Tech Casabamen Dump Pomona

BY ROGER NOLL

Caltech's varsity basketballers picked up an ICGAC league victory last Friday by dumping Pomona's Sagehens, 67-62. This was their fifth victory for the Beavers on the Pomona court since 1952, when they last captured the league title. The victory gives the Beavers an overall 1-1 record this year.

Tonight the Beavers face Occidental on the Oxy hardwood at 8:15. The Tigers have one of their weakest teams this year, having lost by 25 points to Redlands and two points to Claremont-Mudd. Caltech has a good chance to win, and this one Occidental's attack relies on two features—consistent fast breaks led by Bill Gates and deadly outside shooting by forward Dave Nelson. In their own games, the Beavers are ferocious, but the Beavers will probably catch them napping, and could easily have a big upset.

Next Tuesday the Beavers host league powerhouse Whittier. The Poets have played fine, con-

Hong Kong
Hand to Speak

You take one small island and add a very large number of people. Then place this over-populated postage stamp along the coast of Red China, where it receives billions of disillu-
sioned Chinese every day (according to our propaganda). The result is the most crowded laboratory for the study of ex-
treme overpopulation and immi-
gration.

Harry Brunker, fresh from the laboratory, will chat with anyone interested in hearing about his visi-
tions soon Friday at the training
tables in Swope. He has dealt with China in Hong Kong, and is allegedly the world expert on student refu-
ges in Hong Kong, where he is a TMCA secretary.

Wiries Outlines Arms Problems

Dr. Jerome Wiesner, newly appointed Special Assistant to the President for Arms Control, gave the first report to the students concern-
ging what he thinks and about and approaches that the problems (controversial them).

Wiesner, officially tied by his new appointment, had to speak without knowing the final agenda. He instead talked off the cuff about maintaining maximum security for the nation, establishing an arms control program, and eliminat-
ing the complacency that seems to be "no adequate defense in a system.

He thinks that large steps must be taken in the direction of disarmament, steps which in his opinion would be in terms of their effect on the balance of power, because time is running out. It is becoming increasingly difficult to keep pace with weapons development; as a result, we always find our- selves dealing with obsolete problems.

Wiesner pointed out the prob-

Shearing Slated For Jazz Show

George Shearing, the Hi-Lo's and others will be featured at Caltech's Third Annual Jazz Con-

Six Candidates Vie Today For Two BOD Vacancies

Six candidates are running in an election today to fill two vac-

Hanessian, Next AFUs Visitor

BY MATT COUCH

John Hanessian, Jr., the sec-

Six candidates are running in an election today to fill two vac-

MUN Picks Six Delegates

The Dominican Republic, Cal-
three months learning about the United Nations, world problems, and the Dominican Republic, and then journey to Eugene to repre-

Strachey, British MP Talks On Deterrent

John Strachey, a Labor Party member of the British Parlia-

"The Coming Struggle for Power," "The End of Eu-

This year's model United Na-

California Institute of Technology

VOLUME LXII.
Pasadena, California. Thursday, January 19, 1961
Number 14

Flashi ng R.E.G.'s for the fans are the candidates in today's AFUs elections. In the first round would-be Representatives, Al Bernstein and Jim Segura, Athletic Manager (second row) are Al Bernstein, Tom Keil, and John Arudi.

Hannesian, Next AFU's Visitor Will Speak On Polar Regions

In 1958 he became acquainted with the International Atomic Energy Agency, and has just com-

Caltech's Humanities Division.

The third current series of art exhibits at Caltech will open to the general public in the lounge of Dabney Hall, January 16 through February 3.

The group of 37 serigraphs from the Holger Sorensen In-

terests of the United States, work of such internationally known art-

The Titans were much more
tung and talented Orange

Although the final agenda has not yet been established, such topics as Algeria, disarmament, nuclear testing, and the legiti-

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Before we reach this stage, it is imperative that arms con-

Serigraphs Show In Dabney Lounge

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**Tensions Rise In Power Duel; Donnelly Charges BOD 'CS'**

The Watertight Chairman announced yesterday that the new rules for the annual IHC-BOD waterfight have been completed and will be available in time for the IHC-BOD spring waterfront to be held this Saturday at 1130 a.m. at the Atheseneum lawn.

