



08 Mar 1963

The Missouri Miner, March 08, 1963

Follow this and additional works at: https://scholarsmine.mst.edu/missouri_miner

These newspapers reflect the attitudes, perspectives, and beliefs of different times. Neither the library nor the university endorses the views expressed in these collections, some of which contain images and language which may be offensive to some readers.

Recommended Citation

"The Missouri Miner, March 08, 1963" (1963). *The Missouri Miner Newspaper*. 1706.
https://scholarsmine.mst.edu/missouri_miner/1706

This Newspaper is brought to you for free and open access by Scholars' Mine. It has been accepted for inclusion in The Missouri Miner Newspaper by an authorized administrator of Scholars' Mine. This work is protected by U. S. Copyright Law. Unauthorized use including reproduction for redistribution requires the permission of the copyright holder. For more information, please contact scholarsmine@mst.edu.

All Freshmen to Carry Shillelaghs for St. Pat

SUBJECT: The carry of SHILLELAGHS by ALL FRESHMEN of the Missouri School of Mines and Metallurgy who have not had the honor of serving Saint Patrick.

SPECIFICATIONS: Saint Patrick has specified that all SHILLELAGHS be of sufficient size and properly decorated to keep away the evil spirits that may cast their spell on the celebration in honor of our dear Saint Patrick. It is advised that these most important weapons be kept to a small size in order that the evil spirits may not see them until being attacked and driven away.

WHEN: The above mentioned citizens will have the specified SHILLELAGH in their possession at all times between March 10 and March 15 when venturing on the sacred campus of the Missouri School of Mines.

WHY: 1. Once again our Patron Saint has gotten us two days off, to enjoy the finer things of life.

2. To protect us unfortunate souls who aren't allowed to carry SHILLELAGHS from all that Saint Patrick holds unholy and to rid our campus of all evil spirits before the arrival of Saint Patrick.

3. Saint Patrick, through one of his very loyal campus organizations, shall bestow three awards to

the freshman (or other faithful servant) who most faithfully and diligently observes this time honored tradition by making and carrying an authentic replica of a properly decorated Irish Shillelagh.

May the Curse of Killarney be upon all usurpers.

Alumni Named Works Manager At Gypsum Plant

Robert P. Connett, Plasterco, Virginia, has been named works manager of United States Gypsum Company's Plasterco plant. Connett joined the Chicago building materials manufacturer in 1944 as a quarry engineer at the Alabaster, Michigan plant.

Subsequently, he was promoted to quarry superintendent, plant engineer superintendent at Alabaster; assistant works manager at the Windsor, Nova Scotia plant; manager at the Jamaica Gypsum plant; and assistant works manager at Plasterco.

A native of Wymore, Nebraska, Connett graduated from the Missouri School of Mines and Metallurgy. He served in the U. S. Army during World War II.

MSM Students to Hear Professor Max Dresden

Professor Max Dresden, of the State University of Iowa Department of Physics and Astronomy at Iowa City, Iowa will serve as a visiting lecturer at the Missouri School of Mines and Metallurgy at Rolla, Missouri, Thursday and Friday, February 28 and March 1.

He will visit under the auspices of the American Association of Physics Teachers and the American Institute of Physics as part of a broad, nationwide program to stimulate interest in physics. The program is now in its sixth year and is supported by the National Science Foundation.

The American Association of Physics Teachers is one of the five member societies of the American Institute of Physics. Other member societies are: The American Physical Society, Optical Society of America, and the Society of Rheology.

Professor Dresden will give lectures, hold informal meetings with students and assist faculty members with curriculum and research problems. Professor Harold Q. Fuller, chairman of the Missouri School of Mines and Metallurgy, will be present.

lurgy Physics Department, is in charge of arrangements for Professor Dresden's visit. On Thursday evening, February 27, preceding his official visit, Dr. Dresden will hold a lecture and seminar for Sigma Xi, the honorary physics society.

Born in Amsterdam, The Netherlands, Dr. Dresden attended both the University of Amsterdam and the University of Leyden and received the Ph. D. in

(Continued on Page 10)

MSPE to Give Scholarships to High School Grads

Scholarship awards amounting to \$800 have been made available in 1963 to deserving high school students who intend to study engineering in one of the four ECPD-accredited engineering schools in the State of Missouri, by the Missouri Society of Professional Engineers. An announcement of the new scholarship awards was made by President Marshall Bliss, P. E., Kansas City, following approval of the scholarship program by the Society's board of directors.

Melford Monsees, P. E., Kansas City, chairman, MSPE Education Committee, said the Society will continue the Joe B. Butler Memorial Awards to four outstanding engineering students in their junior year at each of the four Missouri ECPD-accredited engineering schools, Saint Louis University, University of Missouri, Washington University and

(Continued on Page 4)

M INER

The Missouri

MISSOURI SCHOOL OF MINES AND METALLURGY

VOLUME 49

FRIDAY, MARCH 8, 1963

NUMBER 21

Student Union To Feature Smothers Brothers In Concert

The Smothers Brothers will appear in a general lecture at the Student Union, next Monday, March 11, at 7 and 9 p.m.

Brothers have shown every sign of becoming a national institution. Tom and Dick Smothers (that's their real name — and they are

in demand for appearances on television, in concerts and at the nation's leading night spots.

Alternately singled out as brilliant satirists and equally brilliant musical performers, the Smothers Brothers have displayed both sides of their artistic ability on such highly rated television programs as the Danny Thomas Show, the new Jack Paar Show, the Merv Griffin Show and Bing Crosby's specials. They also have earned the attention and applause of patrons at such notable niteries as the Blue Angel, in New York; the Casino Royal, in Washington; Freddie's, in Minneapolis; the Crystal Palace, St. Louis; San Francisco's Purple Onion and the Exodus, in Denver.

They launched a cross-country tour of the nation's college campuses in 1962 and proved to be one of the most popular and successful offerings in the college concert field, drawing large and appreciative audiences from New York to Los Angeles, with stops at major schools in between.



Ever since their introduction to the American public-at-large via an appearance on the Jack Paar Show in 1961, the Smothers

brothers) have emerged in very little time as one of the outstanding young comedy attractions on the current scene, becoming much

SCHEDULE OF ST. PATS EVENTS

Friday	
9:00 a. m.	Queen Candidates Interview
10:00 a. m.	Coronation Practice
11:00 a. m.	Balloting for Queen of Love and Beauty
12:00 Noon	Queen Candidates Luncheon
2:00 p. m.	Procession to Lion's Park
	Shillelagh Contest, Beard Contest, etc.
9:00 p. m.	Dance at Student Union
	(The Deacon and the Preachers)
Saturday	
10:00 a. m.	Parade
1:00 p. m.	Knighting Ceremony on Football Field
9:00 p. m.	Coronation Dance at Student Union
	(Les Elgart)
10:00 p. m.	Coronation of Queen of Love and Beauty

"Dean Wilson Has Proven Himself Man for the Job"

From the very beginning, Dean Wilson's tenure of service to the Missouri School of Mines and Metallurgy has been one of efficiency and purpose. In the 1942 Rollamo an appropriate tribute to his ability was stated:

"Dean Wilson has ably proven himself as being the 'man for the job' during his first year in office . . . With

such an excellently qualified man as our Dean we may be rest assured that MSM will keep on the road to progress in engineering education."

Along with Dean Wilson's arrival at MSM came a vibrant spirit of cooperation and friendliness. He gave an early insight into the educational beliefs that have characterized his administration ever since. In his first address to the student body in 1941, Dean Wilson emphasized his philosophy that primarily the educational institution exists for the students. His policies have always been formulated for the greater interest of all students. Dr. Wilson has valued the following traits in the successful student: honesty, loyalty, ability to get along with others, avoidance of mediocrity, and spiritual, social, and physical development.

When the disastrous attack was

(Continued on Page 10)

Outstanding IEEE Members Given Awards

Awards for outstanding student branch members of the Institute of Electrical and Electronics Engineers were announced recently. This recognition of service and scholarship to the Missouri School of Mines and Metallurgy Branch was conferred on James J. Baremore and Kent Swearingen as outstanding seniors and Robert J. Vogelphol as the outstanding junior.

The awards were presented by Donald S. Czekanski, representing the St. Louis section of I.E.E.E., at a joint meeting on the M. U. campus of M.S.M., St. Louis University, Washington University, and Missouri University Branches of I.E.E.E. Similar awards were presented to outstanding members of the three other schools.

Baremore, of Webster Groves, Missouri, is Chairman of the Student Branch of I.E.E.E. He also won the Outstanding Junior Award of the I. E.E.E. last year. He is a member of the Radio Club, of which he has been Treasurer and

(Continued on Page 12)

NOTICE

The Traffic Safety Committee wishes to announce that the section of the Traffic Regulations regarding possession of, and registration of motor vehicles will be suspended for the St. Pat's holidays, commencing at 7:30 a. m., March 14, 1963 through 7:30 a. m., March 18, 1963.

Campus parking regulations will remain in force.

INDEX

Letters to Editor	2
Fraternity Mascots	6
Sir Issac Newton	7
What You Should Know	
About the National Budget	9
Sports	14

Only
10 More
Days Till
St. Pat's

Miner Editorials

What Can You Do to Help?

"Where are you going?" may sound impertinent and trite, but an answer to that question may well determine your success or failure in the engineering or scientific field. Your work at MSM can spell a fruitful future, as it has for many in the past.

But you will probably retort, "What more can I do than study and make effective use of the existing facilities?" The answer to this question relates directly to the completeness of the facilities and staff personnel.

The value of your degree, regardless of which level, depends upon the adequacy of the facilities, the quality of staff, and the general reputation of the school from which you graduate. Thus, any steps taken by the student to assist in the expansion of his school or to enhance its educational quality will reap benefits for the student.

What can a student at MSM do?

Since the School of Mines is a division of the State University, it receives the bulk of its support from the state legislature. Obviously, the public's support, inspired by a clear presentation of fundamental problems and needs, would help the Legislature realize the need for MSM to receive its required share of appropriations for operational expenses and capital improvements.

MSM is ranked as one of the nation's top ten engineering schools; its prominence has become known internationally. But this rank could deteriorate without proper and critically needed expansion of present facilities, new buildings, and additional equipment. But why explain all this to you, the student? You know better than anyone what problems and needs are pressing MSM. Explain them to the Missouri Legislature, making use of the facts provided in the Student Council-Miner Supplement published two weeks ago.

The Student Council strongly urges you to consider your own interests along with those of MSM and contact parents, friends, and relatives, asking them to write their legislator. Even if you do not live in Missouri, a letter from you and your parents would introduce another factor into the picture — opinion and sentiment outside the state of Missouri. Help MSM, help those to follow you, help yourself.

Support Your St. Pat's Board

St. Pats is probably the biggest occasion of the year for Miners. It is a time when school is called off and everyone forgets the books for a while. It is, to members of the St. Pats Board, a climax to a year of work, for the St. Pats Board is the sponsor of a large part of the celebration, including the float contest and the dances at school.

It is unbelievable the amount of work and effort the St. Pat's Board puts into the planning of this celebration. Many ways of rounding up the money needed to sponsor this event are employed, from the running of benefit movies to the selling of St. Pats souvenirs.

All Miners should, if possible, support the St. Pats Board, by attending the dances sponsored by the Board and by purchasing the hats and buttons offered as souvenirs.

Letters to the Editor

Dear Sir:

It is a common attitude among the citizens of Rolla that the Missouri School of Mines students, most of whom spend four to five years in this town, have an almost hostile attitude toward Rolla and its people. Also, I have heard many Miners state in very emphatic and colorful language, that once having graduated from MSM, they would never return to Rolla. Why would a student be so bitter toward his alma mater? School, with all its hard work, builds lasting ties of pride and friendship with its students. There must, then, be some powerful force which alienates the students. One does not have to look too far to find it.

Rolla has chosen to exploit the students, and other unfortunates, who find themselves strangers in the area. Perhaps many Rolla residents do not realize how acute this situation is — they have not seen the barely disguised attics, basements, and garages that are rented to students from prices ranging anywhere from \$20 to \$75 a month plus utilities, depending upon the number of students crowded in. Even some of the better apartments have inadequate heating, toilet facilities, and storage space, as well as suspicious and unfriendly landlords. Some foreign students, having dark or yellow skin, fare especially poor in this town where racial prejudice is denied, but flourishes openly. People in this area are more unfriendly, or perhaps indifferent, to students than anywhere I have ever been.

The Miner can easily sense this hostility, or perhaps jealousy, borne him by the townspeople. At least one local drug store will not cash students checks, even if they are drawn on a Rolla bank! This stems not so much from the fact that they have received an undue number of bad checks from students, as from their unwillingness to accept the student as anything but a transient, someone not to be trusted. About the only local businesses that will unquestioningly cash a student's check are the taverns, and not all of these. To this unfortunate situation is added the fact that many Rolla merchants, especially those that deal most frequently with the students, use the increased demand for their merchandise (created by the students) as an excuse to charge maximum prices. I have personally been charged \$9 an hour for labor on my automobile, as well as many other outrageous, even ridiculous prices on items too specific to mention.

