



E.E.'s Hear Lectures On Computer Processes And Color Television

By SAMUEL S. EIFERMAN

At the Thursday, October 18, meeting of the AIEE-IRE, Mr. William Thornton of IBM, delivered a lecture on the use of computers for solving problems of an engineering nature.

Although Mr. Thornton did not stick to lecturing about computers, those who attended became very interested when Mr. Thornton started telling them how IBM hires graduating seniors and the reason IBM hires some seniors and not others.

Mr. Thornton said that the difference between an engineer and a scientist is that the engineer is a doer and whatever the engineer builds can be reproduced, while the scientist discovers the fundamentals but does not make it work. An example he used was that a scientist might say that because he found out that a resistor in an electric circuit throws off heat he has invented, therefore, an electric oven. An engineer will have to figure out just how to design that oven to throw off the heat from the resistor.

Mr. Thornton said that the Electrical Engineer is mainly a logic designer and technician. It is the engineers job in the future to run the companies producing electrical equipment, do logic design, packaging, circuit work, and device work.

A film was shown on the computer and how it was made and sample printed circuits bearing the IBM name and transistors encased in clear plastic were given out at this lecture.

At the October 25 meeting the

Lefkowitz Addresses Students

By KEN SANDLER

On Thursday, November 1, Attorney General Lefkowitz addressed a small group of students in the Finley Ballroom. At the beginning of his speech, in which he praised his administration and listed its accomplishments in the fields of Civil Rights, Consumer Frauds, and Public Housing, there were approximately 30 students in attendance. He seemed disgusted to say the least at the small turnout and he only spoke for 25 minutes.

Quotable quotes of the meeting:

Referring to state laws: "I just pass on the legality of it."

On the Attorney Generalship: "A job I enjoy very much."

On free tuition: "You gotta have the guts to do what's right and Honest." He reminded the

(Continued on Page 3)

first part of a lecture on Color TV was given by Mr. John Hansen of RCA.

Mr. Hansen discussed the basic design of a black and white TV set at this meeting.

At the November 1 meeting the second part of the lecture on Color TV was given by Mr. Larry Black also of RCA.

Mr. Black showed a film titled "The Fabulous Rainbow" which showed the development of Color TV from its creation as an idea to its present stage of the fastest growing product on the market. The film also mentioned a new kind of Color TV set that could color tape a TV show for future viewing by the TV set owner.

Mr. Black then proceeded to tell how the Color TV works. He explained that there are three electron guns in the Color TV picture tube. Each gun hits the screen at a different angle through tiny apertures.

On the screen are trios of red, (Continued on Page 3)

Steinman Awards Now Available

The David B. Steinman Foundation established the David B. Steinman Awards to provide grants in the School of Technology:

- a) to undergraduates who need financial assistance to complete their engineering studies; and
- b) to graduating seniors who need financial assistance to pursue full time graduate work in engineering.

Awards will be made to deserving students selected on the basis of character, scholarship, range of knowledge and interests, well rounded performance, and leadership potentiality. The grants will range from \$100 to \$500.

The degree of financial need and the candidate's potential professional earning power will be primary considerations in determining the amount of the grant.

Applications for an award should be submitted as soon as possible. Each qualified applicant will be asked to appear for an interview.

It is anticipated that recipients of grants will earnestly wish to replenish the fund when in a position to do so, thereby making it possible for future students to be assisted. To this end, grants should be considered as non-interest bearing loans and voluntary debts of honor. It is

(Continued on Page 3)

CITY COLLEGE STUDENTS (Females and Liberal Arts Students Included)

TECH NEWS is trying desperately to increase the size of its staff. There are positions open in all phases of newspaper work for interested students. Most of these positions require no previous experience and takes up little time.

If you are interested in holding any position on TECH NEWS please leave your name, address and telephone number in the TECH NEWS mailbox in room 152 Finley or contact SAMUEL EIFERMAN at this phone number: DA 9-2644.

You are also invited to attend our editorial board meetings which are held on Thursdays during the 12 to 2 break in room 335 Finley.

