. Note whether any old stumps of the temporary set are interfering with normal development, if so these should be removed. The palate should be examined to determine whether the vault is high and narrow, or normal. If high, it is probable that the nasal septum is deflected to one side, giving rise to mouth breathing. This necessitates expansion. Mouth breathing is common and often due to the above condition brought about by finger sucking, or it may be due to hypertrophied lymphatic tissue of the tonsils, and steps should be taken to correct it.

Impacted teeth are frequently the cause of malocclusion, therefore all teeth

should be accounted for, and if any are found to be missing, radiographs should be taken.

The history of the case will prove to be of valuable aid and should be kept on charts. This should record all teeth in malposition, all missing teeth, the shape of the arches and their relation to each other, also questions to be answered by the patient or his guardian which will give information regarding the health of the patient since birth, also noting certain diseases if present, such as rickets, tuberculosis, eruptive fevers, tonsillitis, and so forth.

Having completed the diagnosis of the case we are now ready for the plaster models. Let us first consider the merits of the plaster model as used in the construction of the appliance. It consists of two principal parts, the art portion and the anatomic portion. The first may be finished any way desired. Dr. Dewey, in his text book of Practical Orthodontia, describes a method of trimming the art portion which appears to be excellent. The anatomic portion is left, and one model of each of the upper and the lower jaw is kept for reference and comparison. The other set is used to construct the appliance upon.

The band and arches are constructed so as to fit a stationary set of plaster teeth, which are brittle, also liable to destruction of contour, therefore as a working model it lacks two qualities which are necessary. An ideal model has been constructed of rubber and metal, the rubber part embodying the art and anatomic portions and the metal part the teeth. In this model there is nothing destructible, and the appliance may be constructed upon it without any fear of destroying the teeth or their associated parts. The appliance when finished can be tested thoroughly before being inserted in the patient's mouth, as it may be placed on the model and the teeth which are in malposition ligated. They will respond to the force which is exerted because the metallic teeth are set in the soft rubber, thus every effect of the appliance can be anticipated. If very accurate articulation is desired the models may be set upon an anatomic articulator and the teeth moved into different positions with the finger until the articulation is perfect, the direction of movement noted, and another appliance constructed in duplicate.

Upon removal of any pressure from the metallic teeth, they will spring back into first positions, when you have the original condition of the case. Other advantages may be claimed for this type of model; however, those named are probably the most important.

To construct a set of models as described accurate impressions must be obtained and coated with collodion, which will fill the pores of the plaster and give a better finish to the rubber. Only two impressions are necessary, one upper and one lower, as one model will answer for everything.

Making the teeth.—Small finishing nails are cut into lengths, corresponding to that of the roots. This knowledge may be obtained by means of the radiograph. These pins will form the artificial roots of the metallic teeth and are called the "crown pins." One pin is placed in a tooth impression, held vertical with the occlusal surface of the crown, and copper amalgam packed into the impression and around the pins, the latter being held firmly in position. The whole of the impression is thus filled as high as the line of the free gingiva as produced on the model. The process is carried out until all of the teeth are taken care of in this way. Care must be taken not to join any of the teeth together. When this is completed the whole is set away for twenty-four hours to allow the copper amalgam to set firmly.

Constructing the rubber part, and flasking.—The ordinary vulcanite flask may be used, the impression being placed in the lower half, teeth down, and plaster

run to the top of the impression. The "art strip" is set in place and the plaster continued to the upper margin of this. Care must be taken to avoid any undercuts so that when the upper half is poured up it will draw away freely. The "art strip" is constructed of a piece of brass about three-eighths of an inch wide and of sufficient length so that when formed it will allow some overhang of the art portion over the anatomic portion in the finished model. It may be contoured to resemble Dr. Dewey's method if desired. Three or four of these will be needed since arches vary in size. The function of the art strip is to act as a form in which the art portion of a soft rubber model will be vulcanized. It is set directly over the upper margins of the impression. To prevent the plaster from running into the impression a sheet of wax is set over the upper margin of the art strip and waxed in place. The upper half of the flask is set in place and the case finished as usual. Boil for a few minutes to soften the wax, separate the halves and it is ready for the rubber packing. The rubber may be obtained from any vulcanizing shop. This rubber when cooked will be soft, the packing carried out the same as for a vulcanite plate. Be careful not to dislodge the metal teeth. Fill the impression to the upper margin of the art strip. A little excess may be allowed or the method may be employed of inserting a piece of starched linen between the two halves. Boil for a few minutes, clamp the two halves together, separate again and note any deficiency of rubber. Vulcanize at 150° F. for half an hour.

The writer in using this method has found it to be very efficient and trust that it may be of value to others who are interested in the study of Orthodontia.

NEWTON W. MILLARS, '21.





Preparation of tissues FOR Microscopical Study

BY
M. N. WALLEN—'22
ILLUSTRATED
BY GUY W. L. S. D. 1922

Our present knowledge of the constituents and appearance of tissues and organs is largely due to the great progress and achievements gained by microscopical study. It is quite apparent that all tissues and organs are not alike and the great factor in the study is the preparation of them for both preservation and distinguishment. The methods of preparation are to enable us to learn more of the structure and function of objects. Although it is much more desirable to study from living specimens, the necessity of examining by transmitted light forces us to resort to the various methods of preparation.

Specimens used for microscopical study are not vital tissues, but are changeable, in that they are composed of chemical matter which is subject to change and decomposition. Keeping this fact in mind we can logically state three main reasons for preparation of tissues.

1. To kill (stop) chemical change, and preserve the actual forms of the tissue.
2. To put specimens in a state affording convenience for handling.
3. To bring out by actions of reagents optical differences in the structure.

We shall now regard the procedure in preparation relative to the above named reasons.

The first step, then, is the killing of those tissues and the fixing of their various components in the characteristic stages of activities. This is accomplished by numerous reagents which possess one or more of the following qualities:

1. Power of killing so quickly that as few as possible structural changes take place.
2. Non-shrinkage and non-extending properties.
3. Preservative qualities for the prevention of post mortem changes.
4. Power of penetration.
5. Properties aiding in differentiation and staining.

No one reagent has been found to possess all of the above qualities, so a combination of two or more possessing requirements singly are used. The reagents most commonly used and most successfully manipulated are:

Acetic acid—diluted and in combination with most all reagents.

Alcohol—95 per cent in combination with acetic acid.

Corrosial sublimate—Bichloride of mercury (+acetic acid), rapid in action and excellent for epithelium and glands.

Pottassium Bichromate—(+acetic acid), extensively used in hardening nervous tissue.

Formaldehyde—10% solution, used extensively for preservation, for dissection and fixation of central nervous system.

Osmic acid + chromic acid. Kills very quickly and fixes well; 2% 1%.

After accomplishing the fixation, the specimen must be put in such a condition that will insure convenience and ease in handling and sectioning.

The methods used and those answering the above requirements are three in number:

1. Simple imbedding.
2. Interstitial or infiltrated imbedding (paraffin and celloidin).
3. Freezing, the rapid clinical method.

Simple imbedding consists merely of surrounding the object with an appropriate medium to hold it in place while it is being cut.

In interstitial imbedding, however, the object is infiltrated or saturated with the imbedding substance until all cavities and minute spaces are filled. When set, all parts of the tissue are adequately supported and will not shift position when sectioned.

The two main interstitial imbedding methods are:

The paraffin method and the celloidin method.

The paraffin method (for cellular tissue), and the celloidin method (fibrous and compact tissue).

Paraffin is a translucent waxy material commonly derived from crude petroleum and possesses a comparatively low M. P., about 53° C. In using the paraffin method the section is first washed in 70%; 95% and absolute alcohol and then allowed to remain in xylol for a period of two or more hours. It is then saturated in melted paraffin for about two hours or more, finally placed some fresh paraffin and cooled quickly.

Celloidin is a form of pyroxylin or gun cotton and for interstitial imbedding it is dissolved in a mixture of equal parts of alcohol and sulphuric ether.

In the celloidin method, the specimen after being allowed to remain in absolute alcohol for about twenty hours is transferred to a mixture of equal parts of alcohol and ether for from twelve to twenty-four hours. It is next allowed to stand in thin celloidin for from thirty-six hours to several days, then in thick celloidin for about forty-eight hours, and finally in 85% alcohol, which hardens it.

The freezing method is the most rapid and is therefore used to a great extent in clinical observation. By this method fresh tissues can be sectioned and ready for the microscope in a few minutes. The tissue is directly transferred to the desk of a microtome without previous imbedding, and is sectioned after being frozen. Carbon dioxide in a liquid state or ether may be used; the former being the less expensive and most satisfactory. The main objection to this method is that the ice crystals form in the cells and distort them badly.

The specimen has now been thoroughly killed, fixed and imbedded. Being in a bulky form it is transferred to a device known as a microtome, which cuts it up into thin sections of any desired thickness. We now have a section that may be observed through a microscope, being of thickness that will transmit light (1/30 to 1/1000 of a M. M., or thinner). On observation we note that all the structures look very much alike, and therefore resort to the third step, the bringing out of the optical differences of the structures by the action of certain various reagents or stains.

The stains used have more or less of a selective action, that is they pick out certain elements of a tissue and consequently stain them only. As tissues are

not made up of homogeneous masses, a combination of reagents is used. The stains of the widest application are:

Carmines. A product made from the bodies of the cochineal and kermes scale insects. It stains the entire object a brilliant scarlet or purple.

Anilin itself is a colorless coal tar derivative but is the base from which many of the coal tar dyes are made. The following are the commonest used:

Anilin blue and orange G—acid dye for connective tissue.

Van Gieson's—combination of fuchsin and picric acid, very effective for connective tissues.

Eosin—acid anilin stain for the body of the cell.

Methylen blue—basic anilin stain—for study of nervous tissue.

Bismark brown—a good nuclear stain.

Safranin—one of the most important of the basic anilin nuclear stains.

Orcein—stain for elastic fibres.

Hemotoxylin—a compound containing coloring matter of logwood and used to great advantage in staining nuclei. The different hemotoxylin stains are chiefly Delofield's, Conklin's Pecro, Ehrlick's, Weigert's and Heidenhein's Iron.

Nissl's method—staining Tegroyd substances in nerve cells.

Golgi's Chrom.—silver method—staining nerve cells and their ramifications.

Silver Nitrate—for intercellular substance.

Sudan III—an excellent for fat.

Wright's stain—composed of Eosin and Methyl blue and is used to differentiate the various heights of white blood cells.

