

JOIN THE D CLUB

"In addition to the regular awards, a prize of \$5.00 is paid upon the acceptance of five suggestions from an employee during the term of his employment."

From — "Information on the AFECO Suggestion System"

 The present five members, Frank Rendel, James Davidson, Otto Morgan, George Tharp and Mildred Fore invite you to join them in belonging to the 5 Club.









Frank Rendel

James Davidson

Otto Morgan

George Tharp

"The suggestions which are now being accepted are enabling all of us to turn out more production with less effort. I'm getting older every day and if I can perform my work with less physical exertion, I am better able to produce at peak efficiency. There are still many ways in which every operation in the shop can be improved. A little thinking will increase production and at the same time bring extra money to the suggestor."

OTTO MORGAN

* *

"A suggestion system, honestly and sincerely managed offers an incentive for everyone to bring their ideas out in the open. I submit ideas because, not only do I like to see my suggestions adopted, but

the awards for accepted ideas is money I don't count on and it is pleasant to spend it for something I really want. The \$5.00 given me when five of my ideas had been accepted, was used to make the down-payment on a camera I had desired for a long time."

JAMES DAVIDSON

* *

"I welcome the opportunity of expressing my ideas through the suggestion system and appreciate being able to do my part to help along production. It is interesting to turn in an idea and see how it is handled. The awards make it possible for me to have some of the luxuries I want but could not afford otherwise."

MILDRED FORE



Mildred Fore





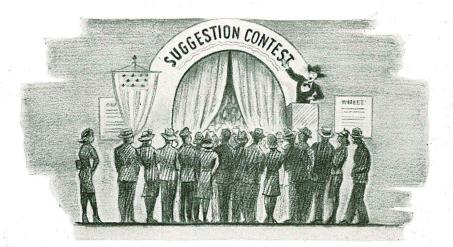








Come On In!



Enter The Suggestion Contest

★ Extra prize awards to the workers with the most accepted suggestions turned-in during the contest period in addition to the regular awards based on the merit of the idea.

There is no limit to the number of ideas you can suggest—the more you drop in the suggestion box before June 30, the better chance you will have to win.

TIME: Starts June 1-ends June 30, 1944

Prizes: First \$25.00

Second \$15.00

Third \$10.00

The picture of every employee who submits an accepted suggestion during the time of the contest will be published in *Parade*.

Turn in that suggestion you've been thinking about.

Your idea is worth nothing if you keep it to yourself.

Win extra money and speed up war production by send-

ing in your ideas for improvements.

S-T-R-E-T-C-H YOUR VEGETABLE GARDEN

To get the most yield out of your patch of garden, when one vegetable is exhausted, replant the same area with another vegetable. Here are some good follow-ups:

Early peas, early beets, and spinach seeded as soon as the soil can be worked will be used in time to sow medium-to-late sweet corn; squash (acorn); and Chinese cabbage, which needn't go in until about the first of July. Or husky young plants of late tomatoes, late cabbage, and cauliflower can be set in as soon as rows, or parts of rows, are emptied.

Peas will leave soil much enriched with available nitrogen if you treat your seeds with an easily bought inoculant before planting. This pea-attracted nitrogen, plus what remains of the commercial plant food spread for the early crops is often enough food for the second plantings. Tomato plants should be well rooted and stocky. Shift without disturbing the roots, water in, and shade for three days. Potted plants already in blossom can be used to advantage if handled carefully.

Follow Corn and Beans with "Fall Greens"

Sweet corn and bush snap beans are harmed by frost, so first plantings of both shouldn't be made earlier than one week ahead of the latest average frost date. Both are so superior when picked shortly before cooking that plenty of row space should be allotted to them. Beans, like peas, should be inoculated with nitrogenfixing bacteria before planting. Follow-up crops can be leaf lettuce and spinach for fall greens, and kale, turnips, and winter radishes for the "winter garden." Kale and turnips can both be left in their rows through moderate winters. The radishes should be stored in bank sand at 40 degrees.

