

ALUMNI NEWS

The Lady Who Licked John L. Lewis

In *Collier's* for June 4, 1949, Sam Stavisky, labor writer for the *Washington Post*, has an article on "The Lady Who Licked John L. Lewis"—Ruth Brown Boyd, wife of Jim Boyd '27. It's the story of how, and why, the Boyds stuck it out, through 15 payless months, until Jim finally won Senate confirmation of his appointment as Director of the Bureau of Mines (E & S, April '49).

"There never was any question in our minds as to what we ought to do," says Ruth Boyd. "You just don't step out in the middle of a fight. Sure, Jim was offered an easy way out, and a higher paying job (with the Atomic Energy Commission), but money isn't the only thing you work for. You've got to live with yourself, and with your children. The children must learn by example the decent thing to do, and what integrity stands for."

George Felbeck's Award

Dr. George T. Felbeck, Ph.D. '43, Vice-President of Carbide and Carbon Chemicals Corp., New York, last month won the 1948 John Wesley Hyatt Award for outstanding achievement in the plastics industry.

The annual award, consisting of a gold medal and \$1,000, went to Dr. Felbeck for engineering developments leading to the large-scale manufacture of polyethylene resins and plastics. His work was primarily instrumental in relieving a wartime national emergency—the procurement by the United States Navy of polyethylene insulation in sufficient quantity to complete its vital radar installations. The Navy needed polyethylene for the production of coaxial cable and other components used in radar equipment. Other materials had failed in this job; polyethylene could do it, but was available only in small quantities.

Dr. Felbeck directed the design of the plant and the high-pressure equipment for the polymerization of ethylene on a large scale and in a continuous process. This wartime accomplishment has helped to establish

a new branch of the peacetime plastics industry. The plastic has already become a major raw material for electrical utilities, electrical manufacturing, packaging, household accessories, and communications.

Dr. Felbeck, who was placed in complete charge of operation of the K-25 Gaseous Diffusion Plant project at Oak Ridge in 1943, now supervises—in addition—the Y-12 Electromagnetic Plant and the Oak Ridge National Laboratory. All three of these installations at Oak Ridge are operated for the Atomic Energy Commission by the Carbide and Carbon Chemicals Corp. Dr. Felbeck's other responsibilities are primarily in new process development for Carbide and Carbon.

Frank Jewett: Un-Retiring

Since his retirement as Vice-President of the American Telephone & Telegraph Co., President of the Bell Telephone Laboratories, and President of the National Academy of Sciences, Frank B. Jewett '98, of Short Hills, N. J., has been resigning many of his trusteeships and directorships. One of the Institute's oldest living graduates, Frank Jewett has served as officer, director, or trustee of such impressive institutions as Princeton University, the Carnegie Institution of Washington, the Woods Hole Oceanographic Institute, Tabor Academy, and the New York Museum of Science & Industry.

Recently, however, Mr. Jewett reversed the retiring process and *added* another trusteeship—at the Battelle Memorial Institute, Columbus, Ohio. His most recent honorary degree—speaking of honors—was a 1948 LL.D. from the University of California.

Alumni Fund Dance

The Spring Sport Dance sponsored by the Alumni Association, and co-sponsored by the Associated Students, brought a whopping turnout of 500 to the Altadena Country Club on May 21. Highlight of the evening was a short ceremony in which the Class of 1949 donated \$500 to the Alumni Fund. President Chuck Forester made the presentation for the class, and President Howard Lewis accepted for the Alumni Association. Dr. DuBridge was on hand to express the appreciation of the Institute.

PERSONALS

1916

Max H. Carson reports from Honolulu that he is still District Engineer for the U. S. Geological Survey in Hawaii, doing stream-gaging work. His oldest son, Arthur, graduated from Caltech in 1944; his other two children are grown-up—"as happens to us all," he adds philosophically.

1922

Harold S. Ogden is holding the same job he's had for many years with G. E. in Erie, Penna., but his department has a new name—"Control Division of the Locomotive & Car Equipment Divisions." He is

working on straight electric locos, mostly of the A. C. variety. Ogden has a wife, a son, 12, and a daughter, 10.