The town also uses the over supply of labor created by student wives as an excuse to hire desperate wives at wages ranging from 75c an hour upward to about \$1.50 for those with special skills. The school, evidently in sympathy with the town, pays similar wages (on the low side of the range). Student wives are, of necessity, glad to get a job at any wage, but this does not excuse the merchant from this "double exploitation," charging very high prices on one hand and paying very low wages on the other.

Students, on the other hand, have done more than their share to

be fair to the town. In the first place, and to put it into locally understood terminology, students spend at a bare minimum, \$60 a month, apiece, in Rolla for food, lodging and accessories. For 3000 students, this amounts to \$1,620,000 for nine months, and this is a minimum figure; The average student spends closed to \$80.00 a month in and around Rolla. Second, students, especially fraternities, have shown a great deal of civic spirit. To cite a few examples, fraternities hold annual Christmas parties for the town's underprivileged children. Student groups help canvas for, and donate to local fund raising campaigns, usually increasing the area total by a substantial percentage. Over 65% of the money raised for the 1962 March of Dimes in Phelps county was raised by the students of MSM. Students have curbed their objectionable St. Pat's activities, although admittedly under some stress from local pressure groups. Even the one breach of peace caused by the students, the "riot" of 1959, was an admirable demonstration of restraint on the part of MSM students. Very little property was destroyed, in spite of help and encouragement from local elements.

The picture is not entirely one-sided. There are many fine people in Rolla, who donate their time and money to various student activities. Many local merchants serve on advisory boards to fraternities and social groups. Local families invite foreign students to their home, doing their part for international relations. This letter is not aimed at these people, who realize and respect the student's position, but rather at the many who see the student as an unwanted intruder, including some who don't appreciate the effect he has upon the local economy. The present "Miner" attitude is a result of disgust with the exploitation and suspicion to which he is subjected. Perhaps this attitude is best summed up by the fact that one of the most insulting remarks that can be made about our school is to call it "Rolla School of Mines."

Fred B. Brost

Dear Sir:

A brief reply to Mr. Mastin's March 1 column. By way of clarification, he states that his concept of disarmament is a situation wherein no one openly displays weapons. Would he expect a nation cheating on a disarmament agreement to openly display its contraband weapons? Would he then say that if no weapons are visible, we have an effective disarmament? If so, why bother to inspect. I agree without reservation that citizens have the right to keep and bear arms. By way of extension, might not this same principle be applied on an international scope. If not, why not; and, if so, why clamor about disarming?

He mentions the difficulty of concealing ICBM's. What about nuclear bombs? Would he plan to do away with airplanes and orbiting satellites?

I will agree that the communists might well be willing to accept an agreement giving them the same relative power position they now hold. But, Mr. Mastin overlooks the simple fact that their greatest advantage is secrecy, a closed society. Would not an effective disarmament require that this shrouding be torn away?

The thought the Russia might be genuinely in favor of disarmament is proffered. In answer, I stand on my original ground, and call our attention to the fact that the Soviets continually reject U. S. compromise proposals while giving no ground themselves.

Mr. Mastin says he isn't sure relinquishing our sovereignty would be inherent in disarmament. In his previous column we find the statement that "Even if the UN becomes only a peace administering body it will wield a tremendous influence on the rest of the world in policy making and attitudes. Whether or not the UN will grow into a world government remains to be seen. Even if the UN doesn't grow into a world government the U. S. may have to surrender 'some' of its rights to see an effective peace achieved." I would direct Mr. Mastin to the philosophy of Fabian Socialism for an explanation of the bit-by-bit salami slicing technique.

Mr. Mastin leaves many issues to conjecture: What about a system of law to guide disarmament? What about a force large enough to enforce disarmament — would nations fear it, and if not, would it be effective? How do we reconcile freedom and totalitarianism?

History demonstrates that the Russians never act except in such a direction as to further their goal of world domination. If the U.S. is to remain free and strong, if we are to remain the greatest nation on earth, we must not relinquish our right as a nation to bear arms with which to protect those rights which we deem essential to individual freedom and dignity.

M. E. Brubaker

NOTICE!

Going to Summer School?

A survey is being made to determine the number of students who plan to attend the MSM Summer School this year and the courses in which they are interested. If you plan to go to summer school, fill in the form below and return it to the information desk in the Registrar's Office not later than March 6, 1963.

Department in which you are majoring _____

Department and Course Number	Name of Course	Semester Hours
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

NAME _____ DATE _____

ROLLA ADDRESS _____

MINER

THE MISSOURI MINER is the official publication of the students of the Missouri School of Mines and Metallurgy. It is published at Rolla, Mo., every Friday during the school year. Entered as second class matter February 8, 1945, at the Post Office at Rolla, Mo., under the Act of March 3, 1879.

The subscription is \$1.00 per semester. This Missouri Miner features activities of the Students and Faculty of M. S. M.

Editor-in-Chief _____ Hugh Murray

Business Manager _____ John Gladysiewicz

Managing Editor _____ D. F. John

Make Up Editor _____ David Blume

Copy Editor _____ Greg Junge

Features Editor _____ Charles Becker

Advertising Manager _____ Scott Carriere

Circulation Manager _____ Paul Gerhardt

Sports Editor _____ Ed Schwarz

Technical Advisors _____ Mike Devaney, Gary Turner

Secretary _____ John Minton

IN MEMORIAM

Russel J. Pummer Dies in Crash

The life of Russell J. Pummer of Spanish Lake, Missouri was tragically taken on the morning of Feb. 21, 1963 following an auto accident occurring only one mile from his home the night before. Russ was on his way to night school at Washington University, which he attended while working on the Cooperative Engineering Program. His auto skidded on the icy pavement and struck a second auto head on. He died of head injuries thirteen hours later.

Russ was a junior enrolled here in electrical engineering and well known and extremely well liked by his fellow students and instructors. A great sense of humor along with an easy-going personable manner made many a fast friend. Not only was he an outstanding person but a brilliant student, as well, as his 3.74 grade point for 94 hours testifies. His death is not only a great loss to the many that knew him but also a great loss to the engineering profession.

NOTICE!

KAPPA SIGMA'S
PHONE NUMBER — 2314
NOT 1314
AS ON APO BLOTTER



Earl Chappell

Says . . .

"Stands to reason that a life insurance policy designed expressly for college men—and sold only to college men—gives you the most benefits for your money when you consider that college men are preferred insurance risks. Call me and I'll fill you in on THE BENEFACITOR, College Life's famous policy, exclusively for college men."

GEN. DELIVERY
ROLLA, MO.
TEL. EM 4-2698

INTERVIEWERS REVEAL —

Importance of Grades, Activities on Salary

At this time of year, many companies are sending their interviewers out to the vast number of colleges in the United States. During this period, many students are wondering just what the companies are looking for. Are scholastic averages most important or is it participation in extra-curricular activities?

The most important considerations seem to be the following; the academic record, faculty opinion, extracurricular activities, and the interview itself. The most important factor is the academic record. In a study made by the American Telephone and Telegraph Company of their employees records showed conclusively that those men with good college scholastic records also did well in business and vice-versa. Of course, not everyone can be in the upper third of his class, so the question naturally arises about the chances of a student with an average or below-average academic record.

That the academic record is the most important single consideration does not mean that a combination of other factors cannot compensate for a poor scholastic average. In the AT & T study it mentioned that two other considerations were significant in a man's business success: the quality of the college from which the student graduated and his extracurricular achievement. The following table shows the relationship as the percent of men in each category achieving top third salary.

This table must be qualified,

because it has been found that participation in campus activities alone is not a sufficient indicator of future business success. Mr.

College Quality:

Top Third of Colleges			Middle Third			Bottom Third		
Above Avg.	Below Avg.		Above Avg.	Below Avg.		Above Avg.	Below Avg.	
Salary:								
67%	47%	50%	52%	38%	34%	37%	25%	26%
Campus Achievement:								
Substantial:								
61	44	37	42	33	24	32	24	18
Some:								
47	37	37	35	28	25	31	24	20
None:								

Frederick P. Kappel, Chairman of the Board of AT & T, said of his company, "It is only real campus achievement that seems to

have any real significance. Mere participation in extracurricular goings-on does not."

The reason that faculty opinion and the interview are important is that companies also want an indicator of the leadership ability, personality, and character of the student.

Thus, it is evident, that only a general statement as to the nature of an employer's consideration is

that it depends on a number of factors, each with more or less weight, and that no factor, not even grades, is entirely dominant.

Geology Dept. Offers \$500 in Scholarships

The Department of Geology of the Missouri School of Mines and Metallurgy has announced the availability of two undergraduate scholarships for students majoring in the Department of Geology for the 1963-64 school year. The scholarships, one in the amount of \$300, and one in the amount of \$200, are made possible by the V. H. McNutt grant to the Department. Applicants are judged on the basis of scholarships, character, and need, and the scholarships are awarded for one year. However, holders of the scholarship may re-apply for further years on a competitive basis. Applications may be obtained from the Department of Geology of the Missouri School of Mines and Metallurgy, Rolla.

A graduate fellowship of \$750 has been made available under the provisions of the V. H. McNutt Graduate Fellowship program at the school for the 1963-64 school year. The fellowship carries no requirements of departmental duties, nor restrictions in the field of study in geology. Applicants are judged on the basis of scholarship, interest, activity and character.

The V. H. McNutt scholarships and fellowships are a part of a grant made to the School's Geology Department in memory of V. H. McNutt, alumnus and former faculty member of the school. The late Mr. McNutt achieved national fame as a geologist as his explorations led to the discovery of oil and other important natural resources deposits.

Applications obtainable from Geology Dept.

Assignment:
gear up for more
"go" in low!



Result: All 3-speed manual transmissions in Ford-built cars with V-8's now are fully synchronized in each forward gear

To get more "go" in low, Ford engineers were asked to upgrade the conventional 3-speed transmission to give drivers more control in all three forward gears—to make "low" a driving gear—and they tackled the problem imaginatively.

Their achievement, another Ford First, is the only U.S. 3-speed manual transmission with all three forward gears fully synchronized! No need now to come to a complete stop when you shift into low—and no clashing gears! It lets you keep more torque on tap for negotiating sharp turns and steep grades. It makes driving more flexible, more pleasurable.

Another assignment completed and another example of how engineering leadership at Ford provides fresh ideas for the American Road.



MOTOR COMPANY

The American Road, Dearborn, Michigan

WHERE ENGINEERING LEADERSHIP BRINGS YOU BETTER-BUILT CARS

FOUND:

Eyelash Curler, Fifty Textbooks... Anything Yours?

Have you lost anything lately? Perhaps some books or a jacket? If you have, it might be worth your while to check into the Lost and Found, located in building T-7. It is open from 8 a. m. until 5 p. m., Monday through Friday.

When an item is left with the Lost and Found office, it is tagged with a note bearing the date it is received, and a card bearing pertinent information is filed. Should the item bear someones name, that person is notified that it is in T-7. After six months, the accumulated lost and found items are turned over to the Student Council.

Each year, at least 1000 items pass through the Lost and Found. This year, due to the cold weather, the number of jackets is less than usual. Each semester, at least 100 notebooks, and 50 books are turned in. Among the items which were lost, and are to found in T-7, are several which might be considered quite unusual coming from the MSM campus. These include several slips, an eyelash curler, and a girl's bedroom slipper. Also found were a suitcase full of man's clothes, dozens of hats, several pairs of glasses, and a bottle of rubber cement.

Mrs. Carol Bartle, the operator of this service, says that if anyone has lost something, they know where they can go — T-7.

Continuous Fermentation Work Has Sophisticated Implications

In most of the industries which are utilizing fermentation processes, the reactions are carried out in individual batches. Work is being done to adapt some of these processes to continuous operation. Should these efforts prove to be successful, the cost of production would be reduced for commodities as antibiotics and BEER! !

Bob Logan, under the direction of Dr. D. J. Siehr, is doing biochemical research into one of these fermentation processes. At present, Bob is working on the development of a laboratory of a continuous fermentation apparatus. The capacity of this unit should be about two and one half liters, and future endeavors will include a five liter adaptation of the present model.

The particular yeast which Bob is working with is known as *Torulopsis utilis*. This yeast is used in removing dissolved organic matter from the waste water discharged from paper plants. After treatment, this yeast is used to feed cattle because of its food value and low cost of production.

The major problem encountered in the operation of a continuous fermentor is that of keeping contaminants out of the unit. In addition to solving this problem, Bob is investigating the growth rates, the chemical and physical changes of the yeast.

Bob is a second year graduate student, expecting to receive his Master of Science degree in June. After that, he plans to continue work toward a Ph.D. here at MSM.

Research into fermentation processes has benefited humanity in many ways. Some of the more famous products of fermentation, as a result of research, are vitamin B12, Cortisone, and monosodium glutamate (commercially known as Accent). The National Aeronautic and Space Agency (NASA) is now conducting research into the production of oxygen by various organisms, to be used in extended space flights.

Other products of fermentation are a number of enzymes. MSM has received a National Institute

of Health grant to isolate and investigate one of these enzymes called Tryptamine oxidase. This enzyme introduces an oxygen atom into tryptamine, a member of the class of chemical compounds known as indoles. Working on this project are two graduate students, Msrs. Frauenhoffer and Patel.