Tech Council Solicits Improvement Ideas For North Campus Cafeteria

Technology Council at the last three meetings has finally elected a Corresponding Secretary. Jack Cohen, the Technology Council Representative from Epsilon Nu Gamma, was elected to this position of Corresponding Secretary at the November 1 meeting of the Council.

The Technology Council has also started a Student Faculty Committee to discuss conditions in the North Campus Cafeteria and the possibility of a January graduation. The committee will also discuss the possibility of getting a lounge in Steinman Hall.

Dean Hyman said that he is in favor of the Technology Council's suggestion that coat racks be installed in the North Campus Cafeteria.

Technology Council will be trying to get suggestions from the students today about the students ideas on the North Campus Cafeteria situation. For this purpose Technology Council has installed a booth outside of Knittle Lounge today with a questionnaire for the students

to fill out with their grips about the North Campus Cafeteria.

The questionnaire reads as follows: To All Students who eat in the Shepard Hall Cafeteria. Technology Council has undertaken an investigation of many of the conditions in the Shepard Hall Cafeteria and will make proposals for their improvement to the management and the school administration. Your help is essential.

1. Please indicate below any present condition(s) in the cafeteria which you find disagreeable.

2. Please suggest below the manner in which you believe the stated condition(s) can be improved. (Use the reverse side if necessary.) Please place completed sheet in suggestion box nearby. Thank you.

The Technology Council will also sponsor a Student Faculty Tea which will be held on December 7 from 3 to 6 P.M. in Knittle Lounge. The Society of Women Engineers and Epsilon Nu Gamma will be the hosts. All students are invited to attend.

City College Fund Has New President

Jerome I. Udell, Chairman of the Board of Max Udell Sons, has been elected President of The City College Fund for the 1962-63 campaign year.

The Fund, which conducts an annual fund-raising campaign on behalf of City College, has set its current goal at \$796,000.

An alumnus of The City College Class of 1918, Mr. Udell succeeds Dr. Joseph J. Klein, senior partner of Klein, Hinds and Finke, who was named Chairman of the Board of Directors of the Fund.

Mr. Udell is the Director of the Clothing Manufacturers Association of the United States

and Vice President of the Clothing Manufacturers Exchange. He is also the Director of the Commercial Bank of North America, a trustee and Vice President of the United Jewish Appeal and a director of Beth Israel Hospital.

Elected as Vice Presidents were Clifford O. Anderson, President of G. R. Kinney Company and Morton Gottschall, Dean of The College of Liberal Arts and Sciences at CCNY.

Harold A. Lifton, President of the Harold Lifton Company, was designated as Treasurer and Aaron Furman, a partner in the

(Continued on Page 3)

Vectors First Issue On Sale Nov. 13-16

Vector, the College's Engineering Magazine, will be on sale November 13-16 in Shepard Hall, Steinman Hall, and outside Knittle Lounge. This term's first issue will feature articles on, "Manufacture of the Silicon Mesa Transistor," "Controlled Nuclear Fission," and "Isotactic Polypropylene." In addition this issue will contain several faculty profiles as well as the usual columns; i.e. Vector Volts, Crossword, etc.

Controlled Nuclear Fission

This article which should be of interest to all engineers enumerates the underlying reasons behind the need for controlled

nuclear fission and the desirability of such a process. While highly technical in parts, the main body of the article can be readily understood and is enjoyable reading that would not be encountered in any engineering course. The article explains the concepts behind the various controlled nuclear fission processes and states the difficulties of each. It takes you on a complete "tour" of a nuclear power plant; i.e. it covers everything from the sources of power to the methods used to tap the power of the reaction once it has been achieved.

Isotactic Polypropylene

While an article of this nature definitely increases the technical level of Vector, it most certainly does not lend itself as enjoyable or understandable reading to any of the various engineers with the exception of ChE's. The article assumes a previous knowledge of polymer chemistry that the majority of the engineering student body does not have.

Silicon Mesa Transistor

This article explains the major shortcomings of early types of transistors (their inability to operate at high frequencies) and shows step by step how this is overcome in the Silicon Mesa Transistor. A discussion of semiconductor physics that can be understood by those who are at all familiar with the field is used to explain how the Silicon Mesa transistor can operate at high frequencies. It further illustrates the manufacturing process of these transistors and explains the essential components in detail. While this article is of interest to many branches of engineering it is most certainly a worthwhile piece of literature for the EE.