Earliest greens - mustard, turnip, tendergreen, lettuce, spinach - can be grown tandem style with plants of tomatoes, late cabbage, eggplant, peppers, celery, and broccoli set in as soon as the early greens are used. Use a commercial plant food with nitrogen in its formula to sidedress the early leaf crops. These pairings should get the part of the garden where the soil dries out first. In eggplants try New Hampshire Hybrid, a new variety that matures almost two weeks ahead of the much-used Black Beauty. Rutabagas make a good second crop to follow the early greens. Planted by the end of June they're in just the right condition to take into storage ahead of the first killing frosts (about Oct. 1).

Eat Carrots and Beets When Half Grown

Early carrots and beets are most delicious if eaten when half grown, the carrots no longer than a man's thumb, the beets under two inches in diameter. This gives time for their rows to produce

> good summer crops of later cabbage, late sweet corn, quick-maturing bush snap beans, late celery, and Chinese cabbage. These make excellent follow-ups also because the soil is kept in better balance as to nutrients wherever the leafy crops can succeed root crops and the root crops follow leafy vegetables.

> Where second and third plantings of sweet corn go into vacated rows, every effort should be made to plant two and preferably three rows (or parts of rows) side by side to facilitate pollination and so get better-filled ears.

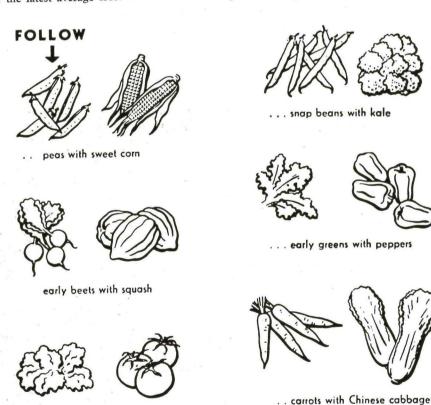
Radishes Grow Rapidly

Radishes pop through so quickly they're just the thing to scatter along your parsley row because parsley seeds are notoriously slow about coming through. The radishes will be pulled long before the parsley starts to spread.

Early leaf lettuce can be grown this way with carrots, beets, and parsnips. Pepper plants can go into second early lettuce rows with saving of time, little loss of space, and no harm to either crop.

Leaf lettuce, globe radishes, mustard greens, and green onions can be tucked in between the permanent asparagus rows, and close to the hills of rhubarb which don't need all their space early. Since these early crops have both a short season and shallow roots and the asparagus must not be disturbed, it's a good plan to rake between the asparagus rows, then open a one-inch furrow with the corner of your hoe. Sow seeds and cover with one-third inch of fine soil and keep off the asparagus as you practice these space economies. From "Better Homes & Gardens.

Killed In Inaction. Those are the War Bonds redeemed before maturity.



spinach with tomatoes

... sweet corn with spinach



lettuce with rutabagas

Keeping AFECO Machinery Operating

Orders are received in the Parts Service Department by mail, phone or telegram and MARJORIE VAN RIE (1) enters them in a book giving the company name and location and date of the order.

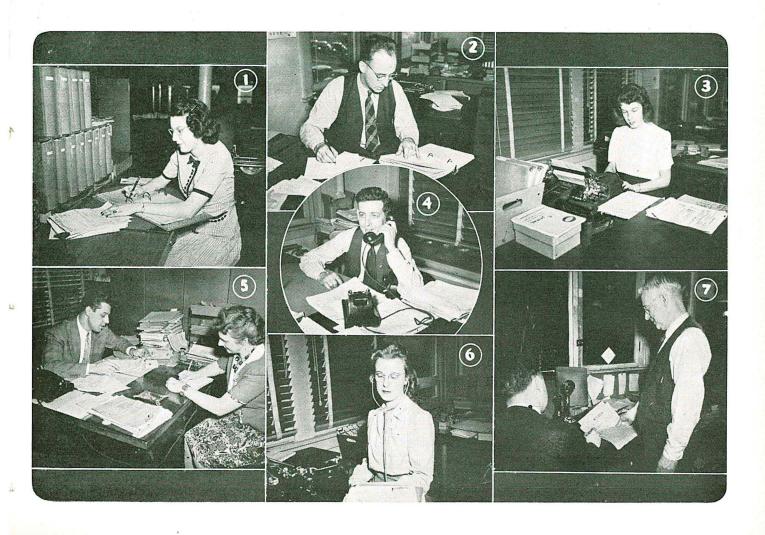
Marjorie then gives the order to GERRY GROVE (2) who services it — that is, he calls upon his extensive knowledge of equipment gained through years in the field as a service man and our sales order files to be sure the order is correct. That is, that the customer has ordered the right parts for the equipment he has in his plant. Sometimes this is quite a job — other than ordering the wrong part number or incorrect size, requests for such things as "paddle wheel with paddle," "bird cages" and "perpetual hubs" have been ordered and translated by the parts service department into American equipment repair parts.