The importance of the investigations of Tryptamine lies with the fact that a link may exist between another indole, Adrenochrome, and a chemical found in certain South American mushrooms, Psilocybin. Psilocybin is blamed for hallucinations which come from eating the mushrooms. Adrenochrome is related to Adrenelin.

AIME to Hear Australian Prof; Plans Made for Oklahoma Trip

The Mining Section of AIME held its latest meeting on February 20. An interesting and informative talk, supplemented with slides, was presented by Mr. W. C. Miller of the U. S. Bureau of Mines.

Mr. Miller spoke on "Sound in Mining," with special reference to the problems involved in noise reduction and control.

A field trip to the southern Illinois coal fields was undertaken on February 25, and 26. Both underground and surface operations were visited.

Plans are now being made for the annual spring outing, a field trip to the Oklahoma lead belt, and a banquet honoring the graduating seniors.

SCHOLARSHIPS

(Continued From Page 1)

Missouri School of Mines and Metallurgy.

The new scholarships will be given to two outstanding Missouri high school graduates. The first award, a \$500 scholarship, and the second, a \$300 scholarship, will be presented to the engineering school after the winners have enrolled this fall, Monsees said. Selections will be made by the Society Education Committee on the basis of scholastic achievement, financial need and the presentation of application material.

Members of the Education Committee include outstanding engineering educators in Missouri: Dr. Dudley Thompson, P. E., Chairman, Chemical Engineering Department, Missouri School of Mines, Rolla; Dr. Nathan C. Burbank, P. E., Director

of Engineering Research and Professor of Civil Engineering, Washington University, St. Louis; Dr. Gerald Dreifke, P. E., Professor of Electrical Engineering, St. Louis University, St. Louis; and Dr. Adrian Pauw, P. E., Professor of Civil Engineering, University of Missouri, Columbia.

Announcement of the winners will be made in sufficient time for high school commencements in the spring.

In addition to the scholarships offered by the Society at state level, several chapters of MSPE have established annual engineering scholarship awards to be presented locally, Monsees said.

THE BUSY BEE LAUNDRY & SANITONE DRY CLEANERS

ARTHUR GODFREY SAYS: "for more than just dry-cleaning, go SANITONE!"

FLUFF DRY 11c lb.
1 Day Service No Extra Charge

DRESS SHIRTS & SPORT SHIRTS 25c

SLACKS 55c SUITS \$1.10

(Cash and Carry—Small Extra for Pickup and Delivery)

CALL

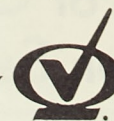
THE BUSY BEE LAUNDRY & DRY CLEANERS

For That Professional Service, "It's the Place to Go."
14th and Oak Phone: EM 4-2830
Faulkner and 72 — EM 4-1124

FREE PARKING

Tucker Dairy Company, Inc.

QUALITY



CHECKD

DAIRY PRODUCTS

103 W. 10th St.

Rolla, Missouri

Phone EM 4-3700



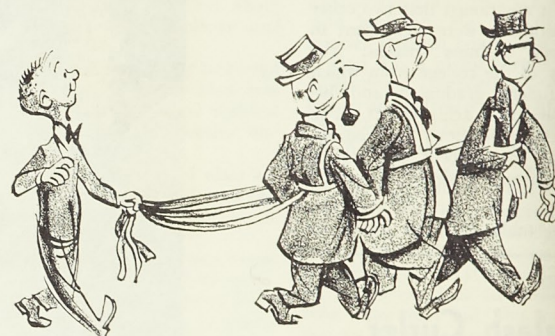
On Campus with Max Shulman

(Author of "I Was a Teen-age Dwarf", "The Man Loves of Dobie Gillis", etc.)

HAIL TO THE DEAN!

Today let us examine that much maligned, widely misunderstood, grossly overworked, wholly dedicated campus figure—the dean.

The dean (from the Latin *Deanere*—to expel) is not, as many think, primarily a disciplinary officer. He is a counselor and guide, a haven and refuge for the troubled student. The dean (from the Greek *Deanos*—to skewer) is characterized chiefly by sympathy, wisdom, patience, forbearance, and a fondness for homely pleasures like community singing, farina, spell-downs, and Marlboro Cigarettes. The dean (from the German *Deangemacht*—to poop a party) is fond of Marlboros for the same reason that all men of good will are fond of Marlboros—because Marlboro is an honest cigarette. Those good Marlboro tobaccos are honestly good, honestly aged to the peak of perfection, honestly blended for the best of all possible flavors. Marlboro honestly comes in two different containers—a soft pack which is honestly soft and a Flip-Top box which honestly flips. You too will flip when next you try an honest Marlboro, which, one honestly hopes, will be soon.



There is not a dry eye in Utah

But I digress. We were learning how a dean helps poor, troubled undergraduates. To illustrate, let us take a typical case from the files of Dean S. . . . of the University of Y. . . . (Oh, why be so mysterious? The dean's name is Sigafoos and the University is Utah.)

Wise, kindly Dean Sigafoos was visited one day by a freshman named Walter Aguincoort who came to ask permission to marry one Emma Blenheim, his dormitory laundress. To the dean the marriage seemed ill-advised, for Walter was only 18 years old and Emma was 91. Walter agreed with the dean, but said he felt obligated to go through with it because Emma had invested her life savings in a transparent rainhood to protect her from the mist at Niagara Falls, where they planned to spend their honeymoon. If Walter called off the wedding, what use would the poor woman possibly have for a rainhood in Utah? The wise, kindly dean pondered briefly and came up with a brilliant answer: let Walter punch holes in the back of Emma's steam iron. With steam billowing back at the old lady, she would find a rainhood very useful—possibly even essential.

Whimpering with gratitude, Walter kissed the dean's Phi Beta Kappa key and hastened away to follow his advice—and the results, I am pleased to report, were madly successful!

Today Emma is a happy woman—singing lustily, wearing her rainhood, eating soft-center chocolates, and ironing clothes—twice as happy, to be candid, than if she had married Walter. . . . And what of Walter? He is happy too. Freed from his unwanted liaison with Emma, he married a girl much nearer his own age—Agnes Yucca, 72. Walter is now the proud father—stepfather, to be perfectly accurate—of three fine, healthy boys from Agnes's first marriage—Everett, 38; Wilhelm, 43; and Irving, 55—and when Walter puts the boys on a lead and takes them for a stroll in the park on Sunday afternoon, you may be sure there is not a dry eye in Utah.

And Dean Sigafoos? He too is happy—happy to spend long, tiring hours in his little office, giving counsel without stint and without complaint, doing his bit to set the young, uncertain feet of his charges on the path to a brighter tomorrow.

© 1963 Max Shulman

We don't say Marlboro is the dean of filter cigarettes, but we're sure it's at the head of the class. Get some soon—wherever cigarettes are sold in all fifty states of the Union.

Motor Vehicle Laws Reviewed QUESTION OF THE WEEK

This is one in a series of twelve questions and answers to inform citizens of the provisions of Missouri Motor Vehicle Laws. This series is based on questions frequently asked members of the State Highway Patrol.

QUESTION OF THE WEEK: I have relatives living in another state who plan to visit me this summer. Their fifteen-year-old son has a license to drive in the state where they live. Can this boy drive in Missouri while visiting here?

ANSWER: The Missouri Highway Patrol says he CANNOT. The Missouri law plainly states that a non-resident under the age of 16 years cannot operate a motor vehicle on the highways of this state.

Greek News

PiKA Celebrates Founder's Day

Alpha Kappa chapter of Pi Kappa Alpha Fraternity was founded on the MSM campus in 1905. Last Sunday, March 3, the annual Founders Day banquet was held at the Pi Kappa Alpha chapter house to commemorate that establishment made fifty-eight years ago.

A short house corporation meeting was followed by an awards banquet. Mr. James P. Brown, National Memorial Foundation president, former national treasurer, and past district president, was guest speaker for the occasion. Mr. Brown, an alumnus of the University of Missouri, is now a prominent St. Louis attorney.

The banquet awards were presented by alumni counselor, Professor Wolf. Alumni Scholarship Awards were given to seniors Bob Markland and Doug Zunkel. A scholarship key was given to Maurice Green for being on the Alpha Kappa scholarship plaque for the fifth straight semester. Owen Lasker was presented an award for the greatest scholarship improvement. Gary Koch was presented the Karl P. Morgan Athletic Award, and Daniel Goodman was given the award for highest initiate grade point for the past year.

Sig Tau Plans Sig Weekend

With St. Pat's coming up next week, Sig Tau has been busy planning for two parties which should be rather memorable.

Immediately following the school dance Friday night, a "Green Door" party will be held at the V.F.W. hall at West 12th and Spring. The Royaltones, from St. Louis, will be on hand to provide the music.

On Saturday, Tekes and Sig Tau are going in together for an afternoon party. It will run from 1 to 5 p.m. and will be held in the College Inn at the Edwin Long Hotel. Music will be by the Royaltones again.

After the school dance Saturday night there will be a record hop at the house.

Delta Sig Has Guest Speaker

Dr. Dudley Thompson, Chairman of the Department of Chemical Engineering and Chemistry, was the guest speaker at the Engineered Leadership Banquet of Delta Sigma Phi, Thursday, February 28, 1963.

Dr. Thompson spoke on *The Eighth Wonder of the World — The Modern Engineer*. "It was the engineer," stated Dr. Thompson, "that supervised the building of the Seven Wonders of the Ancient World, and it will be the engineer who supervises the building of the wonders of tomorrow's World." Engineering is truly one

of the most important fields of the modern world, and the engineer is certainly a primary member of our society. Dr. Thompson concluded with "The fourteen requirements of a good astronaut are the requirements of a good engineer as well."

Delta Sigma Phi finds that the Engineered Leadership Banquet is an excellent method of promoting interest in all fields of engineering by having interesting guest speakers from the Missouri School of Mines' faculty.

TKE Initiation

Beta Eta Chapter of Tau Kappa Epsilon is proud to announce the recent initiation of six new Fraters. Those new wearers of the badge of gold are: Richard Brighman, Jerry Wilkinson, Tom Mier, Benny Heuser, Roscoe Mackie and Paul Cook.

As always more pledges step into the vacant positions left by new initiates. A special TKE welcome is in order for pledges Barry Dew, Richard Wingate, Don Warner, Bob Carey, Mike Boone, Larry Winters and Dan Cassidy.

a message to graduating engineers and scientists

AT PRATT & WHITNEY AIRCRAFT...

YOUR EYES CAN BE ON THE STARS BUT YOUR FEET MUST BE ON THE GROUND

The glamour and excitement of space age programs often obscure a fundamental fact. It is simply that farsightedness must be coupled with sound, practical, down-to-earth engineering if goals are to be attained. This is the philosophy upon which Pratt & Whitney Aircraft's position as a world leader in flight propulsion systems has been built.

Almost four decades of solid engineering achievement at Pratt & Whitney Aircraft can be credited to management's conviction that basic and applied research is essential to healthy progress. In addition to concentrated research and development efforts on advanced gas turbine and rocket engines, new and exciting effects are being explored in every field of aerospace, marine and industrial power application.

The challenge of the future is indicated by current programs. Presently Pratt & Whitney Aircraft is exploring the areas of technical knowledge in *magnetohydrodynamics . . . thermionic and thermoelectric conversions . . . hypersonic propulsion . . . fuel cells and nuclear power*.

If you have interests in common with us, if you look to the future but desire to take a down-to-earth approach to get there, investigate career opportunities at Pratt & Whitney Aircraft.

To help move tomorrow closer to today, we continually seek ambitious young engineers and scientists. Your degree? It can be a B.S., M.S. or Ph.D. in: **MECHANICAL • AERONAUTICAL • ELECTRICAL • CHEMICAL and NUCLEAR ENGINEERING • PHYSICS • CHEMISTRY • METALLURGY • CERAMICS • MATHEMATICS • ENGINEERING SCIENCE or APPLIED MECHANICS**. The field still broadens. The challenge grows greater. And a future of recognition and advancement may be here for you.

For further information regarding an engineering career at Pratt & Whitney Aircraft, consult your college placement officer or write to Mr. William L. Stoner, Engineering Department, Pratt & Whitney Aircraft, East Hartford 8, Connecticut.

Pratt & Whitney Aircraft

CONNECTICUT OPERATIONS EAST HARTFORD, CONNECTICUT
FLORIDA OPERATIONS WEST PALM BEACH, FLORIDA

U
DIVISION OF UNITED AIRCRAFT CORP.
A

An Equal Opportunity Employer

SPECIALISTS IN POWER... POWER FOR PROPULSION—POWER FOR AUXILIARY SYSTEMS.
CURRENT UTILIZATIONS INCLUDE AIRCRAFT, MISSILES, SPACE VEHICLES, MARINE AND INDUSTRIAL APPLICATIONS.

Leaders of the Canine World: Campus Mascots

A "dog's life" on MSM's campus is one any mongrel would envy. There are presently thirteen lucky animals running around Rolla who have the distinction of being fraternity mascots and each one of them has the ultimate in food and attention. They range in size from "Moose" at 190 pounds down to "Tiger" at a few pounds and in age from 8 week old "Churchkey" to 10 year old "Flash." These hounds have it over their human counterparts at MSM in the female field as the ratio of males to females is only eleven to two. The field includes eight different breeds of dogs with German shepherds, boxers, and collies being the most popular. These mascots have done much to add to the traditions of MSM and its fraternities by their constant antics. They are well known to little kids, the dog catcher and the town council, Rolla businessmen, and the paper boy.