Our specimen although having passed through the various steps is not quite ready for study. For convenience in handling and for its protection we must mount it. The tissue is carefully spread out upon a rectangular piece of glass, called a slide, and is covered by a drop or two of clear Canada balsam. Finally for its protection a small square piece of very thin glass, known as a cover glass, is placed upon the balsam and gently pressed into place. Tissues prepared in this manner can be kept for years, the only change taking place is the fading of the stains, due to the action of light.



Problems of Micro-organisms of the Oral Cavity and Their Effects

Our attention was first drawn to bacteria of the mouth and its associated parts by the original student of bacteria, Lewenhock (1683), who at that period demonstrated the fact that microorganisms could be observed by microscopically examining scrapings from the tartar collections on teeth.

It seems surprising since bacteria in the mouth has been so long known to exist that the causative agents of such pathological conditions as caries and pyorrhea alveolaris cannot as yet be demonstrated. Aside from the fact that it has long been known that the mouth is the most common part of entry of many pathogenic organisms comparatively little has been learned of oral bacteriology.

The classification of mouth bacteria has not as yet been satisfactorily worked out. Miller's classification, (1) cultivable and (2) uncultivable, cannot be accepted because it is but a question of time and work when organisms of the latter class will be made to grow on artificial media, thereby upsetting the classification. His work has given the student a splendid description of those bacteria which are normally found in the oral cavity, but as to whether or not under any conditions these bacteria are capable of producing pathological conditions is yet to be worked out. Since Miller's original publication science has been able to demonstrate sixty-odd organisms which normally inhabit the mouth with which must be considered other countless varieties which are to be regarded as transient.

Meyer, of the University of California Dental Department, claims to have made cultures which demonstrate that different regions of the oral cavity harbor normally different kinds of bacteria, that on the palate may be found cocci and a few leptothrices; on the tongue, mostly diplococci and some short rod-shaped organisms, sperochaetes but very rarely leptothrices and vibrios (spirellum), while on the gums cocci in preponderance.

The work on oral bacteriology and the effects of the organism is tremendously hampered by the fact that bacterial nomenclature is tremendously varied, the same organism enjoying many names, making it very difficult for the student to begin where other bacteriologists have left off or compile data with which to investigate, and because of that many of the mouth microbes (probably the one which is the direct cause of the disease in question) cannot be cultivated.

Miller's theory of dental caries, that bacteria colonize on given surfaces of the teeth, are there protected by the formation of plaques and produce an acid which persistently bathes the surface affected and in some manner dissolves intercementing substance of enamel cannot as yet be substantiated. We have not been able to demonstrate that a specific organism or group of organisms is constantly associated with the disease, nor have we been able to produce experimental caries.

Probably one of the biggest strides in the study of mouth pathology will come when the National Dental Association standardizes the nomenclature of dental pathology. SLOMAN, '21.

The Etiology of the Vermiform Appandage

Allow me your imagination,
Fellow readers, kind and true,
And I'll take you for a journey,
That might just be something new.
This tale might have happened
Perhaps in the ancient stone age.
I'll try to tell just how
Was placed the Vermiform Appandage.

The parties that made this tale a matter of history had decided to proceed on an extended exploration of the inner regions of our human body. Adequate preparation had been made and the following tale will serve as an account of their explorations.

The party having mounted the Illiac crest, peered into the Illiac fossa; unaware of the fact that an indirect Inguinal hernia had taken place no signs of the inner regions could be found. Feeling the pangs of hunger drawing tight they dined heartily on Iodoform and Phenol, knowing it to be absolutely harmless from good authority.

Their meal soon over, they again set out on their ascent. They lost their median line and soon were under cover of the Auricula. Groping in the dark they entered the Carotid canal and lo, they found themselves in the Inferior Petrostal sinus. The only thing left for them to do was to take the Navicular and voyage down the Jugular.

They noted, however, at this point that one of their party was missing. They found out later that all unawares to them he had tripped up on the Mandibular division of the fifth and had fell across the wings of that great bird, the Sphenoid. Luckily, however, when he righted he was sitting on the Diaphram Sella, which ruptured and let him through into the Turkish saddle. He gently pressed the olfactory bulb and away he flew, like an extracted tooth from the extracting room of the oral surgery clinic.

Penetrating the cerebrum he passed through the Pia and was caught in the meshes of the Spider Web. He was dashed down the Straight Sinus to the Jugular foramen and then on to the heart. Upon entering the right auricle he was bumped against the intervening tubercle of Lower and fell over the Limbus into the fossa Ovalis. Being breathless he was carried to the Cupola and there rested in the basement membrane.

Feeling cool he traveled south, and finding himself free in that great cave with the Diaphram for a tent, did a few acrobatic stunts using the transverse colon as a bar. He became restless, however, slipped and fell and landed in the right Illiac fossa, clinging to the Cecum of the large intestine.

They tell us that even today one will find the remains of him there as the Vermiform Appandage.

GOLDEN B. FALCONER, '21.

Crown and Bridge Work

By CHAS. A. ERTOLA

There are members of the Dental and Medical professions who are bitterly opposed to bridgework, with arguments that I shall not mention here, only to say that their oppositions are not altogether wrong, and are founded on sound ground, nevertheless I take exception to their conclusions that crown and bridge-work should be eliminated, and will endeavor to show that if the operator take heed and be governed by the following indications, failure and poor bridgework would be eliminated.

Removable and saddle bridges are to my mind useless. For a bridge to be satisfactory it should be firmly fixed and this feature is to be found only in a fixed bridge. We will therefore consider the fixed bridge only.

The indications to be followed are, first, to bring the mouth into a normal physiological condition. Doing this not only makes the field of operation a desirable one to yourself but makes a decided impression on your patient.

The second, stability of abutments sufficient to comply with required demands.

Next is sufficient number of abutments and, fourthly, the proper locations of abutments.

The first essential would be that the teeth to be used as abutments should be absolutely in a healthy condition and in proper relation to surrounding tissue—strongly fixed.

The second essential could be really classed as primary for it would be folly to try to enforce three teeth, regardless of strength and location, to support an 8-tooth bridge, but strange to say, I have seen three teeth supporting twelve and even fourteen, which was idiotic, to say the least.

A guide, I venture to say, is that one tooth is a good supporter for two artificial teeth, and this is going the limit.

The third essential is also a very important one for the location of abutments means a great deal and the operator should be very careful in selecting same.

If these four primary essentials are lacking physiologic tissue becomes pathologic and failure results.

Abutments should be perfectly made. The point of contact between the end teeth of bridge and contiguous natural teeth should get close observation, as this is a very essential feature.

The requirements of occlusion should also be particularly noticed, as an improper articulation renders a poor masticating surface, so the operator should have complete knowledge of the anatomy of the teeth, in order to curve the occlusal surface correctly and accordingly.

As for abutments, most all are good if properly made. I take exception to standards, Richmond or any crown, which necessitates the removal of all of the crown.

Inlays are good if root post can be attached to same, otherwise are useless.

Periodonteclesia

In reviewing many current articles on this most interesting subject, I have found such a diversity of opinion as to the etiological organism that I am led to believe there is no specific bacteria which causes this pathologic state, but that many different microorganisms may cause this disease of the peridental membrane. Some of the organisms which have been more or less generally accepted as the etiological factors are:

Staphylococcus Parnubus,
Streptococcus Pyogenes,
Endamoeba Buccalis.

One would logically expect to find many methods of treatment, and I find that the therapeutic measures used to effect a cure vary. Some radicals firmly believe, and practice, prompt and efficient use of the forceps as a means of permanent cure, and others maintain that all teeth can be preserved by their special treatment, no matter how far suppuration has progressed.

Antogenous vaccines, used where the streptococcus pyogenes was the prevalent organism, have given splendid results when used after thorough scaling and polishing of the affected teeth. Pockets should be cleansed with a good anti-septic, such as thymol and bicarbonate of soda.

The chlorine compounds, chloranin T, hyperchlorous acid, and dichloramin T, have been used successfully by many operators. It is my belief that almost any of these treatments will prove successful, in the hands of a competent operator, if the disease has not progressed too far.

Chloramin T is one of the most powerful germicides known, and often is effective in cases where other measures have failed. Before irrigating, the surface should be dehydrated thoroughly. The solution is then left in each pocket for two or three minutes and repeated three or four times at each sitting. This treatment will usually bring the peridental membrane and the gum tissue back to a healthy, normal condition. Being non-irritating, and fifty times as destructive to bacteria, as compared to phenal, it is an ideal germicide for many affections of the oral cavity of a like nature.

The recognition of periodonteclesia in its early stages will greatly simplify the treatment, and preventive measures should be taken immediately. The oral cavity should be put in an aseptic condition, and all salinary deposits and plaques should be removed from the surface of the teeth. Malocclusion should be corrected if possible. It is found, very often, that the cusps of some of the teeth are too long, not having been worn down properly by mastication of solid foods, and cause a pathologic condition of the peridental membrane to ensue, due to trauma. This can be easily remedied by grinding those teeth to occlusion. Faulty crown and bridgework is too often present in patients afflicted with periodonteclesia; also fillings noticeable for their lack of contact and good finished margins.

To prevent should be the aim of the dentist, as more good can be accomplished in this way than by later therapeutics, and only by taking into careful consideration the above mentioned facts, and many more unmentioned, can he be of the greatest value to his patient.

WILL AUSLIN, '21.

Spirits

R. V. BURK, '22

I shuddered not a little as I slowly climbed the stairs and thought and thought of what I was about to do. It seemed so uncanny, so weird, if you please, and the whole thing made me rather afraid. But I went, rebelliously, of course, determined to make the best of it.

Fourteen! Could I believe my eyes? Fourteen of the most unsightly objects that I had heretofore seen. The sight choked me, I felt weak, my knees quavered, and I started back, but as I started the door closed, and I felt helpless. I seemed to be without power. Suppose—then I vanished the thought, and boldly walked over to one of them, and determined to do my best.

I uncovered my scapelle, and took out my pliers, and with a hand as steady as the step of a man who has been drinking heavily, I started to cut. Oh! the coldness of that arm, the sight of that face, so hardened, and fixed. I couldn't do it. That body had once been alive, had once filled a place in this world, whether a good one or not, and now I was about to destroy the last remaining evidence—of what? I knew not.

I argued with myself, as I stood there, sickened by the sight and the odor of that room on the third floor. How had it all come about? I asked myself, and before I could reply, fourteen voices seemed to say, "Ask us."

Blind men have vision, as compared to me, as I stood there trying to decide which way to go, and how to get out of what seemed to be the devil's cave.

Once more I started for the door, and still again I decided to remain and make the best of it. I cut into the flesh, and from out the incision oozed a light liquid. To me it was blood, and I tried to stop it. As I did so the body moved, I heard a voice which said, "At it again?"