Due to the fact that IHC membership was changed, the rules have been changed to legalize a stickman team, plus one alternate; the presidents of both the IHC and the BOD must be active team members and not alternates.

Anything (including fire hoses) containing water in liquid form can be used as ammunition. The fight is 30 minutes long or until one side is completely drenched, while any team member hitting a viewer or judge becomes an alternate and his team then has only five members. Alternates may not fire back if hit with ammunition.

However, Bill Bauer, ASCIT president, announced Monday that the Board of Directors feels that the waterfight concerns the NEXT BOD and that the date should be postponed until the new Board takes office. The official statement of the IHC, as (Continued on page 8)

**THE TELEPHONE IS ONLY THE BEGINNING!**

The Bell Telephone System involves more than the telephone. Communications is now a wide field. Illustrating this fact is the opportunity offered by members of the Bell System Team.

Senior or Graduate Students will want to talk to our employment representative when he visits...
New Idea Advanced Work Interviews Scheduled

On How Fish Swim

Want to know why fish have an edge in swimming ability over people-type submariners? Try this for size.

For centuries it was conjectured that fishes swim by flapping their tails and using their fins as paddles. People accepted this vague description of the motion as a possible explanation for the principle of swimming, apparently unaware that fish with tail and fins removed swim almost as well as normal fish.

Recently, several biologists found themselves much perplexed by findings obtained in various investigations of fish swimming. They noted in general that swimming speeds attained by fish and mammals were incredibly high in relation to their available muscle power.

Seeking answers to these questions, some scientists invited small fish into their laboratories. Others selected fish or sea mammals as large as porpoises. Dr. T. Yaosun Wu, associate professor of applied mechanics at Caltech, went at the problem by studying the hydrodynamics of swimming bodies. He got some theoretical results he believed to be relevant to the answer.

Like other theories, this one needed testing. Parallel to this study, an experimental program was undertaken by Howard R. Kelly, aeronautical engineer at the Naval Ordnance Test Station, China Lake, Calif.

For this purpose, Glenn Bowles, engineer at the Pasadena office of NOTS, designed and built a machine that could simulate the wave motion produced by any fish. The experiments with the devices were carried out by Kelly and his colleagues.

How Fish Swim

Can oscillating propulsion come around for everybody, and no

New opportunities for engineers

NEW NAME: CHANCE Vought CORPORATION

The name used to be Chance Vought Aircraft, and it fit the company perfectly. No other name is more closely associated with aviation's growing years and great hours. But today, Chance Vought has expanded beyond its traditional field into other market areas, both military and industrial. The Aeronautics Division, which supplies the military, has expanded from Crusader to the Navy and is now a key player on other aircraft and missile projects, also headquarters for a company-wide L.S. submarine effort. The Aeronautics Division is deep into studies for manned space flight—Is prime vehicle contractor for the NASA Scout and a key contractor on the Air Force Blue Book—...An aggressive Electronics Division supplies components and systems to major U.S. defense and research programs. Vought Range Systems is a world-wide service organization with space-tracking, range instrumentation and many other responsibilities. Vought Research Center teeds basic knowledge to all divisions. A subsidiary—Vought Industries, Inc. is the nation's leading producer of mobile homes. Another subsidiary—Information Systems, Inc. produces industrial automation and process control equipment. National Data Processing Corporation, in which Chance Vought owns a majority interest, specializes in business data processing equipment, particularly in the banking field.

If new products, new objectives in your career plans, investigate the wider range of opportunity and greater security offered by Chance Vought Corporation. Please address inquiries to: Professional Placement Office, Chance Vought Corporation, Dallas, Texas.

HOW SMALL CAN YOU GET?