TRIANGLE

"Chris" was given to Triangle by one of its members, Donald Overall, who has since graduated from school. He is a three year old collie (Chris, not Overall). One of Chris' pet habits is chasing small foreign cars. This sometimes is embarrassing to Chris because likely as not he gets so involved with his car chasing that he usually runs straight into any parked car along the street. Chris is known as a very brave dog

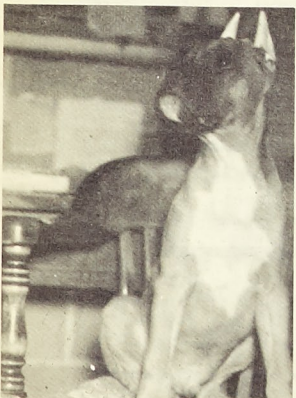


CHRIS

when inside the house, but as soon as he goes outside, he meekly makes a hasty retreat from any other dog in sight. Last, but not least, Chris is somewhat a rattlebrain. Whenever something like a key chain is rattled before him, he immediately begins to nip at his leg. With all his eccentricities, Chris has been one of the best pets Triangle has ever had.

BETA SIGMA PSI

Beta Sigma Psi has a new "Duke of Lindcrest" to replace



DUKE

the old Duke who was put out to pasture last year due to old age. He is a four month old boxer with the papers of a potential national

champion show dog. Duke comes from a champion sire from Detroit and a national champion dam from St. Louis. This beautiful boxer looks and acts like the "old" Duke who had been the Beta Sigs faithful mascot for the past ten years, and the brothers are looking forward to another fine dog.

KAPPA SIGMA

"Moose" is the very appropriately named mascot of Kappa Sigma Fraternity. Obtained from



MOOSE

a private family in Springfield, Moose is a pedigree great dane and comes from a line of beautiful dogs as his grandfather was one of the great show dogs in history. Of course, the most outstanding feature of Moose is his tremendous size, 190 pounds and a height of 6 ft. 3 in. on his hind feet. His appetite keeps his feeders busy as he downs eight cans of dog food per day plus heaps of table scraps. This amount is almost 100 cases of dog food in a school year, but Moose earns his keep by dating girl dogs over the summer. Now three years old, Moose may be found at Kappa Sigma sleeping under desks and beds with his feet up in the air or busily trying to climb trees after squirrels.

LAMBDA CHI ALPHA

One of the most recently acquired dogs on campus is "Blitz" of Lambda Chi Alpha. An unusual breed, Blitz is a registered German Weimaraner and was obtained from St. Louis. Being only four months old, he is rather uncoordinated at present but is a



BLITZ

very active dog. As his picture obviously shows, he possesses very large ears and big feet. As all good German students, Blitz enjoys the favorite pastime of Heidelberg; that is, Blitz is fond of drinking beer. The outstanding features of this Weimaraner will undoubtedly make him a well recognized sight on campus.

SIGMA NU

Enjoying the unique position of being the only female dog on campus (canines), "Grafin" of Sigma Nu Fraternity is a beautiful German Shepherd acquired this past year from a Rolla family. Grafin is a German word for Duchess and of course implies femininity. A trip to the veterinarian has assured that no little Dukes will arrive however. She, as her German Shepherd predecessors at Sigma Nu, loves to chase the squirrels along the telephone wires (dog on ground, squirrel on wire) at high speed barking at the top of her lungs. Another favorite friend of Grafin's is the paper boy, who she thinks keeps throwing things at her. It does seem funny when the evening paper comes wrapped around a rock.



GRAFIN

When there aren't any cats, squirrels, or boy boy friends around, Grafin loves to romp in the field and is often taken to a local ranch where she gayly runs about with no dog catcher in sight.

PHI KAPPA THETA

The newest and smallest addition to the Phi Kap house is a part collie and part shepherd mas-



KAP

cot. Though only a pup on arrival, he has grown to almost 50 pounds and a foot and a half in height. This sleepy eyed fellow is quite playful, if you happen to have the ability to arouse him. A vote of the chapter decided that the only appropriate name for the dog was Kappa, the second greek letter in the fraternity name. This was quickly shortened to "Kap." Possessing a sharp set of teeth which he is too lazy to use, Kap yields a bark many times worse than his bite.

PI KAPPA ALPHA

The mascot of the Pi Kappa Alpha Fraternity is a beautiful tan mixture of boxer and German Shephard about 4½ years old, simply named "Gus." His body is that of a boxer, only larger in structure. His head is basically that of a German Shephard. Gus was given to the house by an Army

Captain who was unable to keep him because of a transfer overseas. Being a very intelligent dog, Gus was sent to obedience school as a

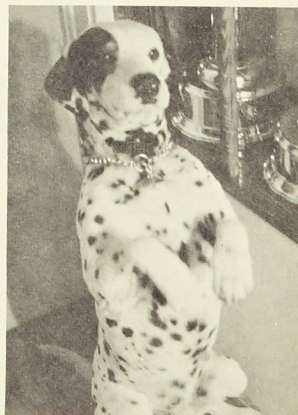


GUS

pup and still retains this training although it is seldom used. His biggest delight is going for a ride or going swimming while his great dislike is girls, for when they are down on party weekends, Gus gets neglected. Gus will always be remembered by the members who know him as a wonderful animal full of vim and vigor and in the future by the beautiful large oil portrait which hangs in the PiKA living room.

SIGMA PHI EPSILON

Within the next few weeks, as St. Pat's draws near, a green dalmation will be seen in Rolla as is always the tradition at this time. Flash, a pedigreed dalmation and mascot of SigmaPhi Epsilon for the past ten years is dyed green each year in celebrating St. Pat's. "Gimper," as he is called, was born in July of 1953 and Sigma Phi Epsilon purchased him in October of that year. Flash, a dog with character, is most responsive to a few choice words. Some of them are: cat, squirrel, bath, walk, and food. Upon the words cat and squirrel, Flash immediately looks for said animals, which he dearly loves to chase. He can be seen around 500 West Eighth Street chasing imaginary squirrels and cats nearly every day. Flash loathes a bath and makes himself scarce at the



FLASH

mention of the word. As Flash grows older there is the increased possibility that he won't be here next year, but he will always be remembered by the brothers of the fraternity.

SIGMA PI

Given the ferocious name of "Tiger," Sigma Pi's mascot isn't usually found hunting meat in the jungles or performing at a circus. Instead, he can generally be found sleeping wherever he can find a spot to lie down - the chapter room, living room, study rooms - any place that has a warm rug or a soft mattress available. This little beagle was given to the fraternity by member Church Williams' parents and promises to be a happy playmate for the broth-



TIGER

ers. Be on the lookout the next time you walk by 206 E. 12th for this mongrel blessed with tremendous ferocity.

THETA XI

In October of 1959, a gold dog trailed a Theta Xi member home and has remained there ever since as its mascot. The original owner of the stray was located and he allowed the fraternity to keep



REBEL

the dog. "Rebel" is now four years old and has become the king of the Theta Xi yard. A cross between a German shepherd and a registered collie, Rebel's love of wandering has cost him more than one night in Rolla's illustrious dog pound. City officials book him by his first name. He also has the habit of disturbing business at the local A & P store to the general disapproval of the manager. Rebel frolics in Rolla nine months of the year as any Miner and spends his summer loafing from one free meal to another at various members' houses.

TAU KAPPA EPSILON

"King Bruno of Liechtenstein," better known simply as King, is the huge St. Bernard challenging Moose for campus heavyweight honors. Representing Tau Kappa Epsilon, King is well known around Rolla for his big and beautiful appearance. Some of his enjoyments include breaking loose and hunting for female St. Bernards, taking a dip once in a while in one of the local ponds, arguing

with Moose over animal affairs in frequent barking spells, and romping on the roof of the TKE house. Now 2½ years old, King still enjoys being pampered and loves lying around. He likes eat-



KING

ing his dog food between crackers rather than from a dish which probably amounts to a lot of sand-which making for his feeders. Often seen on campus taking the pledges for a walk, King has acquired the reputation of having a friendly disposition and most people are glad he chooses to be that way.

ACACIA

"Pythia" was given to Acacia by Father Joe Carlo of the Christ Episcopal Church at the start of the school year. The name of this little boxer comes from Acacia's patron saint's mother. Pythia's



PYTHIA

moods vary from complete laziness to over-exuberant playfulness. Although good sized for 7 months, he fancies himself a lap dog in lazy moments, and at other times portrays the world's greatest watchdog, champion racing Greyhound, and expert campus explorer. Pythia also has an avid dislike for dogfood unless, of course, there's no human-type food to be had. All in all, this boxer is a typical young mutt, good for nothing, but liked by all.

KAPPA ALPHA

A black Labrador Retriever pup, bearing the tag, "Churchkey," is the new mascot of Kappa Alpha. The 8 week old female replaces the border collie, General Pierre Gustav Toutant Beaugard, who met untimely death filming his own version of Route 66.

Churchkey's talents thus far incorporate, for the most part, a tendency to reverse the normal housebreaking cycle in seeking her burying grounds, making her at



CHURCHKEY

times less than a joy to care for. But, growing fast, she is sure soon to be a sturdy guardian of the chapter.

Phi Eta Sigma To Establish Chapter at MSM

On Tuesday, February 5, 1963, a meeting was held in the E. E. building to discuss and organize the founding of a chapter of the Phi Eta Sigma National Freshman Honor Fraternity on the MSM campus. With the aid of C. J. Grimm, who acted as advisor to the group, a petition was sent to the National office of the Fraternity, and a constitution drawn up to be submitted to the Student Council and the faculty. The Student Council approved the constitution on February 27, and it is hoped that approval will be granted by the faculty at its next meeting.

The objects of the Phi Eta Sigma Fraternity are to promote a higher standard of learning and encourage high scholastic attainment among the freshman men, and to give recognition to those who demonstrate academic achievement.

Requirements for membership are that the student shall have a first semester or first two semesters grade average of not less than 3.50 with no grade below B, and carry a minimum load of 16 hours a semester.

In anticipation of the installation of the founding members into the MSM chapter of the Phi Eta Sigma Fraternity, plans are underway to select a pledge class from the present freshman class.

REMEMBER !!!
MINER COPY IS DUE
BY NOON ON MONDAY
OF THE WEEK
THE PAPER IS PRINTED.
ALL COPY SHOULD BE
TYPEWRITTEN.

FAMOUS SCIENTIST

Isaac Newton Was Born In England in 1642

Isaac Newton was born in rural England in 1642 during which time Cromwell's soldiers and the Cavaliers were keeping the countryside in constant terror with their fighting. As a young boy Isaac Newton learned the skills of farming and developed an interest in mechanical devices as they existed in that day. He is said to have been a thoughtful youth, unable to concentrate on his duties about the farm.

King's Point School

When he was fourteen years old, his widowed mother, who was about to remarry, made preparations to send the young Isaac Newton away to school. In September of 1654 he moved into the home of a Mrs. Clark in Grantham. Grantham, which was about twelve miles from the Newton's farm, was the location of the Old King's School. One of the first persons that the young Isaac Newton met when he arrived at his new home was Anne Storey, Mrs. Clark's ten year old daughter. In the following years Newton and Anne became close friends and they eventually planned marriage.

Newton was a poor student at first, but later his interest was aroused and he became the best student in the school. He also learned much about chemicals from Mr. Clark who was an apothecary. His education was interrupted once by the death of his stepfather, but when he proved himself to be a poor farmer, he was returned to school.

Trinity School

After graduating from the Old King's School, Newton entered Trinity College, Cambridge University. At Trinity he studied the required theology, Latin, and Greek and also the optional mathematics under Dr. Barrow. After his graduation from Trinity, Newton planned to stay and become a Fellow at the college, but, shortly after he graduated the last of the Great Plague's began to spread from London. The college was closed and Newton returned to the family farm. During his stay on the farm he deduced that the moon is held in motion around the earth for the same reason that an apple falls toward the earth. To verify his theory he calculated the rate at which the moon must fall toward the earth and arrived at a good approximation of the moon's orbit. While on the farm, he also began to develop the ideas of calculus, the theory of the spectrum, the discovery of which he had been delighted by while at Trinity, and the idea of the Binomial Theorem. During this time also he began to withdraw from social contact and his engagement with Anne Storey was broken off.

Return to Trinity

In the spring of 1667, the plague subsided and Newton returned to Trinity. Almost immediately he released a paper on the Binomial Theorem, to which he refused to attach his name, and within six months he was elected a Fellow. A fellowship at that time was to last seven years, during which time the student was expected to remain unmarried.