Vector Volts

For those of us that are not plagued by the ever present pressures of our engineering courses, Vector contains Vector Volts. Many evenings should be spent on these teasers if your inquisitive minds are challenged by such puzzles.

Other articles include: A new method for measuring the speed of light, and an article on increasing the useful strength of glass so as to approach the theoretical strength. In addition Faculty Profiles rounds out what is hoped to be another award winning issue of Vector.

TO ALL CLUBS

Each club will be notified of the date, time and place for taking its photo for Microcosm. Any group, desiring a photo, which still hasn't notified the Clubs Editor of Microcosm, should do so immediately.



TECH NEWS

EDITORIAL BOARD

JOSEPH NADAN
Editor-in-Chief

CARYL SINGER
Managing Editor
LINDA GRABER
Business Manager
OLIVER ROSENGART
News Editor

SAMUEL S. EIFERMAN
Associate Editor
RONALD ANTONINO
Tech Life Editor
MICHAEL BUCZACZER
Features Editor

ASSOCIATE BOARD

BARRY PRESSMAN
Photo Editor
VALERIE DeCLEMENTE
Copy Editor
STANLEY ALTMAN
Associate Feature Editor

MARVIN CHASEN
Sports Editor
MEL PELL
Advisory Editor
TED SEMEGHAN
Technical Consultant

Phone: AU 3-0054

Editorial Policy of TECH NEWS is determined by a majority vote of the Editorial Board.

Printed by: Boro Printing Co.
216 W. 18 Street

222

"The 300"

When you have to shell out \$315.00 next September, it will be too late to do anything about it. If all the students in the school were to protest, they wouldn't be able to change the accomplished fact.

The time to do something to keep City College tuition-free is right now, when the Governor and the State legislature are up for election. With this in mind, we are printing below the names and addresses of those legislators from New York City who either abstained from voting or voted against a move to discharge from committee the bill restoring the free tuition mandate to the State education laws.

These legislators are from New York City and should understand what the institution of tuition-free colleges means to us. They certainly are sensitive to what their constituents want and expect them to do. If one of the people listed below is your representative, write to him asking his views on tuition, and tell him what your views are. Find out how he intends to vote if the question comes up again; ask your friends and relatives to write.

Techmen get more out of City College's tuition-free status than anyone else. They stay a year longer than other students, and they make much more money when they graduate. We certainly owe the College enough to write one letter so that it can maintain its present status.

The following voting records should influence your vote:

ASSEMBLY

Voted Against Discharge

Edward J. Amann, 285 Kissel Ave., S.I.
Robert F. Kelly, 7401 Ridge Blvd., Brooklyn
Fred W. Preller, 218-05 100th Ave., Queens Village

Not Voting

Michael Capanegro, 38-25 Parsons Blvd., Flushing
William F. Passannante, 72 Barrow St., NYC
Bertram L. Podell, 1155 Ocean Ave., Brooklyn
Frank G. Rossetti, 295 Pleasant Ave., NYC
John Robert Brook, 7 East 75th St., NYC
Dorothy Bell Lawrence, 415 East 52nd St., NYC
Alfred D. Lerner, 155-01 90th Ave., Jamaica
A. P. Savarese, 109-42 Park Lane S., Kew Gardens

SENATE

Voted Against Discharge

Elisha T. Barrett, P.O. Box 24, Bay Shore
William T. Conklin, 7905 Colonial Rd., Brooklyn
John J. Marchi, 711 Forest Ave., Staten Island
MacNeil Mitchell, 36 West 44th St., NYC
George W. Cornell, 225 Broadway, NYC

A Misrepresentation

Student Council's adoption of a watered down suggestion in lieu of a strong mandate directing the OP editorial board to remove the wording, "Voice of the Student Body" from its flag, has proven to be the most laughable action yet taken by the body. Council refused to declare this wording as a misrepresentation but rather noted its ambiguity in what it implied. Does OP claim to be "The Voice of the Student Body" or "A Voice of the Student Body?" We submit that either of these implications is a misrepresentation.