Today let us address ourselves to a question that has long napped and roiled the academic world: Is a student better off at a small college than at a large college?

To answer this question it is necessary first to define terms. What, exactly, do we mean by a small college? Is one that in order to be called truly small, a college should have an enrollment of not more than four students?

I certainly have no quarrel with this statement; four-student college must unquestionably be called small. Indeed, one could even call it silly if one knew what one meant. But I think there is such a thing as being too small. Take, for instance, a recent unfortunate occurrence at Crimscott A and M.

Crimscott A and M, situated in a pleasant valley nestled between Denver and Baltimore, was founded by A. and M. Crimscott, two brothers who left Ireland in 1706 to escape the potato famine of 1841. As a result of their foresight, the Crimscott brothers never went without potatoes for one single day of their lives—and mightily grateful they were! One night, full of gratitude after a hearty meal of French fries, cottage fries, hash browns, and aspargus, they decided to show their appreciation to this bountiful land of potatoes by endowing a college. They stipulated that enrollment should never exceed four students because they felt that only by keeping the college small...
Poetry Of Former Farmer, J. M., Shows Powerful Construction

BY ROGER NOLL

During the Christmas holidays, while rummaging through my late aunt's legacy of family bo alloms, I chanced upon an an~ique bound volume by a minor Victorian poet, James McLaugh~lin Crill. The poems seemed very interesting, so I began a small bit of research in to the life and writings of Mr. Crill.

Crill was born August 23, 1853, in Jefferson, Iowa, a rural section of Winfield, near Br ingwell. His father was a very poor farmer, and his schooling was limited when Crill was only three. Crill spent his early years as a shearing pig, but when he reached the age of 14 he left home, aspir ing to become a society reporter for the Times. After several fruitless months with little food, he landed a job as usher at the Wurland Theater in Los on, which proved to be the cal yst to his entering the literary world.

It was at the Wurland he met the famous actress, Vivienne Lu is de Fruster. Although she was 11 years his senior, she fell in love with him and financed his entry into the poetic circles. Using her money, he published eight books of poetry (more than Keats, Browning or Whi man), some of which was ever successful.

SEVERELY PANNED

Crill was always severely panned by critics, who charged him with everything from "plagiarism without enough talent" to "uninspired Thesaurus-usage." But mid-Victorian critics were harsh on many men, such as Glynne and Fruit, so we should not take their criticism for more than face value.

Crill believed his best poem to be "Fledgling," published below.

Crill said of this poem, in the introduction and as the author's preface to his book, "Parcels in the Dust":

"I wrote this poem while contem plating my piqued indigna tion at the turn of things in California. I could never hear Dizzy's long harangues, and this day his preachings never ceased. The poem itself reflects not but the frustration of life's unheal ing conflict; it blistles the proper understanding of ma\n by man and woman, and takes cog nition of the world's scientific thought. I am proud of it, and of its philosophy so cogently de scribed."

The poem, while admittedly political, is probably not that good. Here it is, and it is str on gly suggested that the reader peruse each line with care - the poem's full force is missed if it is read in less than two minutes.

FLEDGLING

By James McLaughlin Crill

Ah! the world! so young, so thoughtless, so mystery, un known! What fogginess of mind prevails Our soul from reaching out bey ond For yet but grasp the misty morn of thought. There you stand, you human form Of weakness and dismay. You wretched animal of Fat's craft and heartless stroke. But creased yet for naught but to not know. Flow, O river of remorse. And drawn the hopes of learning more.

For all is known that man is yet for to know.

The immediate impression from reading this poem is that Crill had a deep appreciation of conjunctions. In line four, for instance, he writes, "For yet but" rather than the simpler "to." In line eight, and the last line, his use of the con junction creates quite a prob lem in interpretation - one thinks heavily on the meaning of "yet for naught but" only to become more confused. In "yet for to know" the meaning is deeper, but more obscure. The connotation thus implied, that man's destiny has so far been "to know," that through the use of the world "yet"") this destiny is subject to change in the future, is certainly a con cept original In English poetry, and worthy pondering.