On July 7, 1668, Newton was created Master of Arts. The way was then clear for him to spend

the rest of his life as a scholar. Soon he began construction of his famous telescope which used a mirror rather than a lens as its principle component. It gave an image free of color distortion. Meanwhile the paper on the Binomial Theorem was gaining wide acclaim. Newton was finally persuaded to attach his name to the paper. On October 29, 1669, he was appointed Lucasian Professor of Mathematics with the help of Dr. Barrow who retired from the chair in order that the bright twenty-seven year old man might be elevated to one of the most famous chairs of mathematics in the world. This, together with the fellowship, brought him about two hundred pounds annually, which was a good sum in those days. He had to present only two lectures per week and it is said that his disinterested style bored the students to the point that sometimes no one would attend.

Receives Chair

On January 11, 1672, largely because of his telescope, Newton was elected a member of the Royal Society. Soon afterwards he sent a paper on light and color to the Royal Society. In this paper he stated that white light was made up of colors each of which were bent to different degrees by a glass prism. This Newton considered his most spectacular and exciting discovery. In the ensuing months many men irritated Newton by their foolish arguments against his experiment based theory. Among them, one of the most annoying was Robert Hooke, a jealous scientist of considerable note in biology as well as physics.

Three years after he received the Lucasian Chair of Mathematics, Newton's right to hold it was challenged. A rule of the University required that after seven years a Fellow must enter the Holy Orders or forfeit his fellowship. This would mean that he would also have to forfeit his mathematics chair. Newton refused to enter the Holy Orders and after much work on the part of his friends, the king, Charles II, signed a dispensation allowing Newton to violate the rule so long as he held the Lucasian Chair.

At this time Hooke, arguing against Newton's corpuscular the-

ory of light, in favor of a wave theory, irritated Newton so much that Newton began to wish that he had never released his paper on light and color.

The Law of Gravity

On a January afternoon in 1684, in a London coffee shop, Sir Christopher Wren, the famous architect, Robert Hooke, and Edmund Halley sat discussing astronomy. They agreed that the orbits of the planets were elliptical, that there was an attractive force called gravity between the planets and the sun, and that this force varied as the inverse square of the distance from the sun. They believed that there was a mathematical relationship between the inverse square relationship and the fact that the orbits of the planets were elliptical, but they could not prove it. Hooke hinted that he could prove it, so Wren, tired of Hooke's boastfulness, offered a book of the value of forty shillings to the person who could successfully make the proof.

Halley had heard of Newton's mathematical talent from John Collins for whom Newton had solved complicated annuity problems. When August came and Hooke had not yet solved the problem, Halley took it to Newton. Newton had worked on the problem eighteen years ago, but he could not find his notes. He promised to work it out again for Halley. The calculation was delivered in November of that year. The manuscript, *De Motu Corporum, or Concerning the Motion of Bodies*, not only explained the ellipse idea, but generalized to include all particles in free space. Halley insisted that it be published. With Halley's encouragement Newton began an all out investigation of gravitation in February of 1685 which was to last day and night for seventeen months. The product of many meal-less days and sleepless nights was his great *Principia or Philosophiæ Naturalis Principia Mathematica*. In *Principia* Newton defined mass, weight, acceleration and momentum, he went on to waves, tides, and acoustics, he developed a mathematical treatment of the solar system, and he stated that comets do not come just once but follow

(Continued on Page 8)

THE LOUNGE

1005 PINE ST.

PIZZA

PIZZA

LARGE & SMALL PIZZAS

MINERS WELCOME

CHEESE
ONION
HAMBURGER
SAUSAGE
MUSHROOM
PEPPERONI
HALF & HALF
COMBINATION

Also the LOUNGE SPECIAL

FREE DELIVERY

Monday Thru Friday 6 to 1 A.M.

Saturday 5 to 12

EM 4-1583

BSU Members Attend Conference in Texas

Today, Friday 8th, a carload of students from the Baptist Student Union will join more than 1,500 students from a dozen states in attending the 14th annual Student Missions Conference slated March 8-10 at the Southwestern Baptist Theological Seminary in Fort Worth, Texas.

"Sharing Christ with the whole World," will be the theme for the three day emphasis on missions, said L. Jack Gray, professor of missions and conference co-chairman.

Principal speaker for the meeting will be Baker James Cauthen, Richmond, executive secretary of the Southern Baptist Foreign Mission Board.

Others participating in the pro-

gram will be Chester Swor, youth counselor and lecturer from Jackson, Mississippi; Glendon McCullough of the Southern Baptist Home Mission Board in Atlanta; Ancil B. Scull, Southern Baptist foreign missionary to Indonesia, and about 40 other Baptist foreign and home missionaries.

Miss Joe Ann Shelton, professor in the Southwestern school on church music, will direct the congregational singing.

The conference is being planned by eight faculty—student co-chairmen and nearly 100 other seminary students.

Last Friday, a carload of 4 BSU members attended a similar conference at Louisville, Kentucky.

Discipline Was Strict In Early Days of MSM

Any MSM student becoming intoxicated at the St. James Fair will be publicly expelled from school. This was the decided policy of the MSM faculty in 1873. Being only a small part of a somewhat complex system of student discipline, student intoxication did however receive considerable attention. In the 1870's moral citizenship training was considered as important as the subject matter being taught. This of course, is not to infer that moral training isn't being attempted in collegiate circles today, but in the 1870's extreme stress was placed on the subject.

At MSM there was a flexible series of rules and regulations. Demerits were given to students for such grim offenses as absences and tardies to class without excuse. Initially 25 demerits resulted in a note to the student's parents and 50 demerits warranted suspension from school. In later years more demerits were given for these offenses.

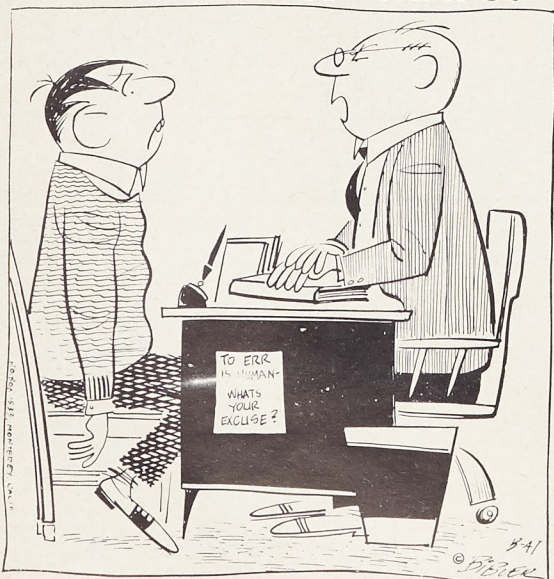
In 1873 several students were expelled from school on an ex-

cessive number of demerits. The faculty once exhibited extreme consternation at an expelled student caught 'loafing' in the town of Rolla. Two students were once given 36 hours to get out of town. In intoxication cases, the guilty party was made to sign a pledge that he would never enter a saloon or become intoxicated for the remainder of the year.

Loitering around the buildings or school grounds prompted immediate corrective action. No student was allowed to ramble through the halls or campus without permission. No student was allowed to leave school before the close of classes except with an excuse from parents. Among the other offenses demanding disciplinary action were: To enter a billiard hall, to engage in noisy and ungentlemanlike conduct around the buildings, to smoke on campus, to leave town without permission, or to mar the furniture or buildings of MSM.

Each case of discipline was (Continued on Page 9)

LITTLE MAN ON CAMPUS



"HERE IT IS ALMOST THE END OF THE TERM AND YOU HAVEN'T BEEN TARDY OR ABSENT—YOU HAVE DONE THE ASSIGNED HOMEWORK AND YOUR PAPERS HAVE BEEN HANDED IN ON TIME!—TELL ME, HAS THE DRAFT BOARD BEEN BUGGIN' YOU ABOUT GRADES AGAIN?"

NEWTON

(Continued From Page 7)

an elliptical orbit and return many times.

Of this last fact, Halley became greatly interested and searched astronomical history for twenty years to find old records of a comet like the one of 1682. Finally he was able to predict that it would come again in seventy five years. When it did appear late in 1758, it was named in his memory. (1986 will be the date of its next visit).

After *Principia*, Newton began to suffer from mental and physical exhaustion. He had been elected a member of Parliament and he attended its sessions. During this period his only scientific work was the discovery that solids melt and liquids boil at a temperature which is constant, thus enabling him to calibrate a thermometer. During this period his mother died. Finally, his dog, Diamond, upset a lighted candle in the study. Many of Newton's notes on chemistry and optics were lost

(Continued on Page 13)

Handsome Buckaroo BULL DENIM WESTERN PANTS AND JACKETS

Dress-up westerns you'll wear with pride. Slim and trim styling in heavy weight, Sanforized BULL DENIM for men and boys. They're long on wear and easy care.

VAT-DYED

These authentic western BUCKAROO pants and jackets will never change shade or shape.



RANDY'S MEN'S
and BOYS'



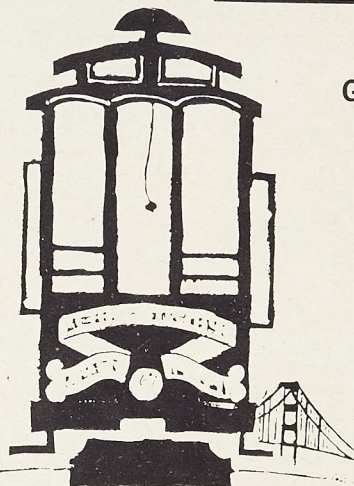
Graduating Ph.D's, MS's, BSEE's

Exceptional
opportunities
with

SYLVANIA

near

SAN FRANCISCO



Sylvania Mountain View, 40 minutes south of San Francisco, offers you challenging scientific work on defense systems, plus ideal living conditions.

The work involves systems studies, design and development in frequency ranges from DC to daylight; it offers growth into scientific or management positions of responsibility.

Immediate openings exist in the following fields:

- Operations Research
- Systems Analysis, Design
- Design and Development of:
 - Antennas, Receivers, Transmitters, Transceivers, Servos
- Analog Computers
- Mechanical Design
- Field Engineering

Sophisticated San Francisco's theatres, restaurants and major league sports are minutes away. The Pacific Ocean is near; hunting, fishing and skiing 3 hours' drive.

Furthering your education? Sylvania encourages, sponsors graduate study at Stanford and other nearby institutions.

See your Placement Officer now to talk with Sylvania's representative

ON CAMPUS, MARCH 12

SYLVANIA ELECTRONIC SYSTEMS
Government Systems Management
for GENERAL TELEPHONE & ELECTRONICS

Write in confidence to J. C. Richards
SYLVANIA ELECTRONIC SYSTEMS - WEST
Box #188 • Mountain View, California
An Equal Opportunity Employer

What You Should Know About the National Budget

What is the most significant trend in the growing expenditures of our Federal Government? Are nondefense expenditures increasing faster than those for defense production? Is the Government really holding the line on nondefense spending, or is it proposing more and more new programs every year?

Answers to these questions—and many others of interest to taxpayers—are given by the Council of State Chambers of Commerce in a critical analysis of the Administration's budget proposals for 1964. The study was made in Washington by Eugene F. Rinta, a noted fiscal analyst.

The "one truly heartening" feature in the budget—the "recognition by President Kennedy and his administration that . . . significant reduction of individual and corporate (tax) rates is essential for the attainment of our (economic) growth potential"—

was found to be jeopardized by the size of the budget itself.

The expenditure estimate for 1964 is \$98.8 billion—which exceeds the highest budget total during World War II (the \$98.3 billion total of fiscal 1945). The 1964 total is \$4.5 billion above the current estimates for 1963, and \$11.0 billion above the 1962 fiscal year which ended last June 30.

The Council analysis further notes that the 1964 expenditure total is 29 per cent above that of 1960, the last full budget year of the previous administration. That represents an annual increase of \$5.6 billion over the four years since 1960.

A cursory comparison of budgeted 1964 expenditures by functional categories of nondefense expenditures show a further rise in spending beyond the sharp increases that have already been effected since 1960.

The record of growth in domestic nondefense areas:

	Percentage Increases		
	1962 to 1964	1960 to 1964	1955 to 1964
Space research and technology	234.1%	947.4%	5,575.7%
Natural resources	16.6	46.0	108.1
Commerce and transportation	22.1	72.6	176.6
Housing and community development	-20.9	116.2	102.9
Health, labor, and welfare	24.1	52.1	159.3
Education	42.8	77.5	307.7
General government	17.1	42.3	88.3
Agriculture	-3.4	16.7	29.8
Veterans benefits	1.5	4.1	21.3
Total domestic nondefense	23.6	52.9	104.9
Domestic nondefense excluding space	12.6	35.0	78.3
National defense	8.5	21.3	36.2

Weekly Puzzle

A certain baseball team used the following men during a Grapefruit League game: Anderson, Becker, Black, Brown Gray, Green, Jones, Smith, and White.

Highlights of the action included:

- With none out and the bases loaded in the first inning, Becker looped a single to center scoring Jones with the second run.
- Black belted a grand slam homer in the first.
- Smith struck out to end the first inning.
- White sacrificed Brown to second in the fifth.
- With Anderson at bat in the fifth, Brown stole third and scored after the catch on Black's fly to deep left.
- Neither Gray nor Smith was ever a base runner.
- The final score was 7-0.

What was the team's batting order?

(Answer Next Week)

NOTICE

Copies of the special Student Council-Miner supplement published in the February 22 edition may be obtained from Student Council members.

similar proposal was rejected by Congress last year.