How well I remembered that night. How well I remembered that jab that stopped a beating heart. It was bloody as I withdrew the knife. I felt guilty, and I left after hastily hiding the body, so that I might easily return and carry it away. As I departed I heard footsteps and I stopped to listen. A woman screamed, I knew that the crime had been discovered and that the whole neighborhood would soon be in pursuit. There was an open square through which I had to pass. I made that without being caught and felt quite safe, but as I dodged around the corner—I—

Oh! the horrible remembrance of the night that I killed our neighbor's dog!

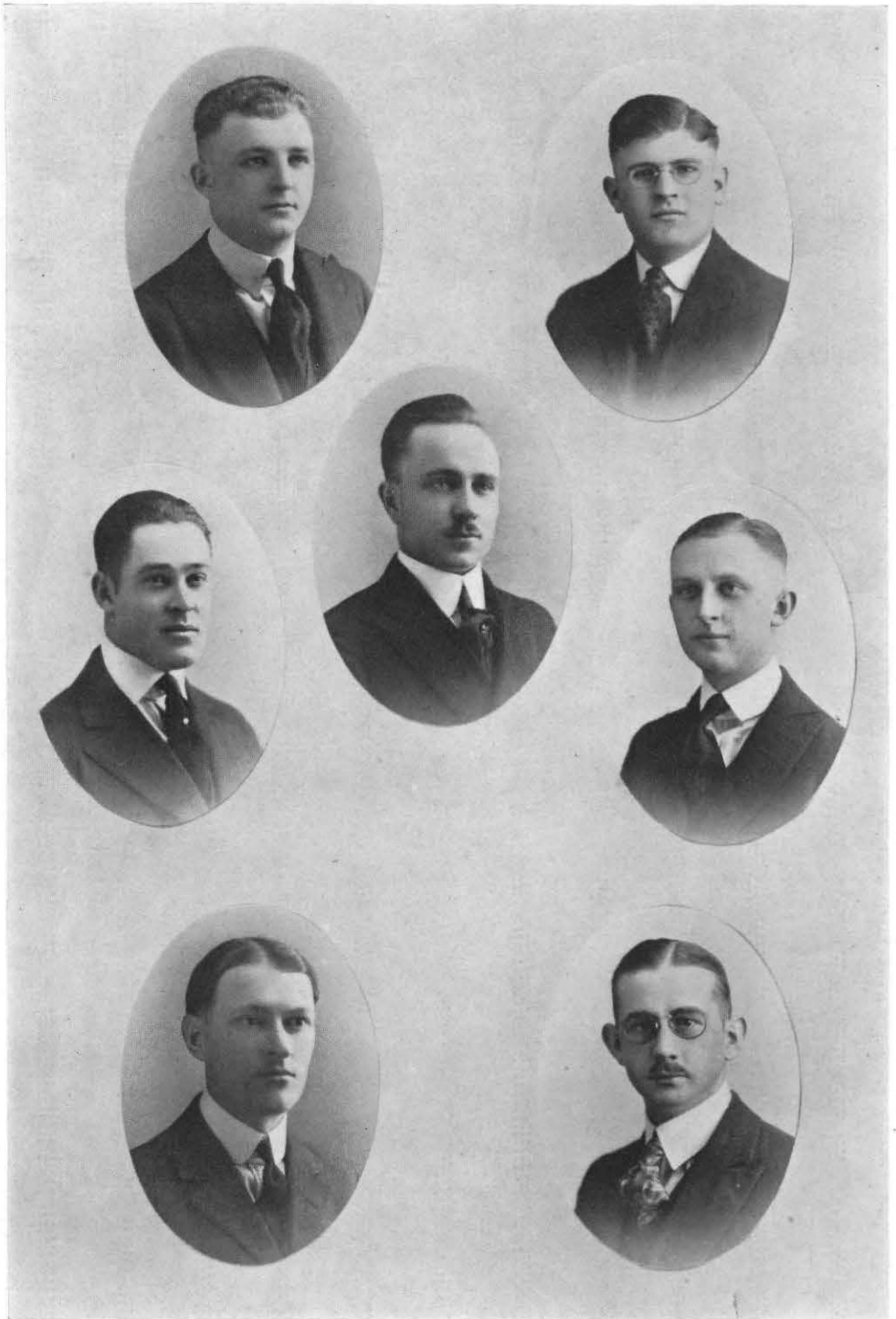
Do It Now

If with pleasure you are viewing
Any work a man is doing,
If you like him or you love him, tell him now.
Don't withhold your approbation,
Till the parson makes oration
And he lies with snowy lilies on his brow;
For no matter how you shout it,
He won't really care about it;
He won't know how many teardrops you have shed.
If you think some praise is due him,
Now's the time to slip it to him,
For he cannot read his tombstone when he's dead.

More than fame and more than money
Is the comment kind and sunny,
And the hearty, warm approval of a friend,
For it gives to life a savor
And it makes you stronger, braver,
And it gives you heart and spirit to the end.
If he earns your praise, bestow it;
If you like him, let him know it;
Let the words of true encouragement be said.
Do not wait till life is over
And he's underneath the clover,
For he cannot read his tombstone when he's dead.



"DEAN OF 'EM ALL"
DR. CHAS. BIXTON



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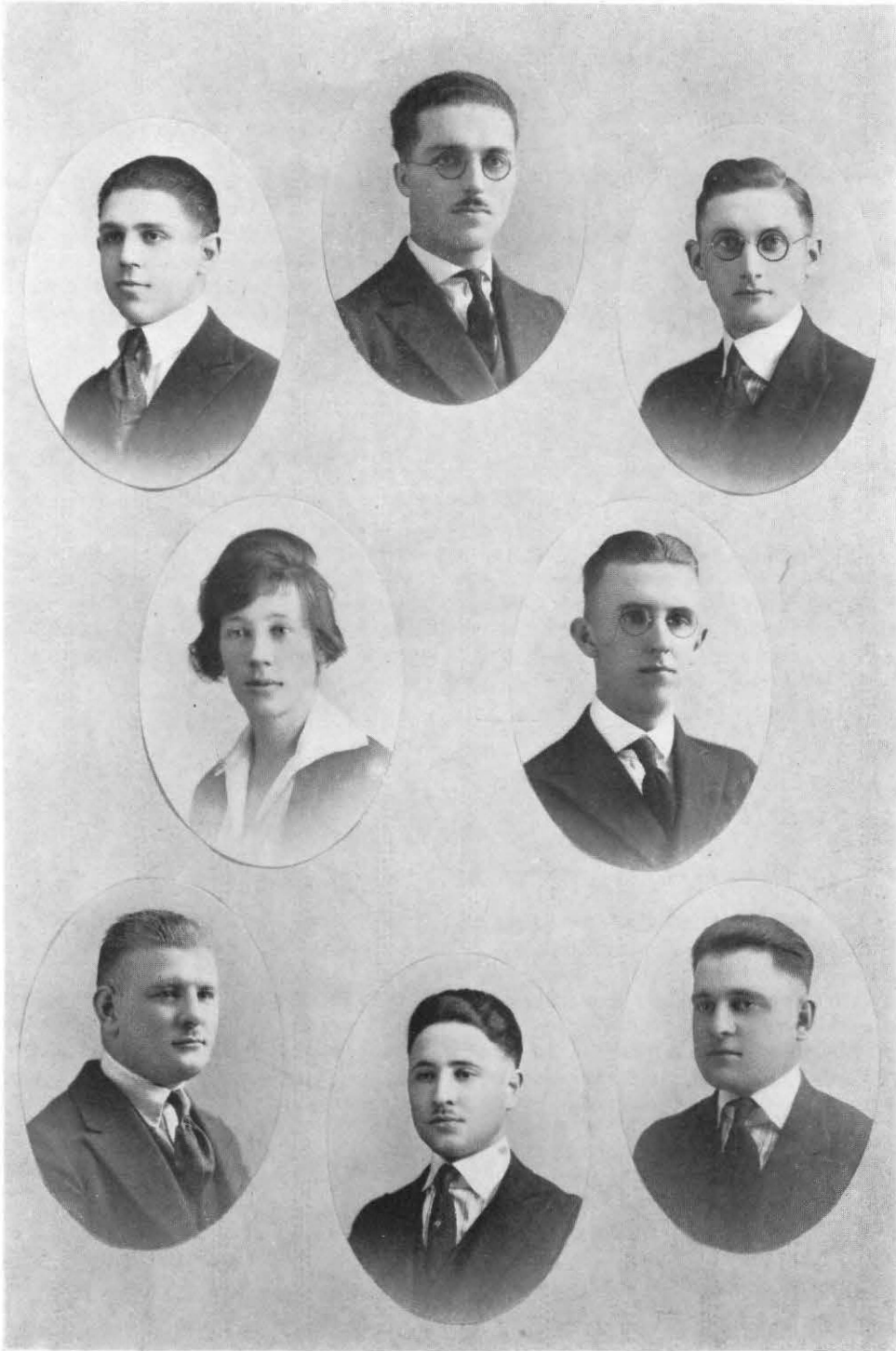
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Social Activities

The social activities of old P. and S. were started off in grand style by the Every New Member Treat banquet held at Gionduja, and needless to say every college man was present along with the faculty and alumni members. Eats and song, along with some not-much liquid refreshments, were at hand.

Evening drew to a close and every one started home never to forget the good time, made possible by the Frosh.

SENIOR-FRESHMAN DANCE

The Senior-Freshman dance was given the early part of the year at the Fairmont Hotel and was a huge success from every angle that it might be considered.

This being the first college affair the Freshmen ever attended, they were greatly enthused, and the Freshmen, as in the past, were not to be kept down but retaliated by giving a Senior dance to be called the Senior Farewell, of which I will tell you in due time.

COLLEGE FRATERNITY AFFAIRS

To say that there is no college fraternity activities shown at P. and S. would simply mean that you never had the pleasure of being present at one of the said affairs.

There are three big fraternities here, and something doing every minute at the home of one of the fraternities.

At first smokers were held, but I guess we got tired of leading a bachelor life, so feeds and dances held a prominent place, with a large attendance of frat men, friends, faculty members, alumni men, and of course many of the local queens.

College is about to close and it is with pleasure we look back on the fraternity social affairs, but look forward to the many more good times to come.

CHIPS PAY DANCE

Thinking it about time to get together again the student body gave a pay dance, held at California Club Hall, and at which every one was present, not alone students, but their friends.

To say that the music was good is putting it mildly, and say! you should have seen the crowd, for you can believe they were all there, with something doing every minute and every one having a good time.

The days following were taken up with the regular work, but you all know a good time can never be forgotten, so this dance was fresh in the minds when along came the theatre party.