Bryant Essick and his Essick Manufacturing Co., have recently purchased control of the T. L. Smith Co. of Milwaukee, one of the largest and oldest manufacturers of concrete mixers in the country. Bryant now spends most of his time commuting by air between the Essick plants in Los Angeles and Little Rock, and the Smith plant.

1924

William C. Dreyer writes that his life is uneventful but agreeable. "I retired into

Westinghouse almost 25 years ago," he says, "and live a very comfortable life with my wife and daughter in Houston, as manager of the Westinghouse Engineering and Service Department in Texas."

From **Doug Tellwright**: "I very seldom have anything of interest to report. But today is different. Our first grandson, Douglas Henry Austin, was born April 23. He has already decided he wants to go to Caltech. I am afraid his older sister (our first grandchild, born February 16, 1947) will probably want to go to Oxy or Pomona. Don't suppose there are very

many grandchildren in the Class of '24 so far." Any challengers?

1925

Commander Clarence A. Burmister is Chief of the Radio-sonic Laboratory of the U. S. Coast and Geodetic Survey. His work involves the design and engineering of a special long-distance electronic navigational system, using pulse technique. The system is used in ship location in hydrographic surveys.

Michael B. Karelitz announces the arrival of a new son, George Michael, on January 14, 1949. Mike is with the General Precision Lab in Chappaqua, N.Y.

Frank Clayton, Chief Plant Engineer of Consolidated Vultee Aircraft Corp., is serving as President, for 1949, of the Fort Worth Chapter, Texas Society of Professional Engineers.

1926

After spending 1946 and 1947 in Sao Paulo, Brazil, running his own aviation sales business, **Ted Coleman** returned to the States and is now settled in Palo Alto. His new job: Assistant Treasurer of the Standard Oil Co. of Calif.

1927

Lt. Col. Vernon P. Jaeger is Senior Hospital Chaplain at Madigan General Hospital in Tacoma, Washington. Recently he returned from the Army Chaplain School at Carlisle Barracks, Penna., where he attended an advanced class in the latest psychiatric techniques in counseling.

1928

R. G. Folsom, M.S. '29, Ph.D. '32, was appointed Chairman of the Division of Mechanical Engineering at the University of California, Berkeley, in March. He's in charge of research work in supersonic flow phenomena at very low pressures. Folsom has three children, two girls and a boy (none of whom are engineers) and says his hobby is taking back-pack fishing trips into the Sierras.

1929

Charles A. Bosserman is busy up in Seattle making production changes in the hydraulics and plumbing of Boeing's B-50 Super-Flying Fortress, successor to the famous wartime B-17 and B-29. Just now they're installing "Single Point" Refueling in B-50-D's, which his group designed with the assistance of Staff Units. Bosserman has three children: Charles, 18, a college freshman with a scholarship in journalism at St. Martin's, Olympia, Washington; Peter, 16, a high school sophomore, also at St. Martin's; and Ann, 13.

1930

L. Sprague de Camp brings us up-to-date on his activities since August 12, 1939, when he married Catherine A. Crook of New York City. He had a son born in January, 1941, and in 1942 was commissioned Lieutenant in the USNR, assigned to duty at the Naval Aircraft Factory in Philadelphia. There he did test and development work on naval aircraft parts,

materials, and accessories. He was promoted to Lieutenant Commander in 1944. In 1946 he went on inactive duty, but remains active in the Reserve. Returning to free-lance writing after the war, Sprague has been turning out books at the rate of two a year: (*Inventions and Their Management*, second edition, with A. K. Berle; *The Carnelian Cube*, with Fletcher Pratt; *Divide and Rule*; *The Wheels of If*; *Lest Darkness Fall*, second edition; *The Evolution of Naval Weapons*) as well as pulp fiction, book reviews, ghost-writing, and radio scripts, including some for Voice of America.

Orrin Elliott has been Water Conditioning Engineer of the Sun Oil Co. of Philadelphia for 15 years. During this time he has built three water treating plants at the company's Marcus Hook Refinery in Penna., one at the Toledo Refinery, one at the Delhi, La., Refinery, one at Willow Slough, Texas, and is just finishing up his seventh in Starr County, Texas.