POWERFUL CONJUNCTIONS

The construction of the poem is like the use of conjunctions, strange but powerful. Many crit ics have contended that in the original version there was prob ably another line between lines three and four, but somehow (probably in the process of print ing) it was left out. On the other hand, if one investigates the poem more thoroughly, it be comes clear that the fourth line is but an example of poetical ampomotopha. In reading the first part of line four, one actu ally experiences the "misty morn of thought."

Several members of the "Lost Line" school referred to above also claim that the second-from last and third-from-last lines have been inserted in this poem, actu ally belonging in some other work in the book - again, the reader would do well to grasp the misty morn of thought.

The immediate impression from reading this poem is that Crill had a deep appreciation of conjunctions. In line four, for instance, he writes, "For yet but" rather than the simpler "to." In line eight, and the last line, his use of the conjunction creates quite a problem in interpretation - one thinks heavily on the meaning of "yet for naught but" only to become more confused. In "yet for to know" the meaning is deeper, but more obscure. The connotation thus implied, that man's destiny has so far been "to know," that through the use of the world "yet"") this destiny is subject to change in the future, is certainly a concept original in English poetry, and worthy pondering.

(Continued from page 8)

Fish Swim On: Science Trails In Watery Wake (Continued from page 3)

In a water tunnel at the Caltech hydro lab.

The motion of the mechanical fish was produced in a pliable foil of copper (or of other flexi ble material) about four inches wide and 12 inches long, by several crank rods working off gears on a drive shaft.

Fish swimming was simulated by varying the frequency of the undulations of the foil which was immersed in a stream of different velocities in a water tunnel. To make the resulting flow visible, a purple dye was re leased at the front edge of the foil, transported by the flow along the foil surface, and mixed with the resulting eddies in the wake. A major portion of Dr. Wu's theory was tested in this experiment. It was found that the theory is in good agreement with the experimental result. Having ex tremely the soundness of Dr. Wu's theory, the Caltech engineer is applying it to calculate the more efficient form of the motion under various swimming conditions. His work is supported by the Office of Naval Research.

Here is the emerging concept of how a fish swims:

The fins do not produce propulsion, they serve to control and stabilize the sides and vertical motion, much as alligators serve the same purpose in air.

The main propulsion comes from the fish body. The wigg ling motion produces a pressure difference across the two sides of the fish. Forward thrust is achieved if the body is angled so that the side of greater pressure does the pushing.

This thrust necessarily must become the vicious drag from the water flow over the body sur face if the fish is to maintain its swimming speed in water.

(Continued on page 5)
Candidates State Their Objectives

If upperclassmen remember the election speeches of last year's BOD candidates, they will remember many pledges to “bring the BOD to the students.” I believe that the time has come for the students to go to the BOD if they want something done. For too long now the BOD has only seen what can be done about parking problems, exams, and room security, while those who have been forced, because of lack of space, to park in areas not designated for student parking, and I feel that the BOD is a good place to start looking.

Many Techmen are looking in their criticisms of the Institute. I am most concerned with its public image, and I will try to best to eliminate any complaints I hear.

Routine qualifications: I feel that I am qualified to care for the bulletin board and run the errands of the BOD. I'm a sophomore.

Ronald Counsell

One of the things that brought notoriety to past Representatives at Large was the state of the Glee Walk bulletin board. Campaign promise: I shall keep it up-to-date and informative. The Chariot Drive has already been held, but the Representative at Large also conducts the Red Cross Blood Drive. Campaign promise: I shall do my utmost to cause the greatest degree of blood-dumping. Platform: I stand on the above, plus my interest in representational ASCIT activities. Like others, I have not always understood ROD actions and I would like to act as representative of the August body and to become more familiar with BOD procedures. Qualifications: I'm a sophomore.

