Stephens, awarded fellowships. Yudelson, were recently chosen to participate in the sixth fellowships are intended to enable the recipients to continue through el and then enter teaching.

He plans to study next year at

A few minutes after nine p.m.

He cited three methods to

The Caltech Glee Club rounded

The vast majority

The Caltech Glee Club rounded

Three Seniors Win Fellowship

Three Caltech seniors, Tim Stephens, David Ponser, and Jer-

Three Caltech seniors, Tim Stephens, David Ponser, and Jer-
Editorial

From Halls of Montezuma...

In seemingly all aspects, the newly independent country of Nigeria had a good chance to develop into a democratic, West­ern-oriented, capitalist nation. It appeared to be one of the few justifications for European imperialism in Africa; whatever harm was done by the Congo, was redeemed by the progress instilled in Nigeria.

Sure, Nigeria had its tribal and religious problems: Moslems in the North hated Southerners, the Easterners accosted the West­erners, petrifying and mentally putrifying aspects of bourgeois pres­ence. But its government, up until a few days ago, was a parliamentary democracy, its econ­omy was on a sound foundation, and its foreign policy was mod­erate. Nigeria was a former colony with fewer problems than most.

Now, however, the military has seized control, and although it may be careful in its exercise of power, democratic tradition has been lost. It is not a foregone conclusion that important democratic continuity had been interrupted if Nigeria were surrounded by sable states; in reality the opposite is the case.

It is naturally assumed that our form of government, obviously the most desirable there is, can be instituted anywhere; how obvious is it that Vietnam can do it; Russia, for example, has not even tried. But aside from the obvious, there are two other justifications for European imperialism in Africa; whatever harm was done by the Congo, this is redeemed by the progress instilled in Nigeria.

Those seething abominations which plague mankind, causing despair, confusion and revulsion to well up in the hearts of condemned souls: those terrifying, beast­like, petrifying and mentally putrifying aspects of bourgeois pres­sures, are in the mortal breast of the European. Those seething abominations which plague mankind, causing despair, confusion and revulsion to well up in the hearts of condemned souls: those terrifying, beast­like, petrifying and mentally putrifying aspects of bourgeois pres­sures, are in the mortal breast of the European. Those seething abominations which plague mankind, causing despair, confusion and revulsion to well up in the hearts of condemned souls: those terrifying, beast­like, petrifying and mentally putrifying aspects of bourgeois pres­sures, are in the mortal breast of the European. Those seething abominations which plague mankind, causing despair, confusion and revulsion to well up in the hearts of condemned souls: those terrifying, beast­like, petrifying and mentally putrifying aspects of bourgeois pres­sures, are in the mortal breast of the European. Those seething abominations which plague mankind, causing despair, confusion and revulsion to well up in the hearts of condemned souls: those terrifying, beast­like, petrifying and mentally putrifying aspects of bourgeois pres­sures, are in the mortal breast of the European.
HorneyTechmen to Appeal to Computer

"Horney" dates are obsolete since operation Match has come to the Los Angeles area. With the help of a questionnaire and an IDM 2000, a student can now pick "his" ideal date from hundreds of thousands of other persons on file with Operation Match. Not a socialized "marriage agency," Operation Match is designed specifically to "remove the obstacle of incompatibility from college dating."

The start
Approximately a year ago Operation Match got started as an unincorporated project for Jeff Tarr, a sociology student at Harvard. He and Vaughan Morrill, a senior at Denison University, founded the Operation Match organization.

The idea
Tarr, a sociology student at Harvard, has been involved in a number of organizations. He and Vaughan Morrill had the idea of doing something to remove the obstacle of incompatibility from college dating. "To become part of Operation Match, you only have to do is answer the questions, and then you can get the list of people you would like to correspond with."

Lombard Thursday, March 10, 1966

Velikovsky vs. The Bigwigs: Will He Win?

Who, in 1963, predicted that it would be found that the planet Jupiter emits radio signals, a fact which was confirmed in 1965? The answer is Immanuel Velikovsky.

JPL's Big Bang Theory

It is said that Velikovsky is an outcast in the scientific community. This is not true. In 1961, JPL announced that Velikovsky's theory of a hot sun expanding and colliding with earth would be confirmed. In 1963, JPL announced that Velikovsky's theory of a hot sun expanding and colliding with earth was not confirmed.