(Continued on Page 3)

Inquiring Technographer

QUESTION: Why did you choose Engineering as your career?



David Klein—507—I have always found satisfaction in understanding and solving practical and theoretical problems in Math and Science. This (coupled with ambition and hope of a promising future) led me to electrical engineering.

Carole Stirbl—307—I enjoy Mathematics, Science, and Physics and their practical applications. Although I appreciate the arts, I do not have the capacity to be creative in them, but I do feel that I can be successful as an engineer.



Al Harrison—305—Chemical engineering is the field I chose because it requires a thorough knowledge of Chemistry,

Physics, and Mathematics, the subjects that are most stimulating and interesting to me. Engineering gives one an opportunity to apply the basic principles learned in school to actual problems encountered in industry.

Demetrios Papadopoulos—807—

Ever since I was very young I have been fascinated by such things as radio, television and the airplane. When I found that the people who made all these things were engineers I decided to be one.



Louis Kranz—807—I chose engineering as my profession because the work is very challenging and the rewards, both intellectually and financially, can be extensive.

Math Society To Hear Talk By Magnus

Dr. Wilhelm Magnus, Research Professor of Mathematics at New York University, will talk on "The Origin of Elliptic Functions" on Wednesday, November 7, at 3 p.m. in Steinman lecture hall (T 123A).

Elliptic functions are periodic functions of theoretical interest, and are important in the solution of many physical problems. The general solution of the simple pendulum is easy to express in terms of them. Under special conditions they reduce to the trigonometric functions. Prof. Magnus is an authority on special functions that arise from the solution of differential equations and other sources.

This is the first of three lectures by professors outside the college sponsored by the Mathematics Society. All faculty members and students are invited.

TECH LIFE

By RONALD ANTONINO

It is strange how the turns of events and existing conditions at a certain time might so interact to produce a stage for, and give voice to, ideas that capture the popular imagination, and then quickly fade away; ideas which probably would have remained in the theater of a limited audience had things been otherwise. When one such instance came about, thirty years ago, for a brief time it cast the engineers and scientists of this land in a role as the potential saviors of the sinking ship of America.

The time was mid 1932, almost three years after the fateful crash of '29. The nation was reaching newer and newer highs in unemployment, national feeling was reaching new lows, and the end was nowhere in sight. It was a time when people with solidly middle-class backgrounds found themselves waiting in breadlines, places where they would never have dreamed they would be standing even one year earlier. There was a march on Washington by unemployed World War I veterans; they came from all over the nation and camped in the Capitol, nearly 20,000 strong at one point, in the hope that Congress would act favorably on a bill making a bonus, due them in 1945, immediately available. Farmers were turning more to direct action, to intimidation and force, in order to prevent foreclosures and sale of their lands; unrest and strikes, which made visible the paradox of a nation unable to consume the plenty it produced, resided in the farmlands. The predominant national mood was one of apathy, of sullenness, then exasperation. There were symptomatic voices that shouted for a dictator, or for martial law, or for sweeping governmental reorganizations. There was an emptiness in the land, and fear, directly related to the Federal Government's inaction and the seeming lack of ideas by business and government leaders on what to do. Assurances no longer assured. Every day, in every way, things seemed to be getting worse and worse.

In this setting, containing the necessary ingredients of conditions and events, Technocracy caught the nation's imagination in almost no time — Technocracy: government by technical experts. Its leading prophet and exponent was Howard Scott, a New York engineer with definite ideas on the future role of engineers in an industrial society. In 1920 he had formed a group called the Technical Alliance, whose purpose was to bring about the formation of a soviet or council of technicians. He had preached for years to whomever would listen. Now the chance to expound his theories and ideas on a much larger scale came, and into the national void stepped Scott with the intention of filling it.

A news story in August, 1932, told of a group called Technocracy, under Scott's direction, which would conduct an energy survey of North America at Columbia University. Almost immediately the popular imagination was captured by the idea behind Technocracy. Here was a man and an ideology that explained mass unemployment and what to do about it. Explanations, what is more, were dressed in the authoritative language of science and engineering. The future was seen in a fresh light. It was in terms of technology, not in the terms of politics and finance which seemed to have steered the country into the rocks.