When Gerry finishes servicing the order PAT FORBES (3) writes up the shop orders for the material requested by the customer, and the shop order is sent to the stock room

for filling, then on to Bill Crowell's department for shipping to the customer.

TOM HAMELINE (4), department head and CHUCK RICHARDS (5) follow-up all orders determining delivery dates, writing the customer about shortages, credits, returned material and many other details. It is Tom's responsibility to route the many hundreds of individual orders received every week through the shop, depending upon the priority rating applied by the customer. MARY WORD-INGER (6) writes such letters for Tom and MARIE MENZIE (5) for Chuck.

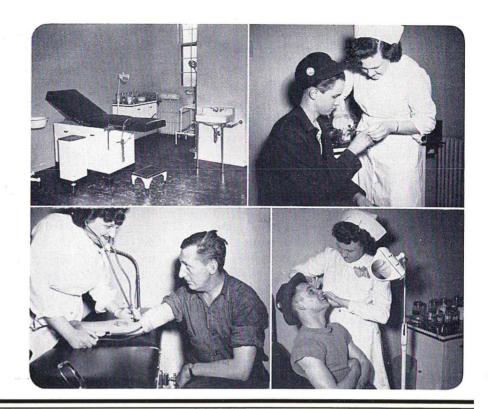
JOE DILLON (7) shown here talking with Andy Stevens, does the leg-work on follow-ups — traveling between the office, engineering and stock room; checking up on unfilled orders and assembling necessary information. There are about 30,000 active parts numbers being used all the time, but part's numbers run from 1 to 68,000 covering all types of equipment manufactured by American.



TO THE AID OF THE INJURED

LEONA TESMER, R. N. handles a variety of injuries each day in the first aid room. Pictured are but a few of the many services she performs for us at AFECO. The upper left hand picture is a general view of the first aid room; in the upper right hand picture Jim Powell, Jr. is having a cut finger bandaged. Oscar Frank has his blood pressure checked in the lower left hand view and from the smile on Bob Barnard's face, he is enjoying having a steel chip removed from his eye.

Miss Tesmer, a graduate of St. Joseph Hospital School of Nursing in South Bend is on duty from 10:00 A.M. until 6:00 P.M. every day and urges that even the slightest injury be brought to her for treatment. A small cut or scratch can develop into a serious infection bringing intense pain and possibly permanent injury to a worker unless proper care is taken.



What would you think of our fighting men if they returned the captured Pacific islands to the Japs without a struggle even before they got to Tokyo?

So would we.

And what do you think our fighting men will think of those who hold our War Bonds for a short time and then redeem them?



To HECTOR SHEEHAN, machinist and member of the Suggestion Committee came a special delivery letter recently informing him that he had won first prize in a contest conducted by Radio Corporation of America to name their new trade mark figure. Hector is now \$5.00 in war stamps richer for his idea to name the little figure "Victor Vim."

HOW TO BE A BIG SHOT

in 12 Easy Lessons at Home

From-"Sales Management."