THEATRE PARTY

The yearly theatre party held May third at the Alcazar Theatre, featuring Belle Bennet in *Peggy Behave* is sure to be a success as have those in the past.

All preparation has been made to make it possible for every one to be there with their sweeties and friends and the committee reports that the tickets are going along at a fast rate.

It is with pleasure we look forward to the party, which means a good time for all of us.

SENIOR FAREWELL DANCE

When the Freshmen said that they would come back with a regular dance is putting on the soft pedal.

In the early part of April came the Senior Farewell Dance at the Fairmont Hotel, and a formal dance never to be forgotten by the men and friends of Physicians and Surgeons.

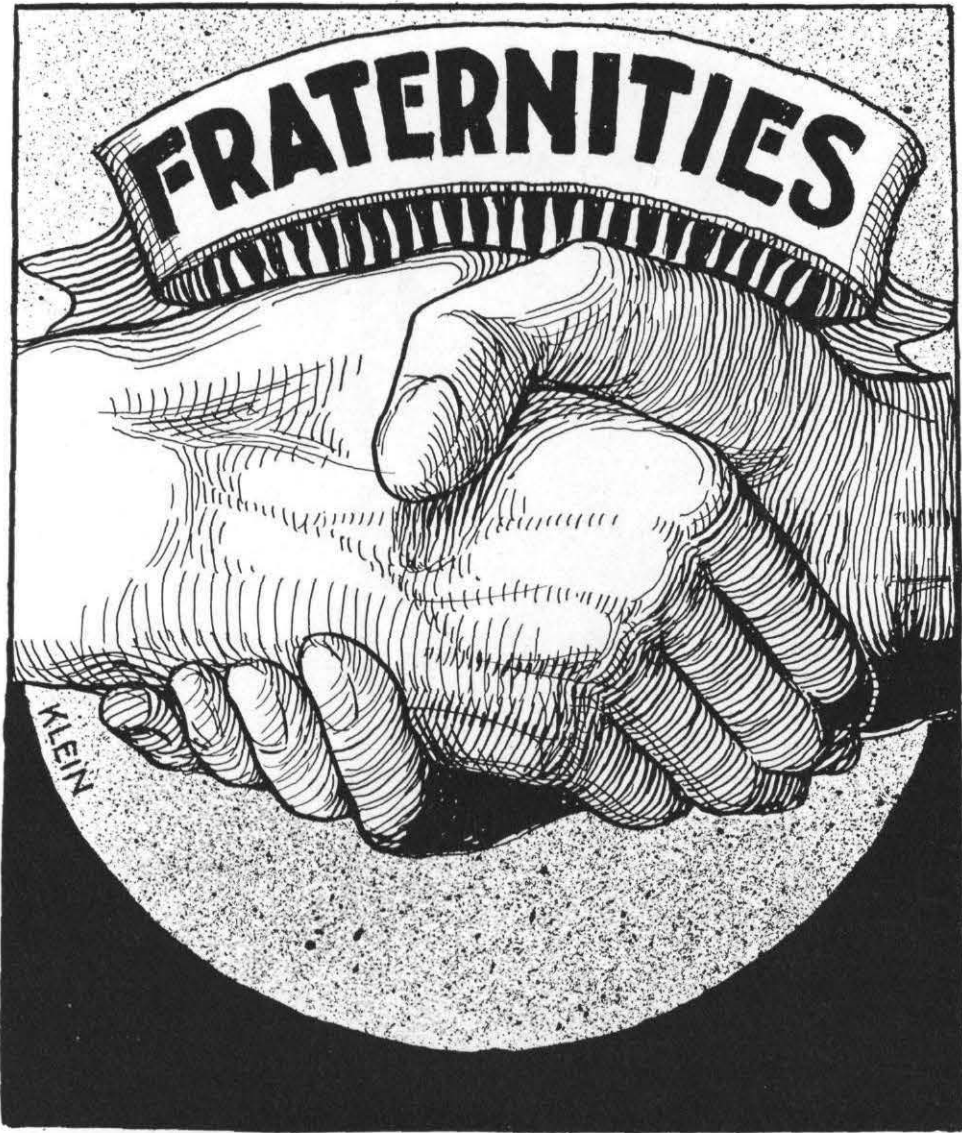
The way the boys stepped out along with some of San Francisco's most beautiful girls is long to be remembered.

But a dance was not enough in the eyes of the Freshmen, so talent both in dancing and singing merit held our attention part of the evening.

Did any of the faculty show up? Well, you bet they did, and did they have their wives and friends? Did they? You can bet they did, and did every one enjoy the music and entertainment? Well, you can bet they did, and every one had a good time, but why try to answer all these foolish questions, for never was an evening so spent in the eyes of old P. and S., and it is with pleasure we thank the incoming Sophomores for their dance, and wish them joy and equally as good a time on being guests at their Senior Farewell Dance.



AT MARKET AND THIRD STREETS





Bertel P. Bartscher	Perry M. Shea	Wesley Jefferson	Harry A. Michaud	Louis V. Puccinelli
Bert Thomas	Garland N. Wilson	Olin M. Wilson	Roscoe W. Nickerson	
August Chuk	Romeo G. Leone	Harold J. Heitmann	Albert O. Carlson	
Fred A. Bley	Albert J. Whitfield	Lawrence Walter	Martin J. Walter	
Leo I. Duggan	John D. Atkinson	John J. Bray	Gerald F. Warren	
Harold M. Grimwood	Ernest H. Hills	Raymond V. Burk	Walter C. McAdoo	Floyd H. Wilson

Psi Delta Fraternity

CHIPS comes forth again representing one of the finest dental colleges of the West, and with it comes Psi Delta fraternity, a fraternity based upon one principle, and cemented together by the same old brotherly love so seldom found in an organization of this character.

Under the leadership of a man, later Senior class president, and afterwards editor of CHIPS, we began this year's work by leaps and bounds. Our first social affairs were held at our former house, but finding conveniences not adequate we moved to our new three-story home at 827 Duboce Avenue, where a number of the out-of-town men make their home and share the comforts afforded.

Every one likes to relax once in a while, so aside from regular meetings, dances, feeds and smokers were given, in which the fellows really enjoyed themselves with their friends, alumni, and faculty members, who have made our school life a pleasure, helping us with their knowledge and experience.

As this year is near an end, and CHIPS is about to go to press, we take this opportunity of thanking the faculty for their kindness and patience; to the graduating class we extend our very best wishes, and hope they soon will visit the old school as prosperous doctors. Thus we close, looking forward to that time when we may turn this fraternity to other hands, and pass out of this grand old school, to be as successful as the men who have gone before us.

G. WARREN, '21.

FRATERNITY MEN IN THE FACULTY

John H. Perschong, D. D. S.

A. J. Rimmel, B. S., M. D.

E. C. Gill, Ph. G., M. D.

E. P. Genochio, Ph. G., B. S., M. D.

E. P. Nicolas, D. D. S.

E. R. Andrews, assistant chair of Bacteriology and Histology.

George Oulton, D. D. S.

M. J. Sullivan, D. D. S.

J. H. Flint, Ph. G.

H. C. Veach, M. D., D. D. S.

ASSISTANT OPERATIVE DEMONSTRATORS

H. J. Heitmann.

A. L. Carlson.

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Clement A. Shields	W. A. McCurry	V. Wassilko	J. P. Fogarty	John P. Ernest	W. E. Anderson
Gerard Dineen	John E. Gavin	C. S. Sydenstricker	Harry S. Wittkopp	Lloyd T. Commins	Patrick Kilkenny
Charles A. Ertola	R. S. Bassett	Fred T. Smith	William J. McDade	G. B. Falconer	William L. Bickel
Archie G. Neail	A. B. Carfagni	N. W. Mellars	D. J. Sullivan	J. J. Gallagher	Arthur Molinari
Vivian A. Prindle	Earl Wroten	R. J. Pashburg	M. L. Kleaver	Walter F. Byrne	Rider S. Manuel
H. F. Bernard	Lee F. Morton	H. W. Jameson	Edgar L. Smith	Frank H. Mecum	



Psi Omega Fraternity

The close of the present school year is near and the Psi Omega Fraternity is happy to say that it has been a most prosperous one.

We received, as usual, our quota of scholarly members of the Freshman class. These men have proved that they are real Psi Omegans, both in their studies and in student activities, and they will beyond a doubt become a credit to the college and to the dental profession.

Beta Sigma Chapter is now located at 55 Buena Vista Terrace and we extend a cordial invitation to all our brothers and friends to visit us.

There is always a time when pleasure and recreation holds sway, and quite often our home is the scene of an informal dance or a smoker. It is on such occasions as these that the friendship and brotherhood of Psi Omega makes itself known.

Early in the year we had the pleasure of receiving a visit from our supreme councillor, Dr. H. E. Frisell, who is dean of The College of Dentistry, University of Pittsburg.

Coming as a distinct shock to his many brothers and friends was the death of Brother Wilbur Purrington. Brother Purrington was an exceedingly popular student, as well as a good scholar, and his death is truly a great shock to us.

Beta Sigma Chapter is well represented on the faculty by men of high standing in the profession, and who are at all times ready to lend a helping hand to any student in trouble.

Fraters in the faculty:

Chas. Boxton, D. D. S.
C. O. Southard, M. D.
B. C. Kingsbury, D. D. S.
J. D. McAlpine, D. D. S.
J. H. Flint, Ph. G.
F. F. Knorp, M. D.
E. C. Gill, M. D., Ph. G.
S. B. Fontaine, D. D. S.
A. R. McDowell, D. D. S.
Martin Dewey, M. D., D. D. S.
Frederick West, D. D. S.
H. D'Arcy Powers, M. D.

WRITTEN, '22.