Jim Sagawa

With only about seven weeks left in the current ASCIT administration, many of the students may be led to believe that this election for Athletic Manager is unimportant. This is not the truth. I believe the Athletic Manager to be elected will have many things to do in these seven weeks. Besides being on the BOD there continues to be the problem of straightening out the activities, awards, etc., with Whiting Co. and also thrusting out the problem of what Tech should do about football. There has been some talk going on that we should drop football, and if not, we should schedule for our games. Needless to say, if I'm elected, I will do my utmost to support football and will find out just what is the stand of the faculty on not only football but the whole general sports picture is.

John Arndt

During the past 39 years, Caltech athletic teams have been uniformly rotten. During this period, the ASCIT Athletic Managers have been of one uniform type, i.e., the "athletic type." It is quite probable that there exists some correlation between these two situations. I suggest, therefore, that the student body try electing a different type of Athletic Manager, i.e., the "un-athletic type." I feel that I am of this type, as I have never been a member of any school team and at the present time do not even take P.E. (medical excuse). I, therefore, suggest that the student body try out a fresh approach for the next eight weeks and elect me as Athletic Manager.

Allen Bernstein

Fish!

(Continued from page 4)

Of course, the fish must use energy in keeping up the undulating motion of its body. A part of this energy goes in to the useful work which is equal to the thrust multiplied by the swim speed, the remaining part of this energy is spent in energizing the flow and creating vortices in the water, the latter part inevitably being wasted. The ratio of useful work to the total energy put in by the fish gives the efficiency of swimming.

The theory indicates that in order to put out enough thrust to overcome the drag and to do this efficiently, the body motion of the swimming fish of wave form which propagates from the front to the tail with the wave speed faster than the speed of swim. The amplitude of the wave should grow larger as it travels down the body.

In other words, Dr. Wu ex-

(Continued on Page 7)

Glee Club Slates Many Concerts

Under the leadership of Olaf Frodsham, director, the Caltech Glee Club has begun its second term series of concerts. The first official concert of this year was held Monday night, January 16, for the Caltech Service League. The Glee Club sang six songs, including a selection by Ibrahim and the Caltech Alma Mater.

Other concerts for this term include a Politechnical High School Assembly today before lunch, the Pasadena Women's Symphony Association next Wednesday, and the Institute of Dalghia Concert a week from Saturday.

Glee Club members are also scheduled to go on a tour from March 19-25, during the spring recess. The tour will probably be in the San Francisco area.

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% "Give a Man a Tough Job and a Chance to Go Somewhere...

...And He'll Break His Neck to Do It"

In 1958 when Bill Ebben was only a few months away from his engineering degree at the University of Detroit, he was in touch with 15 prospective employers.

He chose the Michigan Bell Telephone Company because: "This company offered the kind of engineering management opportunity I wanted—and they weren't kidding."

One of Bill's first assignments was a survey of Michigan Bell's big Central District to find out how long available building space could accommodate the switching equipment required by rapid telephone growth. "I was given any instruction," Bill says, "I was just told to do the job."

So Bill did it. His report became the guide for planning and budgeting future construction.

On his next move, Bill proved he could handle supervisory responsibility. He was sent to head up a group of seven engineers to design a new long distance switching center for Saginaw, Michigan—a $4,000,000 engineering project.

Today, Bill is on the staff of Michigan Bell's Program Engineer. He's working on a system for mechanized control of telephone construction costs.

How does Bill feel about his job? "Give a man a tough job and a chance to go somewhere—and he'll break his neck to do it. Of course, I don't think I'm going to be running the whole thing next year—but I'm getting every opportunity to hit the top. You don't worry about opportunity here—you worry about whether you're as big as the job."

If you're a man like Bill Ebben, a man who can rise up a job, figure out what needs to be done, and then do it—then you should get in touch with one of the Bell Companies. Visit your Placement Office for literature and additional information.

BELL TELEPHONE COMPANIES
By STEVE LUNER

If you've been out to the Gym recently, you heard the sure voice of a pseudo-drill instructor coming from the pool area, then you know that swimming practice has started again in preparation for the first meet on February 18 at UCLA.