- 1. Write letters to the editors of the business press. People will begin to ask: "Did you see what Joe Doakes said about post-war planning?" Don't be disturbed if someone asks: "Who's Joe Doakes?"
- 2. Begin meeting the right people. Attend business luncheons. Get there early enough to get a front seat. App.aud ostentatiously when the speaker has sat down. Try to shake hands with him afterwards.
- 3. Get on a committee or two. Λ sucker can get on a committee, especially in war-time.
- 4. Work hard as a committeeman and you may soon head a committee of your own. Then you can send notices to the newspapers, call meetings, make reports, be a guest-speaker at other meetings, all as "Joseph Doakes, Chairman."
- 5. Find out what charity or particular home-front activity the Big Boss is interested in, and identify yourself with that. It will play hell with your Saturdays, Sundays, and evenings, but, like grapefruit, you will be getting in the public eye.
- 6. Become an expert in some phase of that activity, and, first thing you know, you'll be asked to talk on the radio. Don't be dismayed if it's just a little 250 Watter,

- like Station WART. You are going to be noticed by People Who Count. That's the thing.
- 7. If you have had little or no schooling, and still spell "spit" with two "t's", engage a ghost writer. He will not only write your speeches, but offer valuable guidance in the social amenities.
- 8. Be seen at the symphony concert. Your secret dish may be cowboy songs, but a smattering of Brahms and Rimsky-Korsakoff will enable you to drop words like "counterpoint" and "the shimmer of violins."
- 9. Wear pince-nez, and keep putting them on and taking them off, as though you didn't need glasses except for the finest print. A black cord dangling from them Shows Class.
- 10. Promote other people's ideas as though they were your own. You *could* have thought of them, surely.
- 11. Have an opinion on any subject under the sun, and express it in a loud voice with an air of authority that stifles argument.
- 12. Laugh unseemingly whenever the Big Boss makes with the jokes, even when he retells you the one you told him last week. When he makes a suggestion in conference, exclaim: "Marvelous!" Or: "That's the best idea I've heard yet." With a little practice and a lot of gall, you will be a Big Shot, and this is where we came in.

American Men in Uniform *

ALBERT JAY WARD, Phm 2/C is now stationed at Guadacanal and works in surgery. He likes the work and is in splendid health.

OTTO ALBERT SCHMIDT, WT 3/C

"I have received packages and letters from the company and also received a birthday card with three one-dollar bills in it. This last Christmas I also received a check. I do want to thank the boys and the Company for these. I do hope that this tragedy of war will soon be over.

"I have been very busy keeping the boiler in good condition at all times and do not have much time for myself. I haven't gotten sea-sick yet and have seen a lot of salt water. We crossed the equator weeks ago maneuvering from one island to another."

PVT. EMIL AUWENROGGE - England

"I received a card the other day informing me of a gift of the 'Reader's Digest' from the American Foundry Equipment Co. I want to thank you all for it very much. I can assure you it was greatly appreciated. I've been receiving a copy of the 'Digest' regularly and in view of some of the reading material we get out here, I look forward to receiving my copy every month. It seems that I'm not the only one that appreciates the 'Digest,' though, because I no sooner get my copy in the mail, that somebody comes up and asks me it they can have it when I'm through."

PFC. ROCK MC MANUS

"I am located in England which isn't as bad a place as I expected. In fact it is very beautiful in certain places, but in others it is not so beautiful. All in all, I would a whole lot rather be back in Mishawaka in civilian life."

PVT. CARL HOUSAND

"Unable to put down any certain person's name to thank them specifically, I send my thanks to all of the men and women working at AFECO who that send many helpful things which you all have sent me. I offer even a more grateful thanks for my subscription to the 'Reader's Digest.' It really makes me a much soughtafter soldier in my company when it arrives for there is generally a waiting list on it when I get through with it. Here in England it will be a God-send for it is really difficult to get reading material from the States, so you see it's no wonder we fellows in the Service are so glad to have worked for some one like the AFECO who thinks enough of us to send it to us.

"Not knowing you all like I do, my fellow soldiers can't seem to understand my getting so many swell packages from an employer. Just last week they stopped rationing sunshine in the part where I'm stationed."

* * :

DELBERT J. DARE - Lake Charles, La.