S. H. Schwartz
 W. Anslan
 J. Litchenstein
 M. Kline

Y. Weisman
 I. Charmak
 C. Sinai
 M. Wallin

W. W. Sinai

H. X. Smulson
 D. Shenson
 L. Rothenberg
 H. Jacobs



Alpha Omega Dental Fraternity

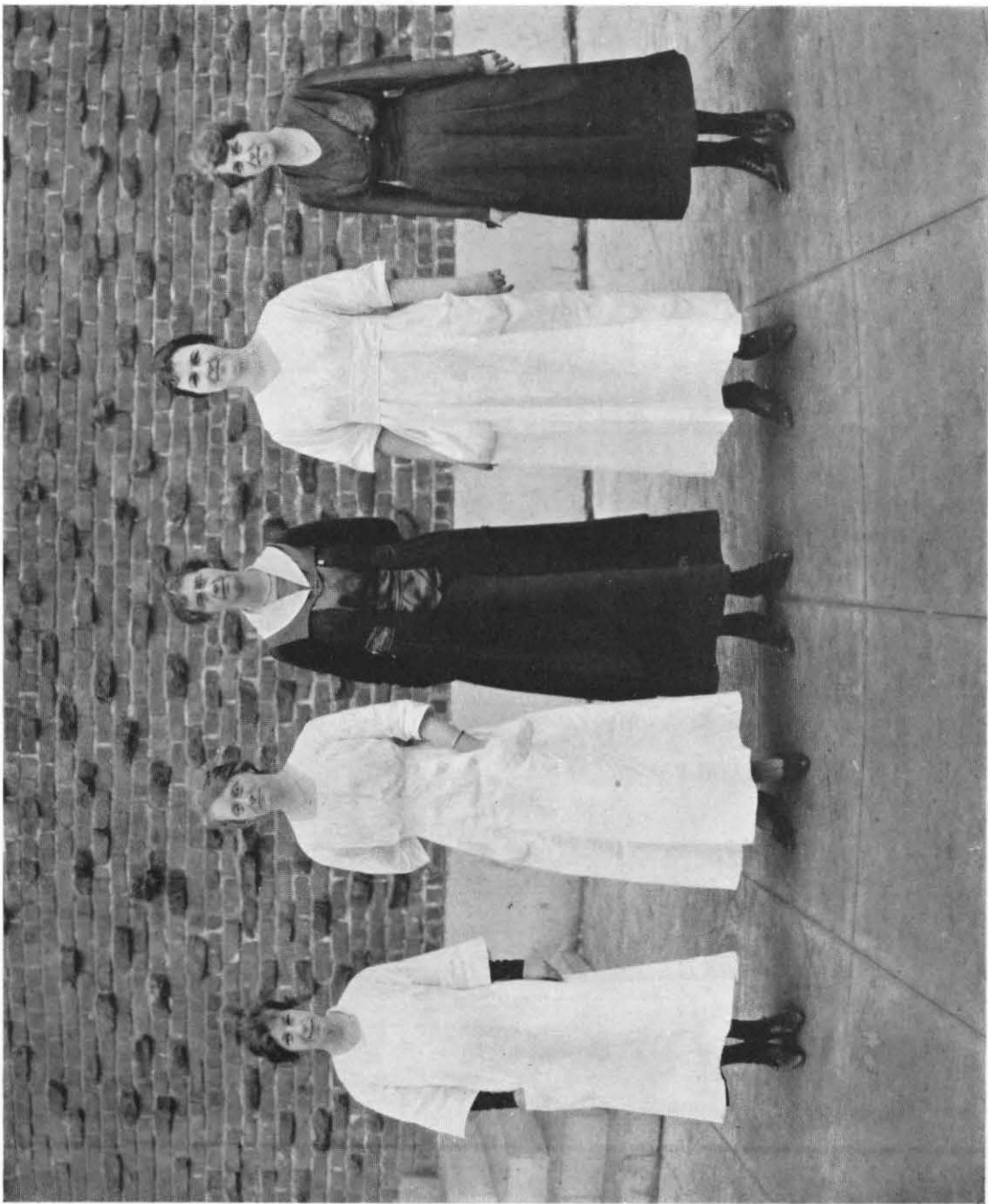
Kappa Chapter of the Alpha Omega Dental Fraternity has successfully closed her third year of activity at the College of Physicians and Surgeons. The end of this period finds her occupying one of the foremost positions in the college activities, scholarships and student life. The members of the fraternity are now comfortably lodged in their chapter home at 121 Haight Street.

Members of the chapter have enjoyed many humorous social activities during the year, which will be long remembered.

Kappa organized for the purpose of establishing everlasting friendships, superior scholarship, and for the united support of our college. This they feel has been accomplished.

Through CHIPS we extend sincere greetings to all our friends who are working for a similar cause.

WILL AUSLEN, Scribe.



The Girls

Of co-eds we are lacking, boys,
But we're proud of our five and two;
We'll shout for them with lots of noise,
Without them, what would we do?

The school hasn't a very large representation of the fair sex, and our picture was taken without two of them, but we can't overlook them, and they will be found on other pages.

Doris, the pride of the Juniors, doesn't need much said of her. We know her from the start; we know that she is true blue, and the Juniors wouldn't give her up for the world.

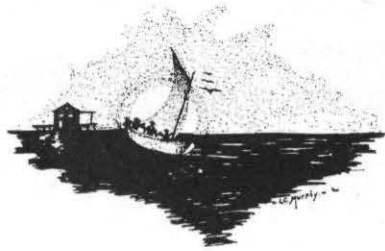
Norma holds her end with the Sophomores, and to show her metal stays right up at the top in all of the honor rolls. She deserves credit.

What would we do without Miss Inglas? How many little and big things has she done for us all when we needed her? She is deserving of her popularity, and we shall always keep her in our thoughts.

Miss Boxton has in the past been a regular fellow, and although sometimes strict, without fault. But wait till she enters the ranks as a Freshman!

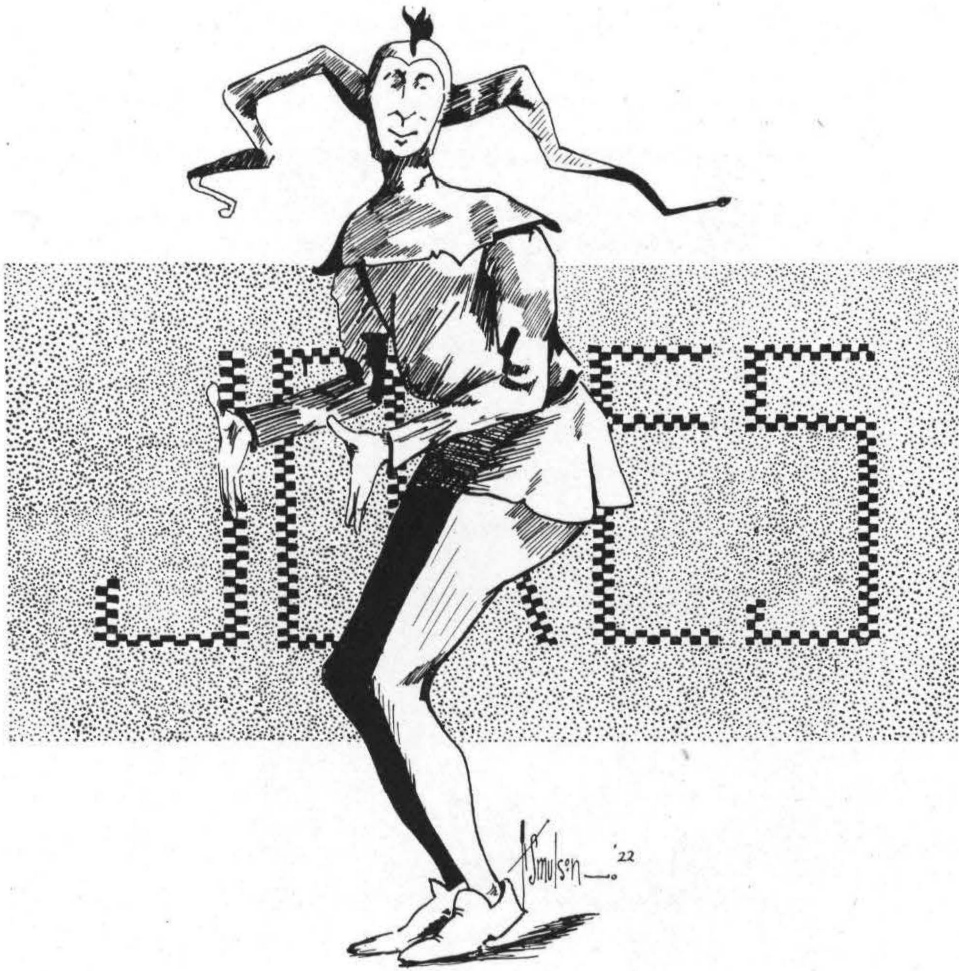
Imagine entering the front door without seeing Mrs. Thompson's smiling face. You wouldn't get the day started right.

Miss Kelley, how easily you can extract the molars with her in attendance. Mickey, well just think of that old song, "Mickey."





A PAIR OF STIFFS



“CHIPS”

[97]

Ain't it "H—ll"

When it's a rainy Monday afternoon and you're going to the Orpheum, and you've gotten your attendance and you're just going out of the door, and Dr. Boxton grabs you by the arm—ain't it "h—ll"?

When you're dancing with a little fairy queen and she takes an exact long step, and something breaks or rips or tears, and she dashes for the dressing room and leaves you out on the floor like a thorn among rose bushes—ain't it "h—ll"?

When you're studying anatomy on Thursday night and your girl rings up, and you talk for exactly four hours and sixteen minutes and it doesn't cost you a cent, and then go up to Dr. Gill on Friday and be told "to pass the bone, son"—ain't it "h—ll"?

When you've just returned from the dyeing and cleaning shop where you have left your best suit, and your pal rings up and says he is having a party to-night, and you have to think of a poor excuse—ain't it "h—ll"?

When you're out strolling 'neath the shady trees with a little country rosebud, and you pick out a nice shady spot to sit upon, and then it begins to rain like it rained when Noah made the Ark—ain't it "h—ll"?

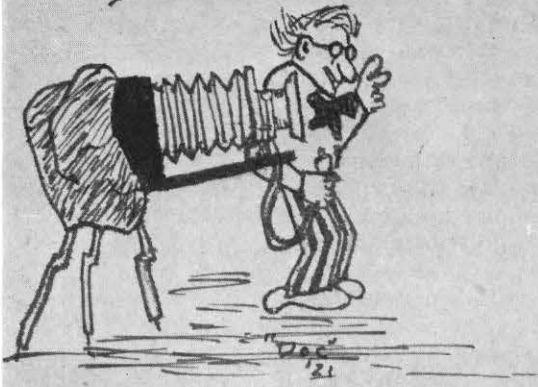
When you sit down at your desk and take up your pen to write, and write this sort of stuff, which only shows what a small amount of brains you have in stock—ain't it "h—ll"?

JOSEPH P. FOGARTY, '23.



How the tooth feels as the time approaches
for it to be pulled—

Photographs.



Spring —



Frost at the Beach.



Six of the Boys.



Our Four Co-Eds

The Reformer's Prayer

Oh, Devil, who reigns far below,
Are you not proud of me?
Look at the work I have done
To save humanity.

I gave the women a right to vote,
They prove my very best aid.
They help me drive out demon rum
And usher in lemonade.