What was this new doctrine that caused such excitement and held "the answers?" Well, briefly, Technocracy was predicated on one fundamental principle; the facts involved in the functional operation of our society can be measured. Where the buying power of the dollar based on gold is susceptible to fluctuations, the dollar based on ergs and joules (i.e. — energy) could not fluctuate because such a base is constant. The most important element in the creation of physical wealth — food, clothing, any material object — is energy, and the flow of energy output is directly measurable in units of work. Therefore, setting the price of goods by the amount of energy used in their production would eliminate underconsumption, because the total kilowatt hours of labor used in production would just equal the total of prices; there would be just enough money to buy what was produced. Producing just what was needed would eliminate overproduction.

Technocracy looked at the conditions then abounding, and said: the price system is based on the use of man-power, a base going back to the times when there were no machines to speak of. But with the use of machinery, the energy capacity of labor is increased greatly, the man-hour is replaced by the kilowatt-hour, and productive capacity is also greatly increased. One machine does the work which previously demanded many men; hence, the machine displaces jobs; therefore, there is less money around to buy goods; therefore, overproduction and depression result.

The United States was visualized by Technocracy as a highly integrated industrial machine. It existed through the efforts of the chemist, engineer, physicist, architect and electrician. The nature of the mechanism itself must determine the rules by which it would run successfully. The old rules, based on an obsolete pricing system, were out. And, of course, with the idea of America as a mechanism, the engineer and the scientist were the ones to run it. There would be no political structure, and no room for political action in a technical administration.

Thus the idea sparked on the national scene with the brilliance of a sudden and rapid release of energy, then, with no fuel to sustain its glow, died out. The rapid rise of Technocracy was matched by its equally rapid fall. Mr. Scott had little more than talk and inconclusive statistics to back him up. The energy survey was always to take place at some future time. The excitement he created began to die down. By January, 1933, Columbia University disassociated from him. Several prominent members of his Committee on Technocracy resigned in a huff, denouncing Scott on their way out.

Outspoken critics had been at work all along. Al Smith, in a biting comment, pronounced, "As for substituting engineers for political leaders in running the country, I cannot refrain from

(Continued on Page 3)

Lefkowitz... HPA Rally Tonight Editorial...

(Continued from Page 1)

audience that he was in favor of free tuition.

Meanwhile in F327, the House Plan Lounge, 75 people turned out for a Halloween Party. Maybe Mr. Lefkowitz should have gone to the party.

The Young Conservative Club and the City College Conservative Club will co-sponsor a lecture by Mr. Lawrence Fertig, the noted author and economist of the New York World Telegram.

The lecture will be held in room 106 Wagner on November 8 at 12:15 P.M. Mr. Fertig will discuss "Economic Growth."

All students both day and evening are invited to attend.

AIEE-IRE...

(Continued from Page 1)

blue, and green phosphors which are activated by the stream of electrons from each gun. This produces your color since any color can be represented by combining different intensities of red, blue, and green.

The aperture mask through which the electrons must pass contain 333,000 tiny apertures while there are 1,000,000 different bits of colored phosphors on the screen.

At the end of the lecture Mr. Black tried to show the audience what a color TV program looked like over the color TV set he had brought with him but he failed when the TV reception in Steinman Hall proved to be bad.

Award...

(Continued from Page 1)

expected that shortly after completion or cessation of studies for which a grant is made, the recipient will complete arrangements for its repayment.

Should a student for any reason discontinue his studies during the period for which an award was made, he will be expected to arrange repayment of a suitable portion thereof.

Application forms may be secured in Room 210, New Administration Building. Address applications and requests for information to Professor Arthur Taft, Financial Aid Officer, The City College of New York, New York 31, New York.

Fund...

(Continued from Page 1)

firm of Feinberg, Jacobs and Furman, as Secretary.