"I received notice that I was to receive another year's subscription to the Reader's Digest as a gift from the factory. I want to thank you for your thoughtfulness. Being as we work 12 hours a day we don't have much time for much reading and the stories and articles in the Digest are just right for what small breaks we do have.

"Also wish to thank you for sending the copies of the Parade. It keeps a fellow in touch with his fellow workers and what they are doing to help in winning the war."

CPL. ROBERT BORTON - Panama

"I am in Panama now, near the city of Colon, and I sure do like it here. It is really paradise here compared to the last place I was stationed. I have been overseas now for the past two years, arrived in this area, March 8, 1942."



Pfc. Delbert Dare, Jr.



T/4 Paul D. Hawkins



Pfc. K. F. Raderstorf



Letters from home mean a lot to ROBERT B. QUALLS now attending Electrician's school in Ames, Iowa. The picture, however, was taken while he was a "boot" at Great Lakes. Official U. S. Navy Photograph



ROBERT B. QUALLS, Ames, Iowa

"Will write you a few lines. I am in Ames, Iowa going to Electrician's school. I received a copy of the 'Parade' not long ago and sure enjoyed it and also enjoy the 'Reader's Digest' which is a present from AFECO employees. I see the boys at the Foundry are keeping up the good work. Sure would like to see all the fellows I worked with in the steel shop. I did not get acquainted with many outside of the steel shop, but hope to, after the war.

"Well spring is about here. I suppose the fellows will be starting their gardens soon. Would like to be back at the foundry with the fellows, but guess Uncle Sam needs me in the Navy.

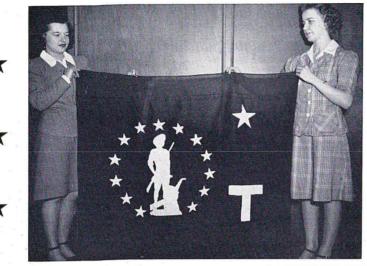
"Thanks a lot, fellows, for the papers and write me a few lines sometimes as I enjoy hearing from you. Tell Sam Snodgrass the picture of him in the 'Parade' looks natural and tell George Morin to keep those 'side frames' ready and those rods burning."

FT. LIEUT. WHITNEY I. GREGORY, JR. has been awarded a cluster to the Distinguished Flying Cross awarded him for his part in the attack on the Ploesti oil fields in Rumania last August. Greg, who now serves as assistant wing navigator also holds the Air Medal, three Oak Leaf Clusters and the Distinguished Unit Ribbon.

He is a navigator on "The Blasted Event" and has flown on missions to Rome, Vienna, Emden, Bremen, Munster, Ludwigshaven and Kiel. Greg was employed in the Engineering Department.

PFC. ED. HIXENBAUGH - Italy

"I had the opportunity to see Richard Hathaway at the time he was in the hospital awaiting an operation which he said wasn't very serious. As yet, I haven't had the opportunity to see him since, but will do so in the near future."



LORETTA ERNST of cost accounting and AGNES ERNST (no relation) of engineering hold the new Treasury Minuteman T flag presented to AFECO recently . . . A fourteenth star has been added to the flag. It is located in the northeast corner of the blue field and indicates that AFECO met is Fourth War Loan quota and has 90% of its employees regularly investing 10% of their earnings in War Bonds . . . Actually 99% of us are investing 10% OR MORE in payroll deductions Bond buying and the actual deduction last year was 14.4% of the entire payroll!

SHUTTERBUGS ORGANIZE

FOR MORE AND BETTER PICTURES

The Americans always have a club for it and a group of shutterbugs at AFECO have organized a camera club. It meets every-other Tuesday in the Hotel Mishawaka.

Future plans, while not complete, include meetings featuring instructional and educational movies, a series of illustrated lectures (some of which are provided by the Eastman Kodak Co.) on various related film processes. Lectures and clinics on taking pictures, composition, lighting, lens openings and shutter speeds, processing of films and printing of pictures, how to get the most out of a negative, unusual effects, new and improved methods of processing, etc., will all interest those people who want to take more and better pictures.