They are now fighting on my side
With the Anti-Tobacco League,
To put the human chimneys out
And stop growth of the weed.

Dancing I will then go after,
Then smiling faces and joyous laughter;
Then my work will be complete
When people's chins drop to their feet.

O, Devil, answer me by dream,
Tell me that you think I'm right,
Say I have carried out the measure
By abolishing King Pleasure.

HIS DREAM

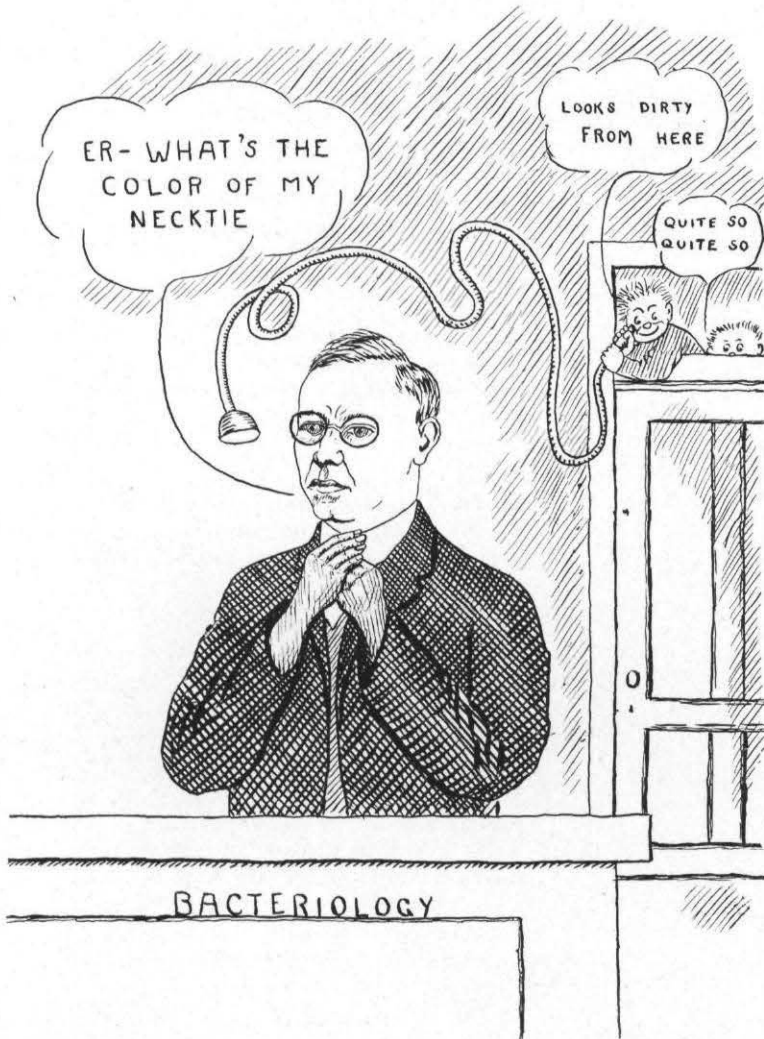
Reformer, I have heard your prayer,
And you shall have your wish.
Tonight you will dream your answer,
And your answer will be this:

When you pass from the world above
You will come down to me,
Because on earth you've done no good
As far as I can see.

You destroyed life's happy pleasures,
You gave amusement the taboo.
Oh! you'll repent those drastic measures
When I lay my hands on you.

That is all to you I'll say
As I now must be on my way
To tell pleasure what I will do
When I lay my hands on you.

ROBERT S. SAALFIELD, '21.



P. and S. is full of willing people: some willing to work, and the rest willing to let them.—Pucc.

F. Wilson—All great people are conceited.

Pucc.—Oh, I don't know; I'm not.

Listen, Wiseman, if you can't laugh at the jokes of the age, laugh at the age of the jokes.—Pucc.

“CHIPS”

[101]



Who is it?

Mr. Dyer's light



Hercules -



"1 1/2 Leave" -



Some Students.



Stoman Wielding & Wicked
- punch -

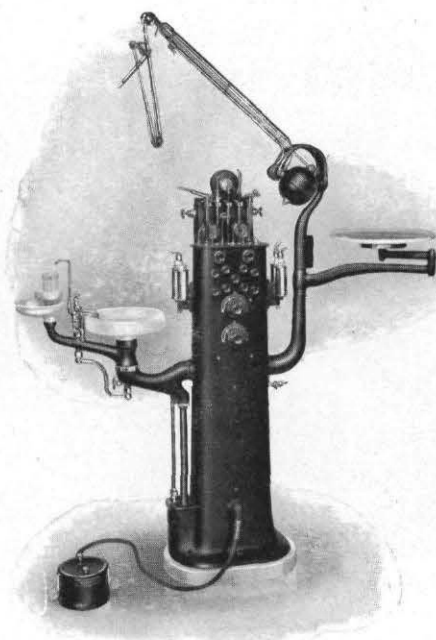


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Ritter Unit Equipment

The Chemical Analysis of a Man

By WARREN, '21

A man weighing 150 pounds, approximately, contains 3500 cubic feet of gas, oxygen, hydrogen, and nitrogen, which, if it were sold for illuminating purposes, at 80c per 1000 feet, would be worth \$2.80.

He also contains all of the necessary fats to make 15 pounds of candles, and with his 3500 feet of gas, possesses great illuminating possibilities.

His system likewise carries 22 pounds and 10 ounces of carbon, or enough to make 9300 lead pencils.

There are also 50 grams of iron in his blood, and other parts, which, if properly welded, would hold his weight if suspended.

A healthy man contains 54 ounces of phosphorus. This is enough with which to make 800,000 matches, or enough poison to kill 500 persons. This, with 20 pounds of lime, makes the bones stiff, and helps to make a good brain.

No matter how small a man may appear to be, he carries 60 lumps of sugar, of the ordinary dimensions, with him at all times. Enough salt may be found in his body to "put down" a good sized hog for the winter.

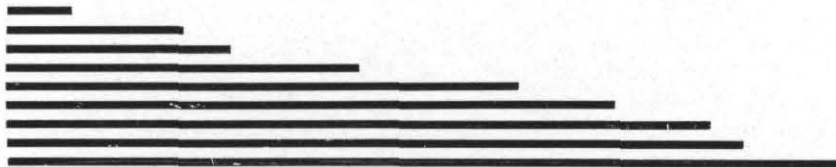
Time prevents a more complete analysis, and I can only mention the hair, which might be used for mattresses, and the ivory of the teeth for piano keys.



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"60" SALES GROW

for nine years—continuously



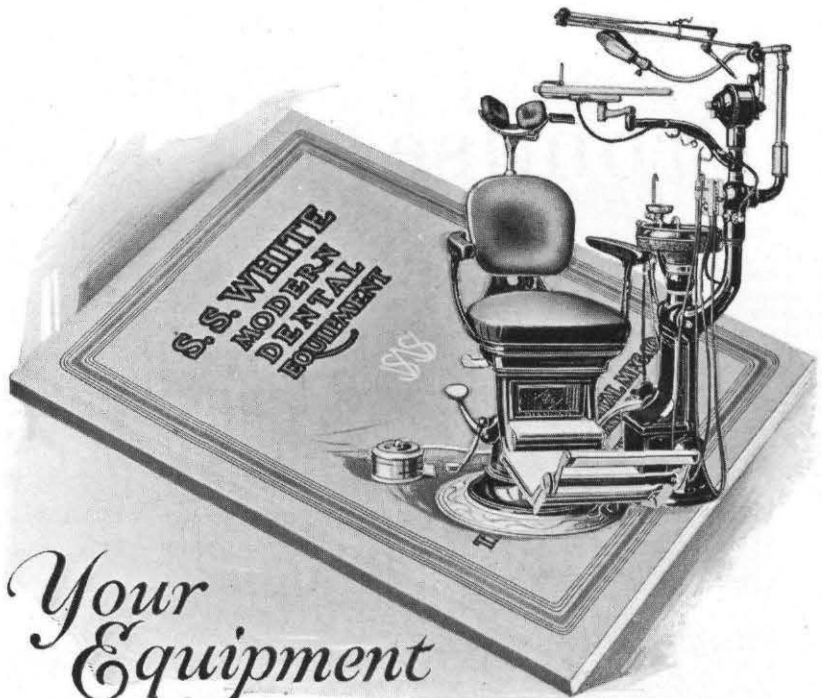
No. 60E, Open

For nine years sales have steadily increased on the "60" series of dental cabinets.

The cabinet illustrated is one of the best numbers in the "American" line—the addition of the "E" top with formaldehyde sterilizer multiplying its utility and beauty.

To thoroughly appreciate the service this cabinet will give—and it may prove exactly what your office requires—write for catalog and prices.

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THE S.S. WHITE DIAMOND CHAIR
AND No. 3 EQUIPMENT STAND

THE character of the service you render the public is reflected by your environment. Let your surroundings, your equipment, your facilities, be of the best. We can give you valuable help in designing your offices and in the selection of your equipment without the least obligation on your part.

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"Since 1844 the Standard"

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Promise Yourself—

That

When you come to buy Dental Equipment you will, before you buy it, investigate the merits of all those who have it for sale. Listen with an open mind— then close it in favor of him who most impresses you. This is all we ask.

THE EQUIPMENT
DEPARTMENT

T. A. STROBRIDGE

Dental Supplies

Hutch _____。



MEET ME FACE
TO FACE



Charmack—Say, Klein, what's the matter?

Klein—I just found out I have a cheap nose.

Charmack—What kind is that?

Klein—Two smells for *one cent*.

Andy—Adam and Eve were put out of the garden of Eden the other night.

Sullivan—Why?

Andy—For gambling. The Lord took their *Para-dise* away from them.

Owing to the H. C. L. you can't go to the store and get kerosene in a can now-a-days and get a potato on the spout.

EXTRA—*Atkinson ran over himself!*

How?

He wanted some cigarettes and asked Carlson to get them across the street at the store. Carlson refused; so Atkinson ran over himself.

Turn backward! Turn backward!

Oh, Time in thy flight!

And give me my liquor just for tonight.

Patient going upstairs to have a tooth extracted was heard to sing:

“The yanks are coming, the yanks are coming.”

*“Man’s Mind is Shown by
his Doublet.”* — Spanish Proverb

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Your classification of a dentist is influenced by the character of his office equipment and environment.