1931

Arthur C. Brooks is still Chaplain of the Asheville School in North Carolina. He teaches mathematics and religion.

Aubrey Horn, with wife Peggy and daughters Pamela (7) and Valerie (3), recently returned to Oregon after three months vacation in southern California. Aub is Project Engineer at Dorena Dam near Cottage Grove, Ore. When construction work is completed this fall, the Horns will be back in their home in South Pasadena.

Perry M. Boothe, Commander, Civil Engineer Corps, U.S.N., has been assigned for the past year to the Munitions Board as Chief of the Industrial Security Division. The job consists of determining the necessary industrial resources in the event of industrial mobilization, and the protective measures needed to insure productivity of those resources. It's very interesting and very complex, Perry says—and we believe him.

He is married and has two children, a son, 12, and a daughter, 7. Recently he succeeded **Harry Cunningham**, '26, as President of the P.T.A. at their children's school. Perry also reports that **Ben Holzman** is a Colonel in the Air Force, married, and has a daughter.

Herbert Ingham is still with Metallizing Engineering Co. in Long Island City, N.Y. His son, Herbert, Jr., won Honorable Mention in the Westinghouse Science Talent Search Contest this year. He will enter Rensselaer Polytechnic Institute in Troy, N.Y. this fall, majoring in physics.

1932

J. V. Chambers has been Treasurer of Industrial Indemnity, a California Workmen's Compensation Insurance company in San Francisco, since 1945. He has three children and lives in Kent Woodlands, Marin County.

Edward C. Keachie is an Associate Pro-

fessor at the Los Angeles State College.

J. D. Cobine, M.S., Ph.D. '34, was awarded an Army-Navy Certificate of Appreciation in ceremonies at Rensselaer Polytechnic Institute last December. He was cited for "services at the Radio Research Laboratory, Harvard University, in directing the activities of the noise graph in basic research in physics and electronics for radar counter-measure applications." Cobine is now Research Physicist at General Electric Research Laboratory in Schenectady.

Charles D. Coryell, Ph.D. '35, has been Professor of Chemistry at M.I.T. since 1946. During the war he was first at the Metallurgical Laboratory of the University of Chicago, in charge of studies of the chemistry of the products of uranium fission, and later at Oak Ridge, carrying on the same type of work.

1933

Rene Engel, Ph.D., recently became associated with **Florent H. Bailly**, '27, President of Oil Properties Consultants, Inc., and Petroleum Engineering Associates, Inc., both of Pasadena. Under the names of Petroleum Industry Consultants-Cuba and Petroleum Industry Consultants-Venezuela, this association is extending its services from branches respectively located in Havana and Caracas. Dr. Engel still retains his position as curator of mineralogy and petrology at the Los Angeles County Museum.

Phillip C. Effromson, since January, 1948, has been a partner in the Calidyne Company, in Mass. It's a new engineering and manufacturing firm, specializing in vibration and general dynamic measurements. Phil says he's contaminably close to M.I.T., but surprisingly enough finds some good fellows there too.

1935

Bob Stanley's new (nine-months-old) Stanley Aviation Corp., of Buffalo, has completed \$200,000 in orders for the U. S. Air Force and Navy and has a backlog of \$100,000 in unfilled orders, according to a recent issue of *Aviation Week*. Navy orders are for guided missile equipment; Air Force contracts include photo and guided missile equipment and instrument training devices.

Bob was previously with Bell Aircraft, where he was Chief Test Pilot from 1940 to 1944. He was in charge of all flight research activities, including the development of radio controlled flight testing, and was the first pilot to fly jet aircraft in this country. For the next three years he was Chief Engineer, responsible for, among other things, design and development, experimental construction shop, and the flight test program of the super-sonic jets, XS-1 and XS-2. In June, 1947, he was made Vice-President of Bell, in charge of engineering.

Allen A. Ray announces the formation of a new firm—Ray Products Company, of

Alhambra, specializing in acrylic fabrication and, more specifically, plastic basins.

Oliver C. Dunbar, Major in the Army Signal Corps, was married to Miss Anna Elizabeth Pritchard of Montclair, N.J., on May 27.