Last year's SCIAC champs are hoping to repeat in that role and the early workouts give them a good start in that direction._indications so far are that the team will be fairly well balanced and should again win the conference title.

Heading the list of returning swimmers — only two were lost by graduation last year — is senior Gary Tibbets. Last year Tibbets took second in both the 220 and 440-yard freestyle events in the Conference meet, as well as swimming a top-notch leg on the 400-yard freestyle relay team.

This year will be rougher in that bracket as Oxy and Redlands both have excellent returning medium distance men. Marshall Buck is expected to repeat as conference champion in the 200-yard breaststroke, while Bill Hogan and possibly Al Hunter will be able to give him some exciting competition.

In the backstroke, Gary Turner is returning, and with a little luck could take the conference in that event. Last year he was second to Rick Morse of CMC, who has since graduated. In the butterfly, Bill Howard, Marshall Buck, Gary Turner, and possibly Peter Mayer will probably take all the marbles.

Bright spot in this year's freestyle event is Sophomore Bruce Chinman, who last year set new freshman records in the 50-yard and 100-yard sprints. Also up from last year's fresh team is Larry Dashek, adding much to the above events as well as skating out a place in the 220-yard and 460-yard events. Gary Mitchell, too, will round out the complement of freestylers.

With the exception of the diving events then, Caltech's team will be as strong as it has been in past years. The league schedule will be a little tougher this year, though, since the other teams in the league have generally gained strength.

Another important event in the first meet is a dual with UCLA and Los Angeles State at UCLA on February 18. Last year the Beavers lost to UCLA by the point margin caused from losing the 460-yard medley relay by six inches.

Basketball

(Continued from page 1)

sparked enough hustle and desire to thwart the Orangemen's attempt at scoring 100 points. In a display of questionnoble sportsmanship, the visitors tried to speed up the game in the last quarter, continually utilizing an all-court press, in an attempt to run the score over the century mark.

Mr. Tyler remarks that the population explosion in Africa has not yet died up to a finite, underpopulation being the major problem. "It was amusing, listening at a representative of the Planned Parenthood Foundation from out of the country," he chuckled wryly. Yet few men seem to understand the significance of an exponential curve.

The main problem seems to be, "How are we going to keep the boys back on the rubber plantation now that they've seen Merv-erick." This problem, however, may be safely left to Firestone, whose 50-year lease on half the plantations harnesses them to the problem of where the next batch of rubber is coming from.

Tyler's successor in the speaker's program is the AUPS representative John Hennessey, dis- couraging on Scientific Careers in Polar Regions. Since Hennessey is neither a scientist nor an arctic explorer, his knowledgeable talk should provide valuable insights.

One need only show up in the Chandler Gymnasium at 6:30 Monday to parakeet of these gems of food and wisdom.
Fish On The Move; End Near

(Continued from Page 5) plained, the point of the fish body which travels the fastest outwards from its mean position should move at a speed faster than the speed of swim. For what is the equivalent to this statement, the quantity called reduced frequency (which is defined as the length of the fish multiplied by the frequency of the tail beat and divided by the speed of the swim) should be greater than one.

A certain observation on swimming trout provides this information:

Trout length — 1.5 inches; tail beat frequency-26.4 inches per second. Trout length — 11 inches; tail beat frequency-16 per second; speed of swim-26.4 inches per second.

The reduced frequencies of these two cases are, respectively, 1.36 and 1.50. Both numbers are more than one and therefore are well in support of the conclusion of the theory. For wide varieties of fishes, this quantity is perhaps not much greater than one.

From this it is not difficult to realize that tail beat frequency is roughly proportional to swim speed, as noted by several observers. At slow and moderate swimming speeds, the theory indicates that efficiency can be quite high — of the order of about 80 to 90 percent.

From my study of the structure of the vortex wake behind the fish, Dr. Wu also found (in an idealized picture) that by neglecting the viscosity of the water, the vortices shed by the fish result in a jet of water that moves quite rapidly downstream from the fish when it develops a forward thrust.