All by his lonesome
It is true that Velikovsky has not found support for his theories in the scientific community. This is not true. Velikovsky's first book Worlds in Collision, which has been translated into twelve languages, has been awarded an International Book Award.

Censorship
The same year and in response to Velikovsky's book, the American Association for the Advance of Science, which is the group that publishes the American Journal of Science, decided that any publication that presents new scientific theories should not be allowed to be printed without the approval of the association's leadership.

Operation Match
Although the book turned down by the association was written by Velikovsky for his own publisher, the association ultimately lost its case.

Future
The theory that has brought about this censorship is the theory of Velikovsky, which states that the earth was once inhabited by human beings.
The baseball team won. No, there was nothing flakey about the game, except an overwhe- ming hitting attack that whacked out eleven runs, a fine round performance that allowed only one run, and a defense as good as it’s been all year, committing only three miscues.

Perhaps answer should be made to those cynics who point out the fact that the contest shrank to four innings because of darkness as the time-end of the Biola blowout. This was the second game of the season, the horsehiders playing before a 21-8 lead. Lloyd of Ricketts. The Scurvs led at halftime by what was probably a record low score, 9-2. Lloyd came back with two quick scores, but three baskets resulting from steals by Ira Herskovitz helped move the game, except an 8

Webmen lose to Champion CHM

Caltech met Claremont-Mudd in their first SCIAC dual swim meet of the season on Friday. Unfortunately, the start was not a happy one, as the Webmen lost 71 to 21. CHM, the champions of this year’s league relays, allowed Tech only two first places. Larry Anderson won the 50-yard, freestyle in 23.8 second and then came back in the 100 to touch Johnstone of CHM in 52.1 for second behind Henry Detwiller of Tech. Detwiller’s time was 51.8 sec.

CHM dominated the meet from the start by taking the medley relay in league-record time of 3:57.6. Frank Greg Wright, who has been swimming well all year and already holds one school record and a share of another, lost two close decisions to CHM’s Chip Hastings in the 200-yard, backstroke and the 200 Individual medley. In each case Harding beat Wright by only eight-hundredths of a second.

With their toughest meet just finished, the Webmen, with a good shot at second place, should do much better in the league meet to come next term.

**Ricketts Wins, Lloyd Loses**

Ricketts defeated Lloyd in Di- caborne backfield by a score of 27-23 in a Sunday game. The first half was marked by cold shooting, and the only field goals were three baskets by Larry Daley of Ricketts. The Scurvs led at halftime by what was probably a record low score, 9-2. Lloyd came back with two quick scores, but three baskets resulting from steals by Ira Herskovitz helped move Ricketts into a 21-6 lead. Lloyd fought back in the fourth quarter, but could not overcome the large story lead.

Frank Potter and Ed Rehbein were impressive on the boards and in keeping Grey Jennings and Les Fishbone to only nine points. Both sides played very hard as shown by the 29 fouls committed in the game.

Fleming will be the next house challenge but it will have to wait until next term.

**Editors’ note:** We regret to announce that there will not be an issue of the California Tech next week. This announcement is made in or- der to fill this space. Thanks.

**Final Basketball Stats**

**To what do you owe your charm, Chadwick?**

**Perhaps to my Security Bank Checking Account.**

**Father keeps filling it with money.**

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**Our message:** If you don’t have Chadwick’s charm, a special checking account at Security Bank is a brilliant idea. There’s no minimum balance required and it costs only 15¢ to write a check. It’s the checking account for people with frugal friends.

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[For more information, visit Security First National Bank.]
Thursday, March 10, 1965

C A L I F O R N I A  T E C H

Cross Sets Two Records

Caltech lost a close track meet to Pomona 78-60, but the Beaver distance runners outdistanced themselves in coming through with fine performances. Pete Cross broke the Caltech mile and two-mile records during the dual meet. His time of 4:21.9 in the mile broke the record set by Em- mering in 1967 (4:22.7). Running more than 30 yards ahead of his competition, he had to sprint his last 440 and was clocked in 62.3 for the lap. After such an outstanding performance in the mile, Cross surprised everybody by setting a blistering pace in the two-mile. Informed at the end of the seventh lap that he was on another record-breaking run, Pete sprinted the last lap and was clocked in 9:09. Caltech's Lane Mason was right on his heels with a 9:33A, which is a new Tech frosh record. The official timer for the event was a Mr. Mason (no relation to Lane), who set the old two-mile record of 9:46.1 in 1961.