1936

T. E. Browne, Jr., Ph.D., reports the following acquisitions: 1936, a job (with Westinghouse Research Lab in Pittsburgh); 1938, a wife (Edna Strom); 1939, a son (Thomas Everett, III); 1941, another son (Joseph Niel); 1943, yet another son (Charles Edwin); 1946, a daughter (Mary Ann Farrar).

Donald F. Folland, M.S., is now Senior Project Engineer, in charge of instrument landing development, for the Sperry Gyroscope Co. in Great Neck, N. Y. In February of this year his second son was born, bringing the count to two boys and one girl.

1937

Martin H. Webster and two fellow-graduates of the Harvard Law School have gone into business in Los Angeles as Webster, Horgan & Kline. The firm will engage in general practice, Webster specializing in tax and business law.

Irving Berler, M.S., is Research Aerodynamicist at the Cornell Aeronautical Laboratory in Buffalo.

Martin J. Poggi moved from Seattle to Fort Worth last January to open an office for Airsupply Co. As Installation Engineer, Martin works with Chance Vought, Convair and Temco on engineering problems encountered in the installation, testing and service of accessories sold to these companies by the manufacturers Airsupply represents. This is the same type of work he has been doing for the past four years at Boeing in Seattle. With him in Fort Worth are his wife and two daughters, Virginia, 2½, and Carol, 7 months.

Harold J. Alwart, M.S., was made Chief Engineer of Clayton Mark & Co., Evanston, Ill., the first of the year. In his spare time he is learning how to run his 80-acre farm. Alwart has two children, Sharon Jo, 6, and Stephen John, 4.

Robert M. Mahoney has recently moved his headquarters from Henderson, Nevada, to Bishop, California. He's still with United States Vanadium Corporation, as Manager of Industrial Relations.

Phil Ives, Ph.D., writes: "The Ives family now consists of boy-girl-boy-girl, just like that. Spring is beautiful, and the trout are biting nicely. The children's names? Richard — Elinor — Donald — and Carolyn. The aging father is still Research Associate in Biology at Amherst College, engaged in Drosophila work, primarily."

1939

C. H. Townes, Ph.D., Associate Professor of Physics at Columbia University, has been appointed consultant to the Micro-

wave Standards Laboratory of the National Bureau of Standards, where he will be available for consultation on microwave absorption spectroscopy and atomic beam equipment for use as frequency and time standards. Before joining Columbia in 1947, Dr. Townes was on the staff of the Bell Telephone Laboratories.

1940

Bob Cox, whose construction of a Florida yacht basin, the Lauderdale Marina, was written up in our October issue, sends the following follow-up: "The only thing I can really add, since your publishing of a letter from my wife, is that my job has changed to longer hours and less pay.

"I will say one thing, however. We probably have more fun in our Marina than the average engineer. I have developed some accomplishments which scarcely go with my sheepskin. I can now run a dragline, piledriver, bulldozer and assorted other equipment. I can qualify somewhat as a civil engineer, without mathematics, on the subject of bulkheading, dredging, and filling. In addition to all this we have learned a lot about such mundane things as electrical work and plumbing and what kind of trees will grow next to salt water.

"The Lauderdale Marina has had a nice season in spite of the fact that we are not as far along as we would have liked. However, the picture you published is still our aim, and surprisingly enough, we are not too far from it."

1941

George H. Bramhall is working on General Electric vacuum cleaners in Cleveland. He says he is known professionally as a "line engineer in charge of domestic upright floor cleaners." In his leisure moments George is building a house in Chagrin Falls, 17 miles from his job. He's contracting it himself, letting out sub-contracts, and plans to do his own finishing work. He is spurred on by his wife Elizabeth and his nearly-year-old son Mark Hardy.

1942

Robert E. Anderson is doing geology for the Signal Oil and Gas Co. in Los Angeles. He was married a year ago to Ruthelen List (Stanford '41).

Emerson L. Kumm married Bettie Miles in November, 1948. He's at North American's Downey Plant, as Research Engineer on Combustion, Ram-Jets, Test Design.