This backward jet current brings with it a backward momentum. Hence by the mechanical principle of action and reaction, a forward thrust results as the reaction. In reality this jet is slowed down by the viscosity of the water, and virtually disappears when the fish ceases to swim. However, the jet can be observed if a fish is fighting hard to get off a hooked line.

Another question concerns the viscous drag experienced by a swimming fish. Many observers contend that fish and sea mammals apparently experience unusual low drag.

A possible explanation, according to Dr. Wu, is that the pliable skin or the waving motion of the fish may maintain a laminar flow and prevent the development of turbulence in the water along its body. This turbulent friction and drag are several times higher than laminar skin friction.

Recently, Dr. Wu added, scientists discovered that turbulence is suppressed in water that flows over a pliable rubber wall covering a rigid surface if there also is water between the wall and rigid surface. On the other hand, Thomas G. Lang, aeronautical research engineer at the Pasadena NORDS office, found in experiments with a trained porpoise that the drag of the porpoise is essentially the same as that of an inanimate body of the same size. Whether this finding will completely let off the steam of this highly attractive subject remains to be seen, Dr. Wu said.

GETTING DOWN TO CASES...WITH AN ELECTRONIC COMPUTER

A young lawyer may spend many years searching through the countless volumes in a law library before he ever gets a chance to plead a case. His job is to research the cases which may provide legal precedent. It's a very necessary but tedious task.

Recently it was demonstrated that an IBM computer could accomplish electronic retrieval of statutory law. Nearly 2,000 statutes pertaining to a specific area of the law were stored in the computer memory. In response to inquiries, the computer searched its memory at electronic speed and an instruction pointed out either citations or the full text of relevant statutes. This was accomplished in minutes. It might have taken a young lawyer the entire day.

Putting computers to work in unusual ways is not new at IBM. Computers are now doing remarkable jobs in interesting and important areas of business, industry, science and government.

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You naturally have a better chance to grow with a growth company.

NOTES

Editor’s Note:

3. The BOD is the Board of Directors. It is the governing body of the Institute.

4. C.S. is a contemporary Tech phrase meaning “Coltech sissy.” The phrase was coined in the 1960s.
Ricketts Whips Darbs, Leads Discobolus Race

Ricketts defeated Darbs, 60, in a recent Discobolus football game to take undisputed lead in the Discobolus race. With one second to go on the Darbs five-yard line, Scuvor Jim (Tex) Morrow threw a wobbly pass, which, when deflected by Darb Dave Olson, fell into the hands of surprised Jen Burke.

Ricketts saved its strength for the last series of plays. Successfully outmaneuvering the Darb line, Morrow missed running and short passes effectively, to set up the final touchdown, after Chuck Tailor had intercepted a Siegel pass at widefield to give Ricketts the ball. Hay was sparkplug of the Ricketts line at center. He was influential in stopping many of the Darb threats.

Page, next in line, delivered a challenge in water polo, tennis, and handball. Both Houses are challenge in water polo, tennis, and handball. Both Houses are

Errata

Last week’s feature story, headlined “Faculty Saddles, Not Bad Eyes, Cause Problems,” was a fictional article written by Tom Managing Editor Roger Nell.

Interviews

(Continued from page 4)

Washinghouse Electric Corp.-

Bill, Mil/EE, ME, Ph; Summer-

Jr. (*)—Citizenship required for em-

ployment.

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Poet’s Eulogy

(Continued from page 4)

thought, to the somewhat comforting, more realistic thought that “For all is known that man is yet for to know.”

Critt died soon after “Parcels in the Dust” was published, on the eve of Saint Patrick in 1893.

He left no heirs to his poetical works, and was never married. His literary career is matched closely by his name, James McLaughlin Critt: a modest beginning, a common middle, a strange end.

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JPL will conduct the missions, utilizing these spacecraft to orbit and land on the Moon, to probe interplanetary space, and to orbit and land on the near and far planets.

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Wishing you a Merry Christmas and a Happy New Year!