In the final standings Pomona won on its strength in the field events and the sprints. Dennis Schmerzheimer, who has been one of the most consistent runners for Coach Lalluch, came through with another fine performance in the 880, winning in 1:58.5. Gus Schultz, another of the fine crop of frosh, finished first in the 120-yard hurdles. Tony Gharrett, with the best throw of his life, came in second in the javelin with a distance of 182 ft. 8 in.

Jim Stanley, running in his first, meet of the season, placed second in the 440 with a time of 51.5. Freeman John Cummings looked strong in the 100 intermediate hurdles but was nipped at the wire (10.75). This Tuesday Caltech hosts Pasadena College and Hola in a triple-deal meet. The event will start at 9:00 p.m.

Tennis Season Poor

In a rapid fire series of matches timed to beat the final exam deadline the Caltech Varsity tennis team had successive losses to the Tiagos and Pressing teams. Timed to beat the final exam deadline the Caltech Varsity tennis team had successive losses to the Tiagos and Pressing teams.

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Rugby Explained

by Hank

As a few readers may have noticed, there have, in the past few seasons, appeared in the California Tech several articles about the Caltech rugby team. If you were one of those who didn't read the articles, you were probably mis- titled by this foreign game. There is very little doubt that anyone played at Caltech today at 5:00 p.m., so anyone interested in going my find this article helpful in explaining the game.

The team

A rugby team consists of 15 players. Usually they are divided into eight forwards and seven backs. The first row of three forwards consists of one prop on each end and a hooker in the middle. This can be compared to the game's forward pass in American football. The second row is made up of a breakdown on each end passing in at an angle, with two second row forwards in the middle. They are like ends and tackles and provide most of the forward charge. The halfback (to be explained later). The final row is the number eight who can best be compared to a linelbacker.

The back who stays near the scrum and receives the ball is the scrum-half and has duties similar to the split-T quarter- back. Angling back from the scrum are the standoff, the inside center, the outside center, and the right and left wing. They are all like halfbacks, while the right wing fullback is like a safety.

The play

The idea of the game is to move the ball over the goal line or to kick it through the uprights similar to football. The ball may be carried, kicked, or fumbled, but no forward passes are allowed. The backs usually try to lateral the ball from one to another, moving out to the wing, who tries to run around the opposition or kick the ball to a more advantageous position. Kicking and position play very important parts of the game. Unlike in American football, any- one may handle the ball, though usually the backs are the ones who do all of the running. When tackled, the runners has to release the ball, and play continues from there. The only stops are for penalties or after scores.

Scoring

Scoring is done in several ways. When a player touches the ball down in the opponent's end zone, it is called a try and counts for three points. After each try a conversion attempt is made, but it has to be made from a point directly behind the spot where the ball was touched down. This counts for two points. (Touching the ball down in your own end zone does not score for the other team.) Finally, drop-kicking the ball through the uprights is considered the most suitable course of the game or a penalty kick also count three points.

A rugby scrum is a "rummication" which are used in rugby, the scrum and the lineout. The scrum takes place after minor infractions of the rules. The forwards interlock arms and shoulders and push and pull against a similar pack of opposing forwards. The ball is dropped into the middle of the scrum, and the forwards try to "hook" the ball back with their feet to the scrum half so the play can start.

The lineout is an in-bounds play. The two sets of forwards line up in two lines perpendicular to the in-bounds line. The ball is thrown down the middle, and again the forwards try to get the ball back to the scrum half.

Hopefully this explanation has cleared up some things. If you are interested in playing or just watching, come out to the game and take part. They are even almost human.

IH Volleyball

The volleyball season has finished another week, and the results have been what was expected, with one major exception. Lloyd, having come along nicely all season, upset Fleming in two very tight games. After blowing an 11-lead in the first game, Lloyd came back to win 15-13. In the second game the Glems took the early lead at 10-2, but Lloyd came back to win by a hair 16-14. It was an all-around team effort that won, with John Walter and Bob Vance shown as the aces.

Page and Ruddock continued to win, although Ruddock got a real scare from Dalney. The Darbs amazed everyone by whipping the first game 15-0, but then turned sloppy and lost 15-1. The last game was extremely close, being tied as late as 10-10, but Ruddock rallied to come up with the last few points to win 15-11. Page has not lost a set yet.

Fleming and Ricketts played a very good match, the Flies finally winning in the third game by the score of 15-13. They had lost the first 15-6 and won the second 15-4.