1943

Leonard Alpert, who was married to Elinor Witz of Alhambra last August, is now working in the plant engineering department of Shell Chemical's Ammonia plant, in Pittsburg, Calif.

Douglas C. Reid, M.S. '47, and Marion Cornelia Paul were married May 7 at the Church of the Wayfarer in Carmel. Reid is with Standard Oil in Richmond.

1944

Ronald S. Johnson reports that he is still in the "long grind" towards a Ph.D. at

the University of Michigan, and that for the past two semesters he has been instructor of graduate courses in business statistics. He and his wife Roberta have bought a house in Ann Arbor and invite itinerant alumni to look them up.

Buzz Bussard writes to say that he enjoys his work at DuPont's new nylon plant at Chattanooga, and that **Bill Olenbush** is now with DuPont's Ammonia Department at Sabina River Works, Orange, Texas.

J. Stewart Martin, M.S. '47, left Tidewater-Associated last October to join Intex Oil Co. of Texas as Petroleum Geologist. He's now living in Abilene, as yet unmarried.

Bob Freeman is a Lecturer in Electrical Engineering at the University of California, Berkeley. Robert Jeffery Freeman was born July 3, 1948.

Kenneth Brown, Jr., is Arizona Superintendent of the Roscoe Moss Co., a firm of water well contractors. He has three nicely-spaced boys—3, 1½ and 3 months.

Thomas N. Norsworthy, another bachelor, is Vice-President of J. B. Taylor, Inc., a Dallas advertising agency.

Elmer S. Hall writes from Hyattsville, Maryland: "Last July my wife gave birth to a baby boy, Douglas Scott Hall, who is just about ready to get into a lot of mischief now."

"I have been employed by television station WMAL-TV, Washington, D. C., channel 7, for the past year and a half, and have had a part in many television 'firsts'—such as looking at the moon and planets through a telescope with a TV camera, as well as looking at cancerous cells through a microscope. We also televise many Washington dignitaries, including H. S. Truman."

1945

R. J. Kieckhefer is Chief Engineer of the American Lace Paper Co. of Milwaukee, and has recently been commissioned Ensign in the Civil Engineer Corps of the Naval Reserve. He flies his own plane, and hopes to come west soon to renew acquaintances.

F. Miles Day is Sales Engineer for Sales Corp. of America (gas-fired automatic special machinery) in Philadelphia. Saturdays, he's an apprentice auto mechanic, inspired thereto by Tech's Peter Kyropoulos. Sundays—summer ones, that is—he spends on the Jersey beaches with wife, beer and chiggers. "No children, just one handful of dog."

L. H. Davy writes from San Francisco that he is now working with Headman, Ferguson & Carallo of Phoenix, in Emeryville, on Paraffine Company's new plant—to be installed in New Jersey.

1946

Howard R. Woods and Sonya Gray, of Denver, were married this spring in Covina, Calif. Mrs. Woods is a graduate of Scripps.

Charles E. Burdg is at General Electric's Erie plant, working in the Refrigerator Works Lab, where most of the electronic measuring and testing devices are designed and constructed. He's on a six months "signup" as Test Engineer, will move on about August 1.

Richard Davis has spent the past year in Scotland at the University of Edinburgh, writing his thesis for his Ph.D.

Theodore R. Goodman, M.S., is an aerodynamicist at the Cornell Aeronautical Laboratory in Buffalo. He'll have a paper published soon in the Aeronautical Sciences Journal.

George Huffard got an MSEE at the University of Washington and is now working for the Central Radio Propagation Laboratory at the National Bureau of Standards, making theoretical analyses of tropospheric phenomena.

Walter Bonner, Ph.D., writes: "For the past three years I have been a Research Fellow in Biology at Harvard University. During this time our family was enlarged by one son, born November, 1947. I now plan to spend the following year, until August, 1950, in Cambridge, England, hav-

ing recently been offered a fellowship by the Committee on Growth of the National Research Council, acting for the American Cancer Society."

Ted Dehnke, who is still with Dow Chemical in Midland, Mich., reports the birth of a son last February.