3. A drop of \$248 million in net postal service outlays is accounted for by a lower postal deficit due to the full year effect in 1964 of postal rate increases approved last year.

4. Foreign economic and technical assistance shows a reduction of \$145 million from 1963, but the fact is that these activities are being expanded by \$278 million, or more than 10 per cent. The apparent net reduction is due to an increase in net receipts of \$423 million by the Export-Import Bank resulting in the main from anticipated private sales of \$540 million of loans it holds in its portfolio. These sales may prove more difficult in realization than in budgeting.

5. Expenditures for the conduct of foreign affairs indicate a reduction of \$50 million but this is more than accounted for by the absence in 1964 of a one-shot \$100 million outlay for U. N. bonds in 1963.

6. A reduction of \$250 million is shown for housing and related programs but \$150 million of this results from an anticipated increase from \$49 million to \$199 million in private sales of housing mortgages held by the Federal National Mortgages Association.

According to Mr. Rinta's analysis, the foregoing types of budget reductions would appear to provide a weak foundation on which to base increases in other nondefense activities with the claim, as stated in the President's budget message, that expenditures for purposes other than defense, space and interest are being held at the 1963 level.

The analysis further pointed to a substantial increase in the number of Federal civilian personnel. In a period of three years and five months to the projected end of the 1964 budget year, the Council study noted that the Kennedy Administration will have increased Federal civilian employment by more than 229,000.

What is the possibility of a tax cut in the light of the spending situation? Analyst Rinta notes that the President's tax program places primary emphasis on rate

DISCIPLINE

(Continued From Page 9)

handled independently and consideration for the student involved was made. Somehow the system faded from existence in 1889, never again to return to the MSM campus.

**ATTEND
THE
BOXING
AND
WRESTLING
FINALS
TONIGHT**

You may obtain a copy of the Council analysis by writing to the Council of State Chambers of Commerce, Room 513, 1025 Connecticut Avenue, Washington 6, D. C. Ask for Bulletin No. 199, and include a business-size self-addressed stamped envelope.

Support MSM

By

**Supporting
St. Pats**

"Be a True Miner"

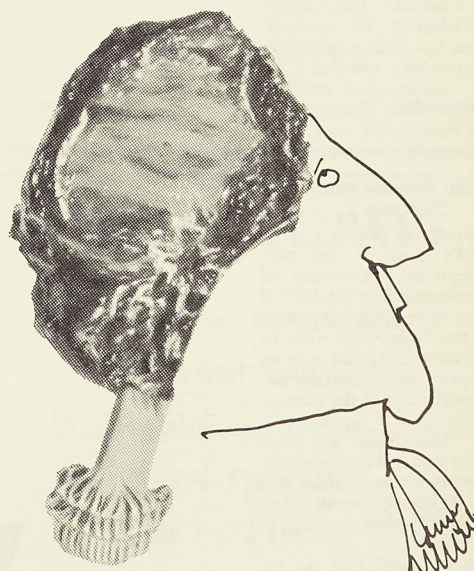
LONG INSURANCE AGENCY

A. E. Long, M. S. M., Ex '22
810 Pine St. ROLLA, MO. Phone EM 4-1414
"Service Is Our Business"

The Finest in.....
DRY CLEANING

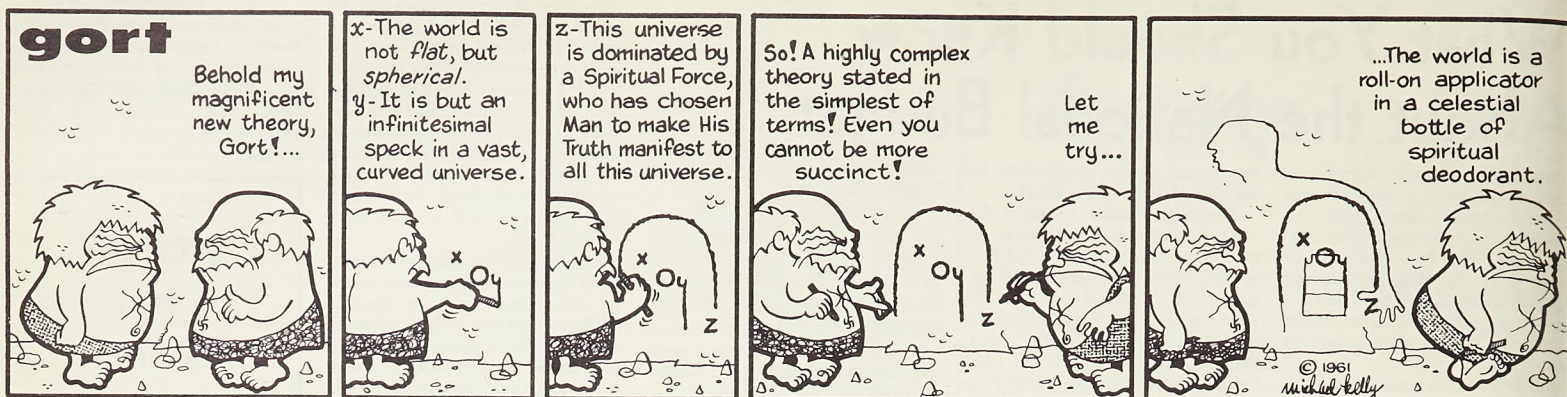
Pressing While You Wait.
One Day Service if Requested.
Pick Up and Delivery Service.

MODERN
Dry Cleaners
9th and Pine



It's greasy, by George! But Vitalis with V-7 keeps your hair neat all day without grease. Naturally, V-7 is the greaseless grooming discovery. Vitalis with V-7 fights embarrassing dandruff, prevents dryness, keeps your hair neat all day without grease. Try it today!





DEAN WILSON

(Continued From Page 1)

made on Pearl Harbor on Dec. 7, 1941, Dean Wilson came to the forefront in urging the students to stay in school and complete their training as quickly and efficiently as possible rather than immediately enlisting into the armed services. He emphasized the fact that a critical demand for engineers and scientists would be made in the war effort. While not discouraging patriotic enthusiasm, he was able to convince most students that their service to their nation could best be carried out by completing their education.

War-Training Programs

Under Dean Wilson's leadership, many war effort programs were carried out at MSM. Among the programs were: The Engineering, Science, and Management War Training Program, directed by Professor E. W. Carlton; the Civil Pilot Training Program, coordinated by Dr. A. J. Miles; the Signal Corps trainee group; and the Army Specialized Training Program. With the wartime graduates providing their engineering facilities to the armed services and their critically needed skills to the war industry, MSM had achieved a position of prime merit and importance by the end of the conflict.

In the spring of 1944, plans began for the returning of veterans from World War II. Through Dean Wilson's guidance, a Veteran's Curricula Committee was appointed under the chairmanship of Professor Carlton. They established a program for veterans based upon the congressional actions concerning veterans. In 1945, 90 veterans had matriculated in the Veteran Training Program. In 1946, 584 men were under training in the program.

Constant Improvement in Curricula

Throughout Dr. Wilson's term, the school's curricula has constantly improved. A system of course numbering was established to conform more with other divisions of the University. One of the outstanding curricular policies of our Dean's administration has been the separation of the humanities studies into a separate department. This change was made in order to gain better co-ordination between the humanities and the fields of engineering so necessary to the complete training of today's engineer.

Though he maintained the belief that the school's physical plant does not make the school, he realized early the need for expansion of plant facilities to contain the growing postwar enrollment that was later realized. Just as today, along with the anticipated growth came a more meri-

torious record of achievement from the Missouri School of Mines. By means of these and later efforts, Dean Wilson will, without a doubt, always rank as one of the greatest administrative heads in the MSM history.

PROFESSOR DRESDEN

(Continued From Page 1)

physics and mathematics from the University of Michigan.

He taught at the University of Michigan from 1941 to 1946 and then served on the faculty of the University of Kansas from 1946 to 1954, receiving promotion to full professor in 1951. He was a visiting professor at The Johns

Hopkins University and served as a research associate with the Argonne National Laboratory.

Dr. Dresden was Professor and Chairman of the Physics Department, Northwestern University, Evanston, Illinois from 1958-1960 until he joined the staff as Professor of Physics at the State University of Iowa.

He has published in the fields of distribution theory, statistical mechanics, superconductivity, and quantum hydro dynamics. He is on the board of directors of the Midwestern Universities Research Association (MURA) and belongs to The American Physical Society of Sigma Xi.

Father Sullivan Reviews Life of Cardinal Newman

The Newman Club meeting of February 28 was especially interesting. Father Sullivan, the pastor of St. Pat's, explained the obligations of the Lenten fast and abstinence. He showed that it is the idea behind these penances that is important.

Among the things discussed as future plans for the club is the spring communion breakfast and

a tentative chili or spaghetti supper.

Following the talk by Father Sullivan and the business meeting, a film on the life of John Cardinal Newman was shown as a special tribute to the originator of the Newman Club idea, since February 24 through March 2 was Cardinal Newman week. Cardinal Newman's literary works are well known, particularly his *Idea of a University* which presents his ideas on the philosophy of education. Cardinal Newman's idea at the University at Oxford will make his name long-lived in the many Newman Clubs across the country.

NOW YOU KNOW

why more people smoke Winston than any other filter cigarette.

Flavor does it every time—rich, golden tobaccos specially selected and specially processed for filter smoking!



PURE WHITE,
MODERN FILTER



PLUS FILTER - BLEND UP FRONT

Winston tastes good
like a cigarette should!

© 1962 R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

Tips on Winning Contest

Ever wonder how they do it? How some people develop the knack which permits them to complete the last line of a jingle and win a new car? Or \$500 a month for life?

About 5000 contests are advertised yearly in newspapers, magazines, and grocery stores — offering as prizes a combined \$60,000,000 in money and merchandise. Correspondence clubs — formed to exchange contest tips — have a membership roster of 10,000. Contest schools flourish, some chartered by the state. Some successful winners pass on their knowledge and skill for nothing to shut-ins and poverty-stricken elderly people.

What are your chances of winning a contest? To help you better them; here are seven tips collected from judges, big winners of yesterday, and a contest writing teacher who says that his graduates have won \$6,000,000 in the last 30 years:

Use "I" and "My"

1. Use "I" and "My" in your entry. Take the personal approach. Use warm, informal language rather than chilly phraseology. Here's a winning entry written by Mrs. Nita Parks of Pasadena, who has won a car, a dog, and a houseful of appliances. This sentence won her dog-food contest:

"Skillfully blended, rigidly inspected, champion-recommended, it makes my poodle eat hearty, act peppy, look sharp, and smell so healthy, we're both happy."

Use Your Knowledge

2. Watch for contests in which you have the advantage of special interest or knowledge. Football fans, for instance, last year had a chance to win "The Best Year of Your Life" — 12 prizes including both a winter and a summer vacation — in the White Owl Cigar Sweepstakes.

To enter, fans had to pick the winners of four football games: Texas A&M vs. Texas, Michigan vs. Ohio State, Army vs. Navy and Syracuse vs. U.C.L.A. Those contestants who picked the four winning teams had their names entered in a sweepstakes drawing — for 1068 prizes in all. The top prize in the contest, which may be repeated this year, was won by a James Kearney, a railroad towerman from South Plainfield, N.J. Kearney, and avid sports fan, who had been entering sports contests for years, commented after he had recovered from the shock of hearing he had won "The Best Year of His Life": "This is one time that a real sports fan won a sports contest."

And a New Yorker named Robert Moses won \$25,000 for an essay on highway improvement. Mr. Moses was Commissioner of Parks for New York City.

However, a large majority of contests are won by housewives — simply because, say judges, they comprise about 70 per cent of the entrants.

Obey the Rules

3. Be sure to obey all the contest rules — to the letter. Hundreds of thousands of entries get disqualified each year because the sender hasn't enclosed a label, has gone over the word limit, or has misunderstood the problem. (If

you must supply a word to rhyme with another word — be sure it rhymes with that particular word. Also make the rhyme scan. If the first line goes da-do-da-do-da-dee, don't make your line go da-dodo-da-dodo-dade). Get an entry blank from a dealer if the rules require one. And before starting to work on any contest — first make sure its deadline for entries has not already passed.

Hidden Appeal

4. See what's 'hidden' in the product you're writing about — such as usefulness, aroma, eye appeal. Study the advertising and see what the sponsor stresses about his product. Can you think of any quality that doesn't seem to have occurred to him? Tell what the food, or soap, or wearing apparel does in your life, or the role it plays in your house-keeping or in helping you cope with some familiar problem. Then see if you can say it in a brief, sparkling manner. In a contest sponsored by a shaving cream maker, one contestant scored with "Saves shaving seconds and second shavings." And for a diaper service contest, the winning sentence was: "Rock-A-Dry-Baby."

Take Your Time

5. Take plenty of time on your entries and don't be easily discouraged. Mrs. Nita Parks, the big winner mentioned before, sometimes works ten hours a day on an entry. Often, she spends much time using the product, asks her children what they think about it, spends days or weeks before the big inspiration comes. Starting to enter contests because she was bored, she mailed in 300 entries before she won her first prize — a net shopping bag. Two hundred

entries later she landed six tickets to a drive-in movie 60 miles away. But since then she's won hundreds of prizes, often gives away tips and training by mail to shut-ins.