The City College Fund provides scholarship assistance for students at the College, supports a program of Visiting Professorships and the College's student centers and placement office, as well as other special educational projects which do not come from the eaz budget. Last year the Fund received a record total of \$390,000.



Tonight, November 5, House Plan Association will hold its annual Election Eve Rally in the Grand Ballroom in Finley. The purpose of this rally is to elect the Honorary Governor of House Plan Association from various candidates put up by the individual Houses.

Everyone who attends this event is promised an evening that will be remembered for a long time. The evening activities will include skits by the houses that are supporting

candidates, refreshments for all free of charge, and a victory dance to be held right after the winning candidate is announced in the Ballroom.

The skits will be put on from 6 P.M. to 7:45 and at 8:30 there will be a grand march, of the finalists, into the ballroom. After this the winning skit will be announced and the victory dance that follows will last until midnight. There will be a live band present to provide music for the dance.

Tech Life...

(Continued from Page 2)

mentioning the fact that we have finished an era of government by engineers in Washington," alluding to President Hoover's career as an engineer.

And so the dream ended. Scott and his solution being removed, the nation once again faced the abyss, and waited.

Why did Technocracy prove to be an unworkable solution? Well, that might be answered by Economics or Government students. But acceptance of the idea would have led to some interesting results. For example, your engineering studies might have been preparing you for a government position. North Campus, at this very moment, might be decrying the apathy and lack of interest in Student Government by South Campus student. And the nation, by this time, could have been making great strides toward the realization of Aldous Huxley's BRAVE NEW WORLD.

(Continued from Page 2)

tion. In addition council refused to enumerate penalties and followup actions in "the remote possibility" that the suggestion was not followed. While the mandate was under consideration SG prexy Ted Brown expressed the opinion that by stipulating penalties or any force to be brought upon OP would in effect be censorship of OP.

It is our opinion that the forced deletion of the statement "Voice of the Student Body" from the OP flag would not be censorship because it in no way interferes with the paper's editorial policy or its issue content. We maintain by not mandating OP to remove the questionable wording from its flag, Council has shrunk from its responsibility to the student. We further maintain that this misrepresentation, when confronted by a non-familiar, non-CCNY reader, creates an impression that hinders the engineers' occupational opportunity.

We therefore suggest that Student Council adopt the following mandate at its next regular meeting:

SC mandates the OP editorial board to remove the wording "Voice of the Student Body" from its flag within one week after the adoption of this resolution.

SC further mandates the SG treasurer to withdraw all Student Activity Fees from the paper in the event of OP's non-compliance with the above section and in addition to notify the printers of OP of this action.

Have a real cigarette—have a CAMEL

Richard Bertram
OCEAN RACER AND YACHT BROKER

The best tobacco makes the best smoke!

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

Slants on Sports

by Marv Chasen

The Values of Weight Training

Many people have often wondered if the use of weight training can be beneficial toward becoming better athletes. Like all issues, two sides arise, those who believe that this training will tighten the body and hamper activity, and those who believe that weight training can be a valuable aid. It is interesting to note just how many people still believe in the "muscle-bound" theory; that is to say, they actually believe weight training will produce enormous muscles that will make a person useless in a good many sports. This is nonsense, and can actually be called an old wives tale.

An investigation of a number of teams at the college will uncover some interesting facts concerning the use of weights toward improving general body condition. Coach Lucia of the Fencing Team has employed the use of weights for improving body condition with no severe results in the co-ordination or agility of his men. Coach Baron of the Lacrosse Team is planning the extensive use of weights to get his boys in shape. Lacrosse is a rough game, and conditioning can be a vital factor in a team's success. If the Coach believes that weight training will help, and his men believe that it will help, then the mental satisfaction alone will be a stimulant toward success.

How can weight training improve body condition? It is just like any other form of exercise, but in a more concentrated form. Swimming an hour a day, five days a week for an entire year, will produce a body that is both strong externally and internally. Is it not feasible that a swimmer can supplement his normal swimming exercises with weight training such that the same vital areas of his body are worked? If this is so, then weight training can be beneficial to a swimmer. In track and field, it is a known fact that most of the "weight" men will participate in some form of weight training to build up body strength for their events. A strong shot-putter will be very satisfied if this weight training will increase his throwing distance even a small amount. The track men, who rely so heavily on their legs, may be wary of weight training to build up their leg strength, but each man is his own judge. If he feels it might aid him, he will know in the long run.