At this writing Page is favored to win and Ruddock to come in second. Lloyd, having won four, hasn't played the top two teams yet. The horns could break into the top with two excellent games.

More Art

(Continued from page 2) with the New York Philharmonic.

The prices for the concerts are $2.50 for the public and $1.50 for students. Concert tickets may be obtained through the mail from the Pasadena Art Museum at 46 East Green Street, Pasadena, California. A letter should be made out to Encounter.

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Light Thrown on Photoelectricity

"Anyone who has ever had a sunburn is familiar with a photoelectric reaction." With this phrase Dr. George S. Hammond, Arthur Ames Noyes Professor of Chemistry at Caltech, began his lecture on "Light as a Chemical Reagent." A day at Black rock Auditory. Sight is also a photoelectric reaction, for when we see our蚱odsSicipants eyes the cell generate a nerve impulse to the brain.

Not one, but two, milestones are on their way to a major accomplishment. The first is to conceive of the, "new" and chemical reaction, and is often used to do the "hard work" of the chemist. For instance, a synthesis which would require a half-dead, or more demanding steps will be done by methods that may require a simple photochemical process.

Two interesting characteristics of photochemical reactions are their speed and their selectivity. The time lag between the absorption of a photon by a molecule and the appearance of the products is often on the order of a thousand of a second. The selectivity of a photochemical reaction is so great that often a photon will cause only a few specific reactions in a complicated system to react, much like burning a single straw in the middle of a big pile without affecting the straws around it.

Exotic shapes

Probably the most important class of photochemical reactions is the one in which the energy of the reaction is contained in the molecule. These include the energy of the photon. This is important because one might be possible to store solar energy in such a way.

We are at present using up earth's supply of fossil energy (as stored by photosynthesis in coal and petroleum) at an alarming rate because of our ignorance of the photochemical processes may lead us to an answer to the possible energy deficit of the future.

Hammond went on to describe children's (high school and younger) interest in the use of light in photochemical processes which would require a storing of energy in the molecule, and thus store the energy of this huge mass would be.

Conclusions for teachers when teaching photochemical processes may lead us to an answer to the possible energy deficit of the future.

The owner had obtained some small plastic birds of dynamite. There is also the chance you may have to be unemployed!

There are two major types of photo-chemical reactions: (1) homogeneous and (2) heterogeneous. In the former, the reaction is carried on in a uniform medium, such as water, and in the latter, the reaction is carried on between dispersed particles and the medium. In both cases, the reaction is carried on between dispersed particles and the medium.

A two-day conference has been scheduled by the California Society of Professional Engineers to discuss the problems of the stability of the employment market for their profession. The conference, to be held March 24-25 in the U.C. Davis campus, will be attended by some 200 professional engineers, educators, and personnel executives.

According to Alfred C. Tanger, general chairman of the conference and Dean of Engineering at UCSD, the detailed examination of engineering employment problems will also cover the effect of training and professional competence on the engineering market.

In addition to employment stability, the conference also has two other objectives. The first of these is to study the problem of technical education and its relation to engineering education. The last objective is essentially a formulation of policy of public and private agencies in the engineering education practices.

This will be studied by the use of panels, headed by such prominent engineers as Professors Paul Baltin of Claremont Graduate School of Economics, and Jack Mason, Director of Engineering General Dynamics at Pomona.

Other groups at the conference include Albert Tielburg, of the State Employment Relations Agency and Robert J. Kruse from the CSPE board of director who will serve as vice-chairman.

Trollist Drollness

(Continued from last week)

In a small town in Minnesota, there was a very peculiar bar. The owner had obtained thousand of small plastic birds of ten varieties, and was placing one of them in each mug of beer. Of course, he was a prize for the collection of a complete set.

The owner noticed that certain brands of beer were selling unusually, he decided to experiment with small plastic birds be put in the different brands. After six months of experimenting, he concluded, "A hint in the Hamms' is worth two in the Anheuser.

Europe


PUBLISHING CAREER?

We have an immediate opening for a male college graduate who has completed his military obligations (sic), and who is interested in book publishing as a career. An extensive training program includes travel throughout the country; sales promotion, editorial procurement, and market research are the basic ingredients of the training program with later specialization anticipated in one of these areas. For an on-campus interview please send resume to James Walsh, One Park Avenue, New York, New York 10016.