Juggle Words

6. Re-phrase — juggle words — use words that sound well together. Wilmer S. Shepherd, Jr., who estimates that 60,000 graduates of the Shepherd School in Philadelphia have won over \$6,000,000 in the last thirty years, offers these tips on wording your entry. Watch for chances to reverse your phrases (saves shaving seconds and second shavings.) Use contrasting words (biggest-smallest.) Look for chances to compound words (hospital-clean.) Use assonance and rhyme (more stylage, more mileage, more smileage.) Transfer ideas (arrest Cancer — wanted for murder.)

Be Sincere

7. Be sincere. (If you don't use the product or don't like it, why not enter another contest instead?) While limericks and jingles are supposed to be funny, the complete-in-25-words-or-less are usually judged on the uniqueness-aptness-sincerity basis. This basis, according to a leading judge of contests, the Reuben H. Donnelley Co., is no mere fiction.

The firm supplies a "weighted scale" of contest judgment to the Post Office beforehand, listing, on the basis of 100 points, what valuations they will give entries. For instance, in one contest "aptness" might count for 30 points, "sincerity," 40 points, etc. Therefore an entry high in the latter quality might outpoint one which seems to be more apt than sincere. This is a rather complicated matter — the scale chosen is a secret. De-

fining these words for puzzle-purposes is chancy; but one might make a stab at it by saying that "apt" means "to the point" — hitting the nail on the head —

getting to the essence of the matter quickly. "Uniqueness" — that no one else thought of the matter in that particular way. "Sincerity" — no fluff, no bluff, no stuff.

REMEMBER!!

The St. Pat's Parade Starts at

10:00 A. M. Saturday,

March 16, 1963

DON'T MISS IT!!

LITTLE MAN ON CAMPUS



SEEMS TO BE A LOT MORE STUDENT ENTHUSIASM SINCE THEY CHANGED THIS EVENT FROM A 'GREASED PIG' TO A 'GREASED GIRL' CONTEST."

I Like My Coffee With Cream

or

How to Make Even Mr. Maxwell Say — I'd Rather Lipton!

I'm really fond of old St. Pat

I'm strong for the School and all like that

What's more, I'm as Irish as the next one

Nevertheless, I have a real conniption

When comes the week of March 17

The Cafeteria serves that GANGRENE CREAM,

IT'S GREEN!

The emerald spuds I don't mind

Color the cheese, the cake, the pie, any kind,

But when the dispenser starts to ooze

That bilious, slimy green cow juice

I cannot think that ever good St. Pat

Would want e'en a Miner to drink stuff like that

GANGRENE CREAM, IT'S GREEN!

Kratzer's Koffee may not be great,

But it's O.K. when its au lait

And when on St. Pat's they go and serve

Stuff even a taxpayer doesn't deserve,

It's enough to make a fellow scream

The Devil take that Go — GANGRENE CREAM,

IT'S GREEN!

Cafeteria Customer

The LAUNDRY CENTER
LAUNDRY - DRY CLEANING - SHIRTS
Complete Bachelor Laundry Service
Corner 7th and Rolla Streets

•
ALSO FEATURING

New Coin-Operated Self-Service Laundry

For the Finest in Jewelry

Class Rings

Diamonds

FULLER JEWELRY

715 Pine

Ph. EM 4-2142

HAVE FUN ST. PAT'S

We Have New Sweatshirts

for You and Your Girl

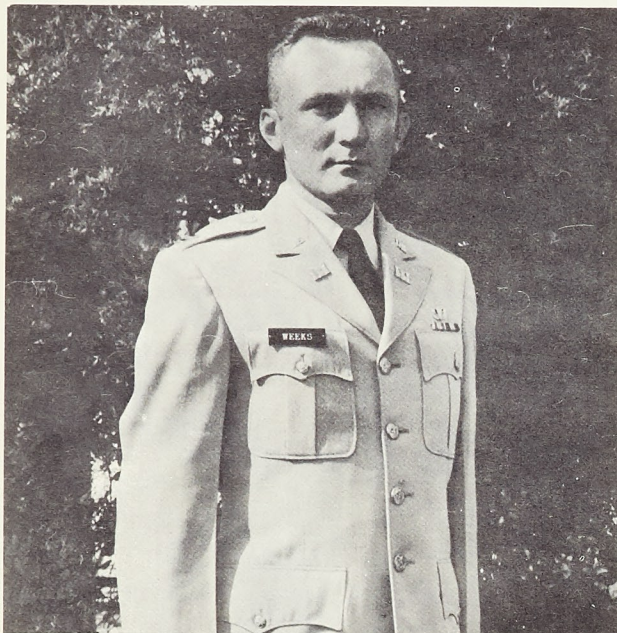
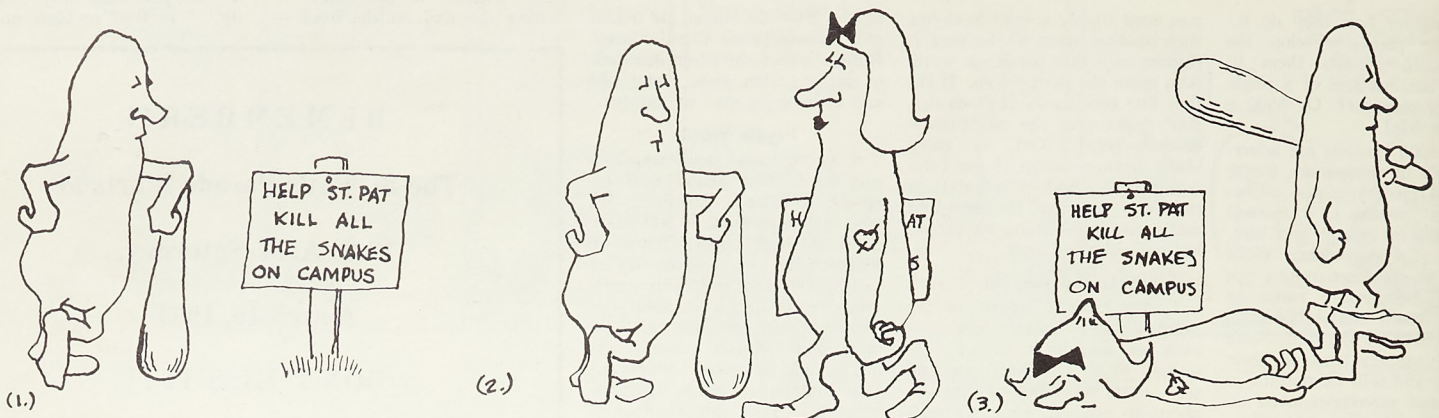
Register now for —

FREE TICKET

to St. Pat's Dance

CAMPUS BOOK STORE

THE ENGINEER BY KRIEGER



FACULTY FEATURE

Capt. Weeks Is Guided By West Point Motto

"Duty, Honor, and Country."

This motto, which is engrained in all West Point cadets from their first day at the academy, is the guiding light of Captain Robert E. Weeks, freshman military advisor.

Capt. Weeks has been active in armed service work since his days in ROTC at Mackenzie High School in Detroit, Michigan, his birthplace. He entered West Point in 1950 and began his active participation in student activities. An ardent fan of all sports, Capt. Weeks lettered in hockey. He was a member of many clubs and was a member of the influential Policy in his senior year.

Upon graduation in 1954, Capt. Weeks attended the Airborne and Ranger School of Fort Benning, Georgia. With all the talk of fifty mile hikes these days it is notable that his last patrol at Fort Benning consisted of a fifty mile trip over rough terrain in three days living off the land.

He next proceeded through the ranks as a platoon leader and executive officer and in 1956 became a General's Aide. This position involved handling the administration of the affairs of the Deputy Commandant of the Army War College. He then proceeded to Fort Belvoir, Virginia for an advanced officer training course and upon completion of this

course he was sent to Korea.

As the commander of an Engineering Field Maintenance Company in Korea, Capt. Weeks was responsible for repairing the engineering equipment of the 1st Cavalry and the troops in Seoul. His company also did work in the Korean villages, such as odd jobs, road repairs, and rescue work. On one trip, Capt. Weeks had the opportunity to see the 38th parallel, the arbitrary boundary line between North and South Korea. He was impressed by the extreme ruggedness of the terrain in this portion of Korea.

After a 13 month tour of duty in Korea Capt. Weeks was assigned the position of assistant freshman military advisor at MSM. This year he was moved into the position of freshman advisor.

Capt. Weeks reads a great deal about military history and political science. He hopes to begin some serious writing in the next few years. He still holds his love of sports and likes to skate, fish, and play handball. He works out at least twice a week in Jackling Gymnasium.

Capt. Weeks is a member of the West Point Alumni Association, the Army Athletic Association, and still supports the scouting program in Detroit, Michigan, where he achieved Eagle rank. In addition to his freshman ad-

Rifle Teams in 10 State Meet

Sixty rifle teams, including two from Missouri School of Mines, representing large universities, small colleges, high schools, and military schools from 10 states, are entered for competition in the 28th annual Camp Perry Indoor Small Bore Rifle Matches, a leading national marksmanship event, to be held from Friday through Sunday at Kemper Military School and College in Boonville.

Maj. Howard J. Blumhardt, professor of military science at Kemper, and members of his military department are supervising the annual shoot.

The team with the highest combined firing score is awarded the Grand Aggregate John M. Browning trophy. Trophies also are awarded the winning team in each of the three brackets advanced ROTC, basic ROTC, and high school.

St. Louis (Mo.) University high school, which won last year's Grand Aggregate championship with a score of 1896 out of a possible 2000, is sending two teams to this year's meet in hopes of defending the title.

An awards dinner will be held at Kemper Sunday night.

The late Col. John B. Barnes, a former professor of military science and tactics at Kemper, originated the idea of Camp Perry along with Sgt. William T. French in 1929. First actual competition on the then new rifle range came in 1930 with 16 rifle teams competing.

The Missouri School of Mines is entering one team in the advanced ROTC bracket and one in the basic ROTC division.

visior position, he sponsors the Raiders, the varsity "B" rifle team and the newly organized Judo Club.

A man with an intense desire to improve himself, Capt. Weeks hopes to some day go back to school and acquire an M. S. degree in Civil Engineering.

Capt. Weeks feels that one of MSM's greatest needs at the present time is a new athletic plant. He believes that the present facilities are entirely insufficient for an all-boy's school of the college age group. Through acquaintances with graduates of other schools, Capt. Weeks ranks MSM on a par with California Institute of Technology, Purdue, Iowa State, and several other leaders in the engineering field.

Capt. Weeks has a wife, Janet, and a six-year-old daughter, Kathleen, who now attends kindergarten.

AWARDS

(Continued From Page 1)

Secretary, Tau Beta Pi, and Eta Kappa Nu. He has an overall grade-point through seven semesters of 3.36, and has received the Phi Kappa Phi Bookplate award and the Gold Key award. He has also been active in Student Union committee work.

Swearington, a graduate of the Mt. Vernon, Missouri, High School, is President of Eta Kappa Nu, Vice-Chairman of I.E.E.E., and Moderator of U.C.C.F. He has been quite active in all three organizations since entering MSM. He held Curator's Awards in his freshman and sophomore years,

and has been given the Phi Kappa Phi Bookplate and Silver Key awards. He is a member of the Interfaith Council and belongs to the Prospector's Club. His grade-point after seven semesters is 3.00.

Vogelphohl, from St. Louis, is now president of the Radio Club and has held other offices in this organization. He is a member of Tau Beta Pi and Eta Kappa Nu. He has the Phi Kappa Phi Bookplate Award and the ROTC's Red Fouragere. He belongs to the Engineer's Club. He has been a student assistant in the office of Asst. Dean Leon Hershkovitz. His grade-point after five semesters is 3.41.

A. B. C. BOWLING

12 FULLY AUTOMATIC BOWLING ALLEYS
OPEN 9:00 A. M. EVERY DAY

Convenient Snack Bar — Ho-Made Chili and Sandwiches
Midnite Snacks

Phone EM 4-2121

PHONE ORDERS ACCEPTED

TOP HAT LOUNGE

Michelob on Tap

"WHERE ALL THE MINERS MEET"

Air Conditioned

Open 10 A. M.

Television

EM 4-2030

PARTY TIME IS FALSTAFF TIME

Get thrifty
Falstaff
Party
Quarts



Each One Serves
5 Full Glasses of



AMERICA'S PREMIUM QUALITY BEER

FALSTAFF BREWING CORPORATION, ST. LOUIS, MO.

MUELLER DISTRIBUTING CO.
Rolla, Mo.

ROTC Rifle Team Places Second At Camp Perry

The ROTC Basic and Advanced Course Rifle Teams both placed second at the 28th Annual Midwest Indoor Camp Perry held

Army Area ROTC match, getting an impressive 2823 points out of a possible 3000 for a ten man team. The winning team last year



Displaying the loot from Little Camp Perry are, kneeling, the Basic Team of Hall, Bingham, Landon, and Winkel; and standing, the Advanced Team of Holkenbrink, Haden, McCauley, and Steib.

at Boonville, Missouri on March 1, 2 and 3. The ROTC Rifle Teams are composed of members of the Varsity Rifle Team who are also enrolled in ROTC.