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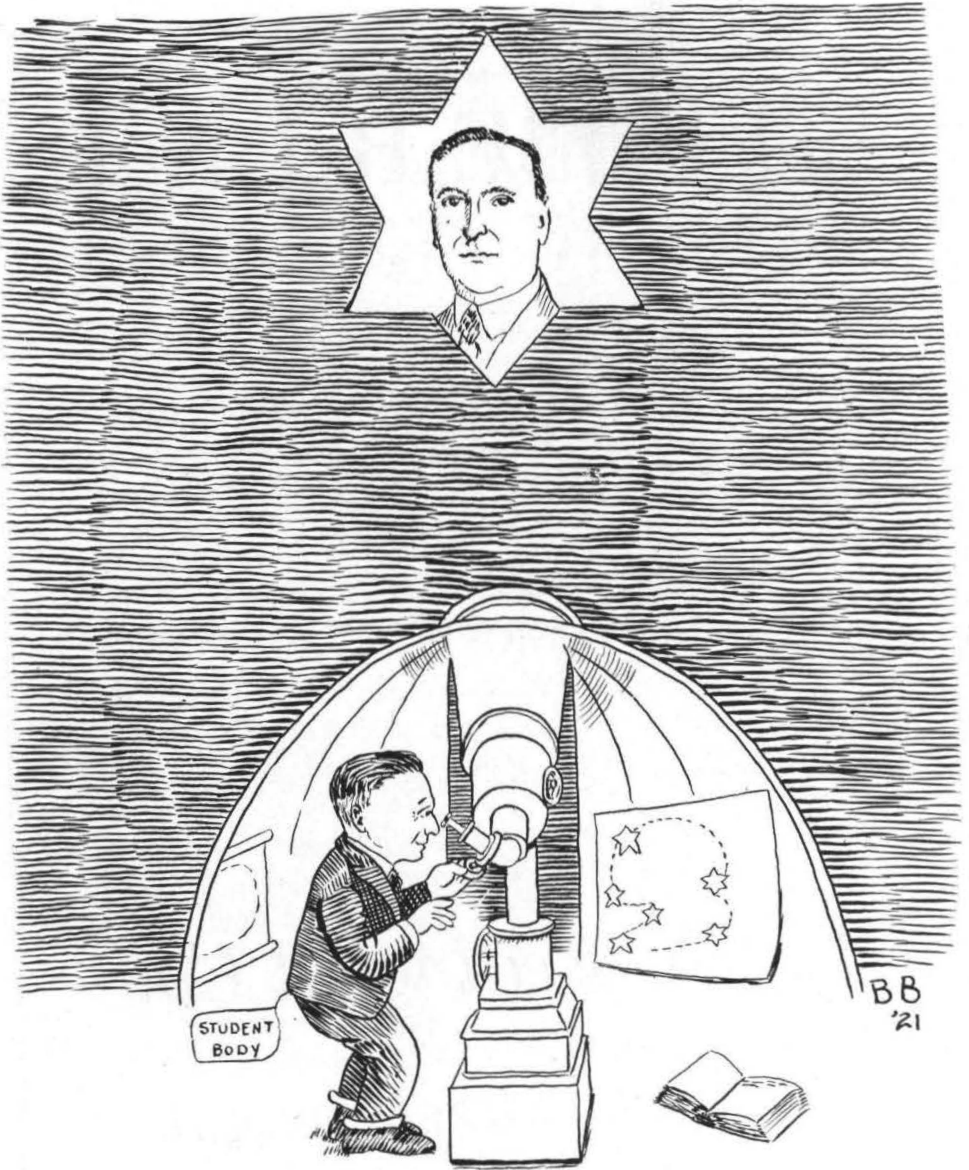
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"Mac" and his gang —



Who's the young fellow?



Smoulson & his first -
customer.



Guess who's is it —



To let 'em (has).



Harry X. Smulson - '22

Little Miss Blank has lost her teeth,
Let's hope that she will find them
For if her suitors learn they're false,
Her charms no more will bind them!

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"Hutch"—21



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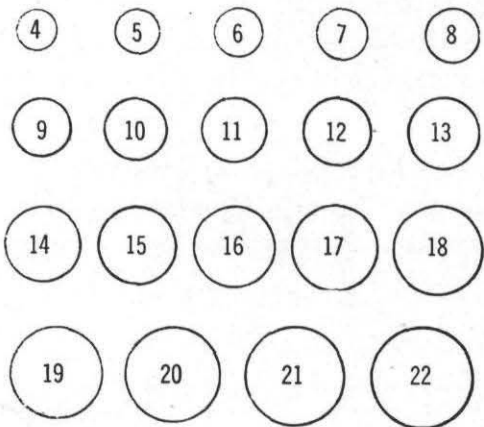
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18-Kt. plate	\$.90	\$18.00
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22-Kt. shells	1.07	21.40

For 14-Kt. plate 450 \$0.65 \$13.00
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 21 and 22-K discs, same price as plate.

We will pay you for your scrap gold:

	Dwt.	Oz.
22-K scrap gold	\$0.90	\$18.00
21-K scrap gold . . . . .	.85	17.00
20-K scrap gold . . . . .	.81¼	16.25
18-K scrap gold . . . . .	.73	14.60
Platinum scrap		

We will melt your fillings and sweeps and pay you assay value for same.
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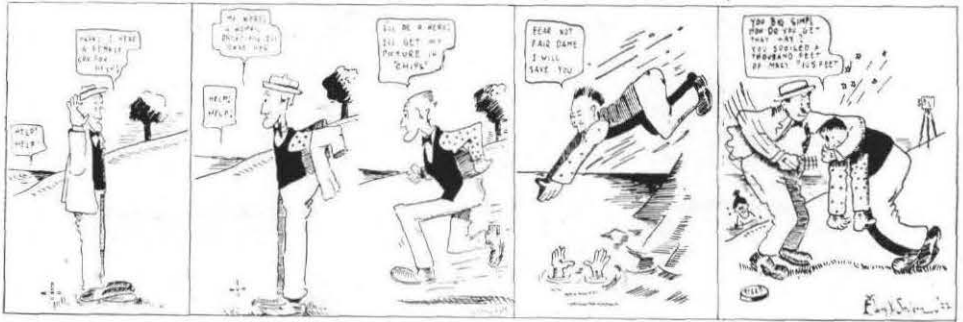
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*To all whom it may concern we
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STENSON PULLED A KEYSTONE ON THE OPERATOR



"A Dissertation on Doctors"

The name DOCTOR is derived from a Greek word meaning "WISE GUY."

The wisdom of the profession comes from the experience gathered in medical college fraternities during their early days, augmented by careful practice in double-entry bookkeeping.

Doctors should have at least one degree, but that does not seem to keep some of them from remaining at zero.

No doctor is successful without a practice, though in their case practice does not always make perfect.

The courses followed by doctors are: those of the allopath, the homeopath, the osteopath, and sometimes the straight and narrow path.

The custom of bleeding patients is still in vogue although its origin dates back many, many years.

Clever doctors, with the aid of the druggist who fills your prescription, are responsible for many checks in the curing of disease. Nowadays the shrewd citizen of the twentieth century learns early in life to read a gas meter and the doctor's prescription. This saves him from bankruptcy and maybe a premature death.

When the doctor tells you that you need a change and rest, provided he has a gilt-edged reputation, he usually lets you keep the change and he takes the rest.

And as you all know the doctor places a high value on his sleep. Call him up some night and he will not hesitate to bill you at a dollar a snore.

But after all we need the doctor.



*THE SUBSTANTIAL MAN INTERESTED
IN AN INTELLIGENT CLOTHING SER-
VICE AND STYLE OF UNQUESTIONABLE
CHARACTER, WILL BE GLAD TO LEARN
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No wonder I'm
Wise
I've got
FOUR
WISDOM
TEETH!



KING SVIOMON, the wisest man
THE STARRY dome beneath,
Acquired, when his reign began
A set of wisdom teeth.

Mickey—My, you have wonderful eyes.
Levy—Yes, I have school teachers' eyes.
Mickey—What are those?
Levy—Two pupils.

She—Do you know Bud Whitfield?
He—Yes, he sleeps next to me in Dr. Powers' lecture.

Trott—Did you notice that little brunette in the chorus, the second one from the right?
Whitfield—Was she a brunette?

McAdoo—Huckelberry Finn was some picture.
Bird—Yah! What a fine book it would make.

Manuel has been to so many dances lately that he is now confined to his home.
The Doctor says he is muscle-bound above the waist.

E. L. Smith walked into a phonograph shop to buy some records. A saleswoman came forward to wait on Smith. Smith asked for the latest song records. Her reply was this:
For 50c we can give you "Smiles."
For \$1.00 you can get "Kisses."
For \$1.50 "You'd be Surprised."

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NOTHING BUT THE TRUTH

Visitor (addressing a student in Descrip)—This certainly is a bird of a course.
Victim—Yes, I do feel sorta cuckoo.

Sullivan and Saalfield boarded a crowded street car and hung onto a strap in front of a mother and daughter. They whispered to each other. When the mother and daughter were ready to get off, the mother said: "Now, daughter, do as I do and back out of the car."

The daughter thought this strange, but after they alighted she asked: "Why did you have me get off backwards?"

"Why," said the mother, "I heard those two men say, 'when those ladies get off, we'll pinch their seats.'"

"Students short of money can draw on their pipes."

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Dr. T. started life as a —
Barefooted Boy.
Fresh-Well, I wasn't born
with my shots on.
Drawn by I.K.B.

Weisman studied Chemistry.
Weisman is no more,
For what Louis thought was H_2O
Was $H_2 SO_4$.

The Seniors wise saw something green,
They thought it the Freshman class;
But when they closer to it drew,
They found 'twas a looking glass.

STRANGE!

It really almost makes me smile,
So wonderful the treat,
To see an athlete run a mile,
And only move two feet.

Under the sun there's not a thing new,
This we all of us know to be true.
So if there's a joke here that you've heard before,
Read it again and laugh just once more.

Wrotten to McDade—What do you say to a piece of cheese?
McDade to Wrotten—I'm afraid to say anything for fear it will talk back.

Michaud—I'm sorry, but I'll have to extract that tooth.
Patient—I don't like to lose it, unless you can fit me with a substi-tooth.

Doris—Cuticura soap will never be popular with the girls.
Norma—Why?
Doris—Because it guarantees to remove chaps from the lips!

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E. L. Smith—Hey, have you got a lease on that phone?
W. E. Anderson—Oh no, not Alyse; Loretta.

Sullivan—What's this "trough of the sea"—we read about?
Falconer—I guess that is what the ocean greyhounds drink out of.

Red McCurry to Kleaver—Did you ever feel that you needed exercise and go to a *Mutes* dance and swing *Dumb Bells* around all evening?

A professor from old Herculanium,
Had quite a fertile cranium.
He watered his head
On retiring to bed,
And sprouted a lusty geranium.