When should weight training be employed? Most of the people who do indulge, do so during the pre-season or post-season period. Weight training should be used as a preparation toward some goal, whether it be

Pulitzer-Prize-winning author Glenway Wescott will discuss his literary contemporary, the late Ernest Hemingway, today, November 5, at 12 Noon in Room 217 Finley Center.

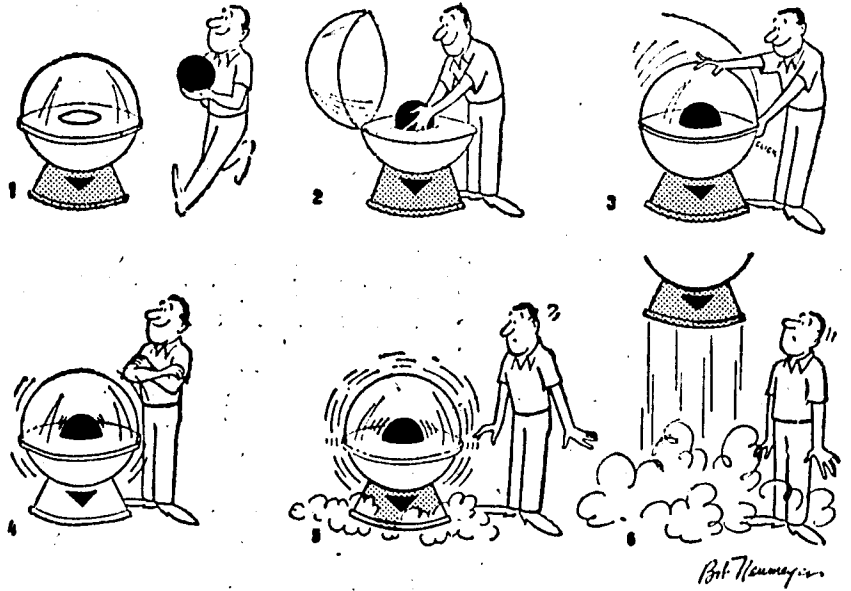
Author of "The Grandmothers," "Apartment in Athens," "Fear and Trembling," "Images of Truth," and other works, Mr. Wescott will appear at City College under the auspices of the College's Department of English.

for increased body strength in a given area, or for general all around muscle tone. It must be emphasized that there is a difference between weight training, body building, and weight lifting. Weight training is what has been discussed above, body building is for general all-around appearance, and weight lifting is the actual sport. Not wishing to offend those who consider themselves body builders, a clarification is necessary. Body building is fine; I don't believe it leads to flabbiness if discon-