The Basic Team competed against 20 colleges, including Southern Illinois, Pittsburgh, and Missouri. They scored 748 points out of a possible 800, losing out by five points to the winning team from South Dakota. Team members were Lloyd Bingham, Eugene Landon, Paul Winkel and Robert Hall.

The Advanced Team competed against 8 teams, including Iowa State, Southern Illinois and Lincoln. They scored 737 points out of a possible 800, losing out by six points to the team from Purdue. Team members were Carl Steib, Ron Haden, Ron McCauley, and Mike Holkenbrink.

The ROTC Rifle Team just completed the firing of the Fifth

was Kansas State University of Manhattan with a 2848. The results for this year will be announced in April.

NEWTON

(Continued From Page 8)

time. It was several months before he recovered.

Warden of the Mint

Newton was now looking for a change of pace which was provided for him by his friend Charles Montagu, Chancellor of the Exchequer.

At this time in England, coins were of uneven weight and many had had their edges clipped. Attempt to put better coins into circulation had failed because as soon as they were circulated, they were hoarded. Montagu needed a good administrator who could see to the production of enough coins of good quality to replace the old debased coins at once and by force of law. Newton completed the job successfully, establishing mints in other cities and placing them in charge of his scientist friends.

One of Newton's final accomplishments was to predict that the earth is flat at the poles and that the period of rotation of Venus could be calculated by measuring the flatness of its poles. Newton died on March 20, 1727 at the age of 85.

AS FOR ME,
I REALLY
PREFER CHECKS!

Don't we all! Once you've had your own checking account, you'll never go back to paying bills with cash. Who wants to waste so much time when checks are so easy to mail?

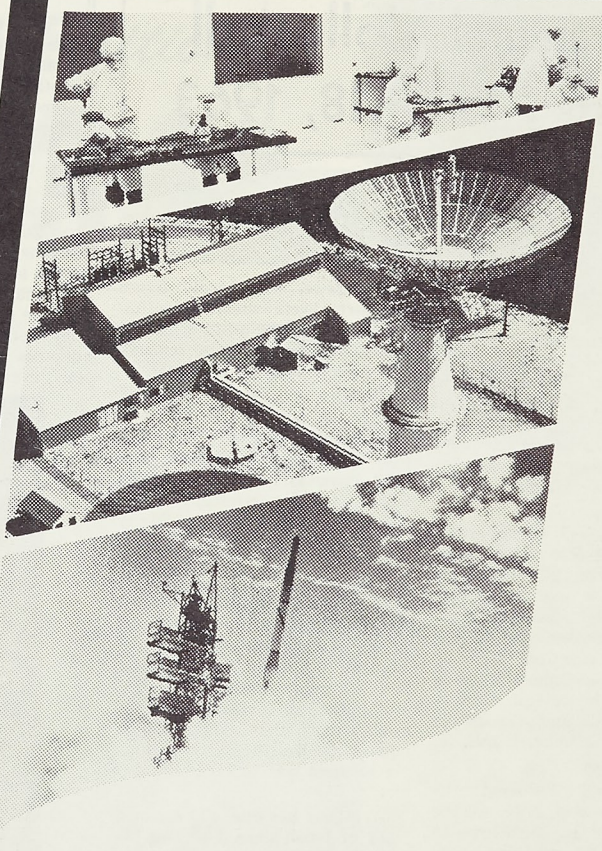
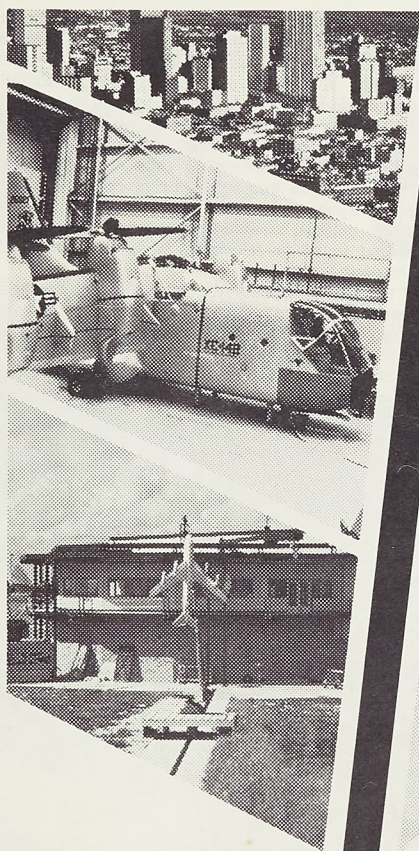


OPEN A CHECKING ACCOUNT WITH US SOON

ROLLA STATE BANK

Main Office:
210 West 8th

Drive-In:
Rucker Ave. & Hwy. 72



TARGET OF OPPORTUNITIES / LING TEMCO VOUGHT

Opportunity for professional advancement, on-the-job orientation and engineering challenge... you'll find this and more with Ling-Temco-Vought. From the first you'll work with experienced technical personnel in an engineering climate that encourages imagination and spontaneity. And because LTV is one of the nation's most active participants in almost every phase of the challenging aerospace, communications and military electronics fields, you can determine the type of promising position which will contribute most to your professional growth. ■ Get first-hand information on LTV's projects and products by picking up our brochure at your Placement Office. Then talk to our representative. Ask him about the company's extensive resources, education assistance and liberal company benefits. Ask too, about Dallas—a modern city noted for its warm, sunny climate. Then review LTV's ground-floor growth opportunities for graduates holding degrees in Aeronautical, Mechanical, Industrial, Electrical and Civil Engineering or Math, Physics and Metallurgy. ■ Schedule an appointment with our representative or write College Relations Office, Ling-Temco-Vought, Inc., P. O. Box 5907, Dallas 22, Texas. An equal opportunity employer.



LING-TEMCO-VOUGHT, INC.

Dallas Area Divisions: CHANCE VOUGHT CORP./TEMCO ELECTRONICS/TEMCO AEROSYSTEMS/CONTINENTAL ELECTRONICS

CAMPUS INTERVIEWS MARCH 27, 28

(Set Dates in 8 pt News Gothic Bold Cond. caps)

RITZ THEATRE

MOVIES ON WIDE SCREEN

Thurs. Thru Wed. Mar. 7-13

Sunday Feature Shown
1:15, 4:00, 6:45, 9:30

Admission: Adults 75c,
Children 35c

'Gypsy'

Rosalind Russell & Natalie Wood

UPTOWN THEATRE

MOVIES IN CINEMASCOPE

Fri., Sat. Mar. 8-9

Saturday Continuous from 1 p. m.

'Blood of the Vampire'

Donald Wolfelt & Barbara Shelley

—PLUS—

'The Phantom Planet'

Dean Fredricks & Coleen Gray

Sun., Mon., Tues. Mar. 10-12

Sunday Continuous from 1 p. m.

'The War Lover'

Steve McQueen &

Shirley Anne Field

—PLUS—

'Winchester '73'

James Stewart &

Shelley Winters

Wed., Thurs. Mar. 13-14

'The 4 Horsemen of the Apocalypse'

Glenn Ford & Ingrid Thulin

—PLUS—

'The Proper Time'

Tom Laughlin & Nira Monsour

MSM Track Squad to Open Season in Conference Meet

Now that the Varsity basketballs are packed away for another year here at MSM, thoughts turn to the spring sports, which include track, tennis and golf.

The Varsity track team will commence its spring schedule on March 16, when they compete in an indoor conference meet at Columbia. Following the opener, the Miners will perform in eight meets, ending the loop in an outdoor conference meet at Maryville.

Returning to the squad this season are Jay Alford, John Brown, Dennis Covell, Bill Kauffmann, John King, Raymond Mullen, Glen Osick, Morris Patrick, David Shimamoto, Conrad Stergas, Edward Tharp, and George Van

Horn. Final selection of the team including freshman is yet to be made, although practices have already begun.

Varsity tennis begins on March 20, when the Miners are host to Lincoln University. Ten days later, Lincoln U. is here at MSM again, this time to signal the start of the golf season.

Although these sports are not usually considered to be as important by the students at MSM, they require an equal amount of practicing and working-out. The participants spend a great deal of time in preparation for each event, therefore it is the duty of every Miner to uphold the school spirit by attending these sports as well.

Intramural Volleyball Starts March 18, 1963

History in Sports

WRESTLING

By Tom Johnson

It would be a good guess if you were to call wrestling man's third form of sport. The prehistoric man thought it might be wise to know how to grapple effectively with animals, so he started practicing by having contests with members of his family or his neighbors.

Wrestling played an important part in all the festival programs of ancient Greece and Rome. It is one of the few sports that has never completely disappeared at one time or another. All nations have had their wrestlers. It, along with running and jumping, is a natural sport because it requires no paraphernalia and is a zestful way of building muscles and developing health.

The Greeks considered the wrestler as second only to the discus thrower in athletics. In fact the greatest wrestling story ever written was about the match between Ulysses and Ajax in the *Iliad* by Homer. The rules followed by the Greeks were similar to the catch-as-catch-can rules used in the U. S. today; only the breaking of fingers, gouging, and choking were allowed. This didn't satisfy the Greeks, however. They wanted more action; and they got it with the origination of the Pancratium, a rough and tumble, no holds barred type of wrestling. Thesus, the Greek prince who introduced the spikes into Grecian boxing, is credited with establishing the first standard rules of wrestling.

After the Romans conquered Greece, they ruled out some of the good holds in the Pancratiun, and blended their style with the earlier Grecian form. This produced the Greco-Roman style that is used in its essential form in Europe today.

The Jews, who hardly figure in sports, were wrestling enthusiasts. The champion at wrestling was ranked as the most remarkable athlete of the Jewish race.

Wrestling was a sport reserved mainly for royalty and its guests in European countries following the beginning of the Christian era. Fete days established by kings usually found a wrestling match topping the program. Many kings took great pride in their army but placed next on their list having one of their subjects as a champion wrestler. International tournaments were frequent in the Middle Ages. France and England had many such contests; and, for many centuries, the rulers of those countries always conceded that the nation which housed the wrestling champion at the moment was superior athletically.

Wrestling has been the national sport of Japan since days long before the Christian era. The Sumo wrestlers are the literal giants of Japan, standing an average of 5 feet 9 inches and weighing between 300 and 400 pounds.

Wrestling in the U. S. today is based on the catch-as-catch-can style. As a sport wrestling was purely amateur until about 75 years ago. About this time the champions of various hamlets and villages found that there was a demand for them outside their own area. At first they received expenses or in some cases the contents of a hat passed through the crowd. Shortly thereafter the contests were held on a regular basis, with the professional wrestler in much the same category as the professional boxer.

At the present time the pro wrestler is a rather forgotten man. But amateur wrestling is established in many colleges and universities and enjoys national popularity.

Varsity Track Schedule

March 16—Indoor conference meet at Columbia.

April 6—Harris Teachers at MSM.

April 12—Springfield and Cape Girardeau at Springfield.

April 20—Washington University, There.

April 24—Westminster College
at Fulton.

April 27—Drury and Evangel at MSM.

May 3—Springfield at MSM.
May 10, 11—Outdoor Confer.

May 10, 11—Outdoor Conference Meet at Maryville.

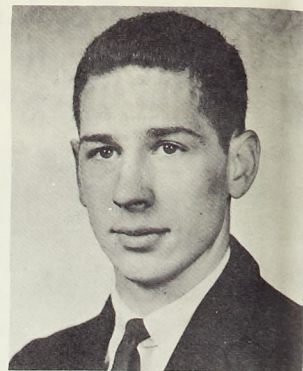
SIDELINES

By David Lochner

This week marks the intramural boxing and wrestling meets. These intramural events are held every year at this time with meets held four days in succession. This year they were held the fifth, sixth, seventh, and eighth of March. Almost every organization competes by sending two or three representatives. There is so much enthusiasm in these sports that some students even compete individually.

This event usually draws the biggest turnout of all the sporting events during the year. The reason for this large turnout may be due to the pure, clean man to man competition involved in both boxing and wrestling. Everyone enjoys this individual struggle and competition. In addition, college wrestling is a completely different type of wrestling than that found on television, which may be another reason for the large turnout.

Whatever the reasons are for the enthusiasm in boxing and wrestling, the competitors deserve all the enthusiasm they can possibly get. They work long and hard training for these events, working eighteen workouts into their already busy academic schedules. So I hope this year's event is as successful as these events have been in the past years.



JIM GOOD

RESULTS
AND PICTURES
OF BOXING
AND WRESTLING
TO BE RUN IN
ST. PAT'S
ISSUE



Does a man really take unfair advantage of women when he uses Mennen Skin Bracer?

All depends on why he uses it.

Most men simply think Menthol-Iced Skin Bracer is the best after-shave lotion around. Because it cools rather than burns. Because it helps heal shaving nicks and scrapes. Because it helps prevent blemishes.

So who can blame them if Bracer's crisp, long-lasting aroma just happens to affect women so remarkably?

Of course, some men may use Mennen Skin Bracer because of this effect.

How intelligent!