A super-chem shark has discovered that aluminum plus hydrochloric acid plus oxygen yields somewhat of a kick, according to the equation:
 Al_1 plus HCl_1 plus O_2 yield Alcohol—ay,

The astronomy class gazed long and longingly at the heavens, the prof discoursing brilliantly the while. Pausing for a moment, he enquired:
"Any questions?"
And got this dizzy comeback:
"What's good for a stiff neck?"

Bob—Am I a little pale?
Pucc.—No, you're a big tub.

Student—P. and S. is a human factory now.
Prof.—How's that?
Student—Oh, they can pupils there.

Student—I saw a woman hung yesterday.
Prof.—Where?
Student—Around her lover's neck.

He—Do you believe in preparedness?
She—Well, I wouldn't mind being in arms.

Prof.—What is a dimetic?
Student—A dimetic is an agent which will increase flow of sweat.

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FOR SALE—Automobile by lady with selfstarter, electric shift, muffler and tin horn.

FOR SALE—Bicycle by lady in Oakland with leather seat.

FOR RENT—Nicely furnished front room—bath—one block from car.

WANTED—By newly married couple, nicely furnished front room—no children until October.

FOR SALE—Twin beds, one almost new.

WANTED—Girls to sew buttons on the 3d floor.

FOR SALE—Two used automobile tires—by man slightly punctured.

Adam—Want to go to the movies, Eve?

Eve—I don't care A—dam.

Pop Flint (in restaurant)—My cocoa is cold.

Burke—Put on your hat.

Leone—I got a zero today.

Weisman—That's nothing.

Sloman—Why is it that everybody says I have the big head?

J. Ernest—Never mind, there's nothing in it.

THE FLIGHT OF TIME

“Tempus fugit,” said the Romans:

Yes, alas, 'tis fleeing on;

Ever coming,

Ever going,

Life is short, and soon 'tis gone.

But as I think of next vacation,

Poring o'er these lessons huge,

Ever harder,

Ever longer,

All I say is, “Let her fuge!”

Trott—How long can a fellow live without brains?

Michaud—I don't know. How old are you?

Gill (giving exam.)—Does any question embarrass you?

Freshman—Not at all, sir, not all. The questions are quite clear. It is the answers that bother me.

Girl next door—I don't believe in long engagements, do you?

Nickerson—Sure. Why shouldn't a young couple be happy as long as they can?

Prof.—What are succadenous teeth?

Kogea!—Teeth a baby sucks with.

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I knew a young lady from Michigan,
To meet her I never would wichigan.
 She would eat of ice cream
 Till with pain she would scream,
Then she would order another big dichigan.

Fresh Soph—Can February March?

Freshman—No, but April May.

Soph (with a sickly grin)—That's all I wanted to know.

Sloman—I thought you took Anatomy last year.

Olemutz—I did, but the faculty encored me.

The jokes are old,
We will admit;
But did you do
Your "little" bit?

Lives of great men all remind us
We should strive to do our best,
And, departing, leave behind us
Notebooks that will help the rest.

Wroten (in restaurant)—How did you find the meat?

Dr. Boxtton—Why, I happened to move a potato, and there it was.

Levy—How much chloroform will it take to kill a puppy?

Dr. Bothe—Tut, tut! Stop smoking cigarettes and you'll think better of it.

Here's hoping the editor lives to be as old as his jokes.

Mary had a little curl,
That hung beside her ear,
But when she went to bed
It hung upon the chiffonier.

Young men who sit up late with a daughter rarely rise with the sun.

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FAVORITE ANSWERS OF STUDENTS

"I don't understand, what do you mean?"
"I didn't get that far."
"I studied the next chapter."
"Somebody stole my book."
"Were you speaking to me?"
"I didn't hear the question."
"I can't see the board from here."
"Why (in injured tone) we didn't have that today."
"I was absent last time."
"I know it but I can't express it in words."
"Beg pardon, where's the place?"
"Why (also in injured tone) I studied the next chapter."
"Well, it depends."
"It varies."
"Why—um—er—ah!"
"Well—ah."
"You mean a——."
"Oh, yes, —er— why——."
"Not prepared."

SILENCE!

If all these jokes
You've often heard,
Just be a sport—
Don't say a word.

COLLEGE DAYS

Though college days
Have their delights,
They can't compare
With college nights.

Salesman—Stockings? Yes, sir. What number do you wear?
Fitzsimmons—Two, of course. I'm no centipede.

"That was a rash act of big Wilson's."
"What did he do?"
"Went and caught the measles."

Grimswood—Say, Bly, what is a kiss?
Bly—A kiss is an anatomical relation of the two orbicularis oris muscles in a state of contraction.

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Honor's Crown of Simplicity—Miss Chew, her sister, was maid of honor and WAS GOWNED in a BEAUTIFUL HAT.—Princeton (Ill.) *Republican*.

FRESH THING!

"Are you familiar with girls?"

"I tried to be once with one, but she slapped my face!"

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Every Night This Week

"Mother, I Need You"
for Three Days,

Beginning February 15.
Geraldine Farrar, Supported for the
First Time by Her Husband

"Her Wedding Night"
Every Afternoon This Week

That reminds us of the old one:
See Mary Pickford
In Five Parts

"Fare thee well! and, if forever,
Large intestine, fare thee well!
A physician says that I can
Do without thee just as well.
Furthermore, he says, without thee
I shall live a longer life.
Hurry with the anesthetic!
Hasten with the carving knife!"

There are meters of accent
And meters of tone,
But the best of all meters
Is to meet her alone.

There are letters of accent
And letters of tone,
But the best of all letters
Is to let her alone.

When In-the-Mission

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Dr. Powers—What is density?

Chas. De Rose—I don't know, Doctor, but I can illustrate it.

Dr. Powers—The illustration is very good.

A wood pecker lit on a Junior's head
And settled down to drill.
He bored away for half a day
And finally broke his bill.

If a body see a body
Thinking in a quiz;
If a body help a body,
Is it anybody's biz?

END OF A SHORT STORY

"There was a blow. Somebody fell. I got up. Turning upon my antagonist, I succeeded in winding his arms about my waist, and by a quick maneuver threw him on top of me, bringing my back, at the same time, in contact with the floor. Then, inserting my nose between his teeth and cleverly entangling his hands in my hair, I had him!"

FINIS

Dr. Sullivan to De Rose, amusing his neighbors by wiggling his ears:-
"Young man, you are betraying your ancestry."

Ertola—Won't you have a little shrimp?
She—Oh, Charlie, this is so sudden.

EDUCATION

Freshie—I beg your pardon, sir, what was the question?

Soph—What's the question?

Junior—What?

Senior—Huh?

Colored Janitor—Doctor, what's dat yo' all got in dat er bottle?

Doctor—That's Dobell's Solution, Charley.

Colored Janitor—What's the mattah with you' all's do' bell—am the batteries weak?—B. A. H., Wheeling, W. Va.

Andrews—What do you think is the best way to stop cheating in examinations?
Ayes—Stop the exes.

Ashes to ashes,
Dust to dust.
If anatomy don't kill you,
Pathology must.

Dr. Boxton to Dr. Werner—How is it that I find you kissing Mickey? Answer me, how is it?

Dr. Werner—Fine, sir, fine!

Nickerson to Patient (noticing peculiar aroma of the oral cavity)—Did you sleep with the chickens last night?

Patient—No, why?

Nickerson—I see you have a fowl breath.

Dr. Richardson—Jameson, did I call on you yet?

Jameson—Yes.

Dr. Richardson—What did you answer?

Jameson—Here.

PROCRASTINATION

My friend, have you heard of the town of Yawn,
On the banks of the River Slow,
Where blooms the Waitawhile flower fair,
And the Some-time-or-other scents the air,
And the soft Go-easys grow?

It lies in the Valley of What's-the-use,
In the province of Let-her-slide;
That old "tired feeling" is native there,
It's the home of the listless I-don't-care,
Where the Put-it-offs abide.

Mickey is well liked by all the boys because she makes a good *impression*.

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To The Graduates

When first you went forth to school,
To be taught the golden rule,
You saved good marks to make a jewel,
For your graduation day.

Now your graduation days are o'er,
And your books you'll use no more,
For to you is opened life's great door,
On your graduation day.

When the sands of the years run out,
And you're all gathered from 'round about,
Of your Alma Mater you'll sing, no doubt,
And your graduation day.

JOSEPH P. FOGARTY, '23.

A Toast

Here's to the sweet girl whom I love,
Here's to her soul of purest white,
Here's to her dear heart from above,
Here's to her sense of wrong and right.

Here's to my sweet and pretty girl,
And her eyes full of heavenly bliss,
Here's again to my rare little pearl,
And to her lips that I love to kiss.

Here's to my little rose so red,
So red that only love she carries.
Now all but her sweet name is said,
And I'll tell that if you but tarry.

Here's to her sweet and holy name,
Which seems to me divine,
From her into this world I came,
For this girl is mother, of mine.

FOGARTY, '23.

The San Francisco Savings and Loan Society

(THE SAN FRANCISCO BANK)

SAVINGS COMMERCIAL

526 California Street, San Francisco, Cal.

MEMBER OF THE FEDERAL RESERVE BANK
MEMBER OF THE ASSOCIATED SAVINGS BANKS OF SAN FRANCISCO

MISSION BRANCH, Mission and 21st Streets.
PARK-PRESIDIO DISTRICT BRANCH, Clement and 7th Ave.
HAIGHT STREET BRANCH, Haight and Belvedere Streets.

December 31st, 1919

ASSETS - - - - -	\$64,107,311.15
DEPOSITS - - - - -	60,669,724.15
CAPITAL ACTUALLY PAID UP - - - - -	1,000,000.00
RESERVE AND CONTINGENT FUNDS - - - - -	2,437,587.00
EMPLOYEES' PENSION FUND - - - - -	318,780.48

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THIS BOOK
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SAN FRANCISCO
CALIFORNIA
U·S·A



APPRECIATION

The editor takes this opportunity to thank his associates and assistants for their untiring efforts in the producing of this book for the year 1920.

The contents show that much time has been spent, and much thought given to the work.

As we look at the preceding pages we feel that, although some parts might be better, as a whole we can feel satisfied that it is good.

Anyone who has done anything at all to help in the production of this book is to be thanked, and it is hoped that next year you will all turn in and help in putting out an even better publication.

THE EDITOR.



Here ends the 1920 CHIPS, being the
year book of the Student Body of the
College of Physicians and Surgeons.

The typesetting and printing from the
press of the H. S. Crocker Co., Inc.

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Issued from the press in May, Anno
Domini Nineteen Hundred and Twenty.





“CHIPS”

FINIS