1947

Richard A. Boettcher, M.S., is with the Arabian American Oil Company in Dhahran, Saudi Arabia. His family, including a baby girl born January, 1948, joined him in May.

Fernand de Percin, M.S., is a Climatologist in the Office of the Quartermaster General in Washington. He was previously an Instructor in the School of Mineral Industries, Pennsylvania State College. His son, Fernand, Jr., was born March, 1947.

R. M. Clock, M.S., is in the Mechanics Department of the U. S. Military Academy at West Point.

Richard L. Felberg is the father of a baby girl born April 13. Felberg is with the Water Department in Earp, Calif.

John W. Bennett, M.S., was promoted to Captain in the U. S. Air Force last October, and is now stationed at Elgin AF

Base, Florida. He's in the Proof Test Division, conducting operational suitability tests on USAF aircraft and allied equipment.

Bob Ilfeld joined the General Electric Co. after leaving Caltech, and is now Sales Engineer in their Special Products Division. He and his wife Winona have bought a house in Schenectady and expect to settle down there. Bob is active in the Edison (Country) Club, the Physics Program Alumni, and the church. Mrs. Bob is a leader in the American Association of University Women.

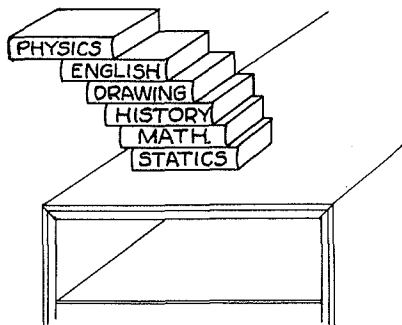
1948

Conway W. Snyder, Ph.D., joined Fairchild Engine and Airplane Corp., in Lexington, Ky., this spring, working on their NEPA (Nuclear Energy Propulsion of Aircraft) Project. He's setting up a research program, using the electrostatic accelerator of the University of Kentucky, to measure inelastic scattering cross sections of neutrons in heavy elements to obtain basic information required for reactor and shielding calculations. Formerly Snyder was with the Nuclear Physics Branch of the Office of Naval Research.

LETTERS CONTINUED FROM PAGE 2

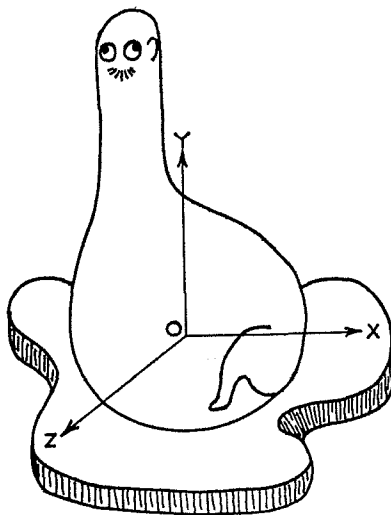
year—for his class in Applied Mechanics 1a. Blair drew the pictures too.

One of the girls in the Bookstore was a bit careless in handing out a stack of books with the result shown. If the stack is in equilibrium and each book is equal in size and weight and overhangs the one below by the maximum possible distance, by how much does the Math book overhang the Statics book?



The shmoo is sitting on a flat rock and thinking. His center of gravity is at 0. With reference to a set of coordinate axes through 0, the equation of his bottom is $2x^2 + 3y^2 + 2z^2 = 12$. The shmoo is in equilibrium in his present position. If he is jostled slightly, will he

fall over, remain in the displaced position, or return to a vertical position? Why?



Incidentally, the shmoo has been thinking about this problem for several days instead of providing Grade A milk and eggs, so help him out.

Caltech

R. R. Martel
Professor of Structural
Engineering

SIRS: At present I am attending UCLA, taking courses in Business Administration

with a Production Management major. It seems to me that many of the courses under this major should be given to all engineers. It would not only help them in their work; it would help them get ahead in the field. These courses, offered at UCLA, include Production Control, Time and Motion Study, Purchasing, and other phases that an engineer too often knows little about. I would like to recommend that a course or two be set up for future students so that at least a survey as to what should be known is given the engineer. These are now offered to the engineer at UCLA and Cal.

Pasadena

Richard A. B. Knudsen, '44

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