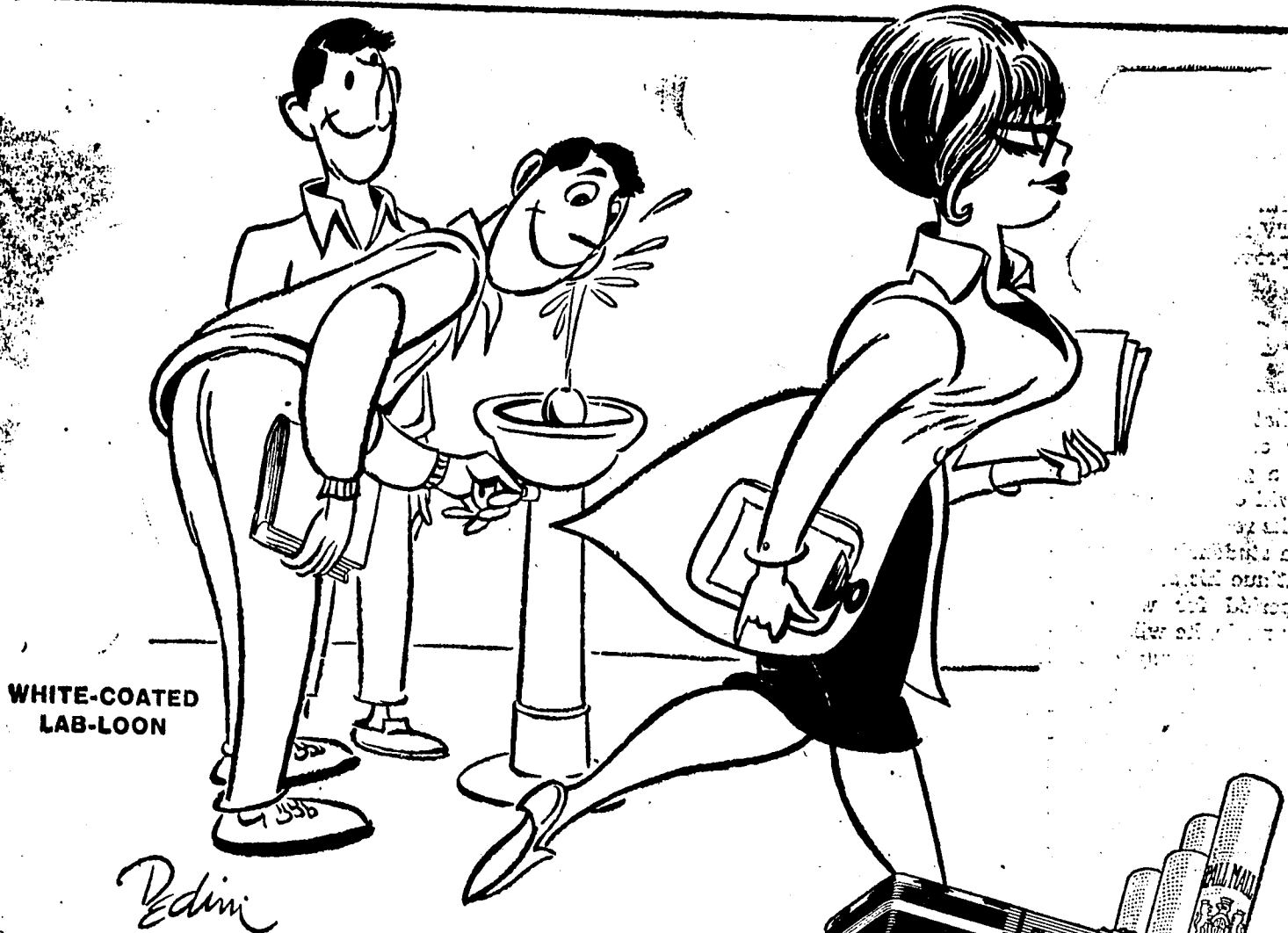
tinued, and it encompasses more than just the use of weights. Gymnastics can develop the body just as weight lifting can, and along with general exercise should be incorporated with body building.

In summary, let me emphasize that each man is his own judge. His coach can be his guide, but in the end it is he who will know if weight training has improved his athletic ability. This training should be used as a supplement, or let's call it a prerequisite, and should not be the bulk of his training. If he is a wrestler, then wrestling must come first. Any advantage gained by weight training is just that, an advantage and no more. In the end, it is the sport itself that he must be successful at, but every little bit helps, and if weight training can do it, then use it.

Ever Try To Clean A Bowling Ball?



Pall Mall Presents~ GIRL WATCHER'S GUIDE



CAMPUS TYPE II

Don't let this girl's costume fool you. She's not really a mad scientist. She's a girl—a real, live girl. It's just that she has to prove something—to herself and to her family.

She has to prove that she has a brain and that, if she ever has to compete with men on their own terms, she can do it—and win. But she really doesn't want to compete with men. In her heart she wants to attract men and eventually, marry one. The girl watcher should not let this situation disturb him, however.

If the girl is watchable, she should be watched, no matter what her motives or ambitions may be. The same thing is true of a cigarette. If it's smokeable, it should be smoked—and Pall Mall is the most smokeable of all!

Pall Mall's natural mildness
is so good to your taste!

So smooth, so satisfying,
so downright smokeable!



© A.T. Co. Product of The American Tobacco Company
"Tobacco is our middle name"