Adult camera clubs are popular in the U. S. having increased from less than 1,000 three years ago to more than 3,000 today. The clubs range in size from units with 4 or 5 members to the large Rochester, New York branch with 2500 members. The local chapter, however, will not be affiliated with any national organization.

Any employee of AFECO, their wife or husband, is invited to join this club whether you operate a 49¢ camera or a superduper movie job.

Officers of the club, elected at the meeting held in the Mishawaka Hotel, May 2 were:

President James Davidson First Vice President Chester Crumrine Still Photography
Second Vice President...Robert E. Schalliol
Movie Photography
SecretaryClyde A. Snyder

Treasurer Kenneth Rohleder

Directors:

Dir	ectors:	
Mary Brioli	Arthur Fuller	
Enoch Fetters	Lester Neddeau	
Marjorie Frazee	Dimitri Soviak	
Program Chairman	Clyde A. Snyder	
Publicity Chairman	Marjorie Frazee	

FORE!

When the weather gets as warm as it should be and when the days are long enough, which should be about now — the Athletic Association will hold a round robin golf tournament. Anyone who is employed by AFECO is eligible to enter — girls, left handers, etc.

Matches will be nine holes in length, played in the evenings after work, probably one or two a week and on a handicap basis.

Each player will play one match against every other player in the tournament (that's the round-robin idea). All matches will be tournament play (holes won will be the basis for determining winners, not total strokes).

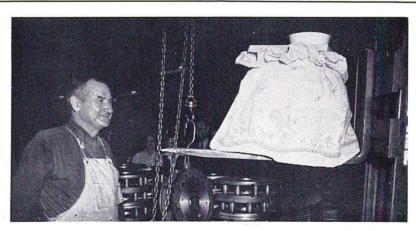
Each player will be credited plus one for each hole won, the person winning the most holes after all have played against one another will be the champion.

Players are to turn in scores for 18 holes before tournament so handicaps can be figured.

WOLF MANAGES TEAM

The AFECO softball team, managed by John Wolf and winner of first place in the Mishawaka A league in 1941 and 1942 and third place position in 1943 again takes to the diamond. The first practice game was May 12 against the Northside A. C.

War Bonds are the raw materials of



Victory.

DEAN BRUGH turned off the power operating his lathe, wiped his hands on a clean cloth, reached for his lunch pail and turned around to sit down and eat one noon recently. His eye was caught by an unusual sight — down the aisle came the jeep and on the prongs was a barrel decorated with pink and blue figured paper. The jeep

bore down on Dean and deposited the barrel at his feet. To Dean's flustered surprise he found it hrimming with gifts for his adopted 8-month's old son — John Rolland — from the members of the machine shop. Dean was so busy opening packages he forgot all about eating his lunch.

Bits About Us

TUMBLAST ASSEMBLY TIPS

Ray Hutchins

Congratulations to Dan Miller's daughter Martha, a student at Mishawaka High School on becoming a member of the National Honor Society.

* * *

Discovered, at last, three honest fishermen! George DuBois, Woody Stoddard and Joe Turnock who went trout fishing the first day of the season. George and Woody admit catching one each, while Joe tells about the one that got away. Fish don't mean anything to Joe, for he has been known to clean fish at the edge of a lake and absent-mindedly throw them back into the lake when the task was finished.

* * *

TRAFFIC TIPS Arvilla Hummel

Jim Feller, a cook in the famous Seabees, stopped in to see us recently and the next day Pvt. Ray DeSmet of the Army came visiting too. We offered them a job, but they insisted their commanding officers couldn't get along without them.

* * *

We welcome Alma Walters to the department and hope Henry Beal will soon be recovered sufficiently from his injury to be back with us.

* * *

MACHINE SHOP MURMURS

Irene Grams

Joe Blasher raised 10 rabbits and had so much difficulty killing the first one using a bowling pin as a club and then wasn't able to eat the meat that he sold the remaining 9 when they were old enough to market.

* * *

Blanch Null who moved here from Temple, Arizona, is the new pilot on the machine shop jeep.



Herman Roeder's birthday gift of peanuts, donuts, candy bars, loaded cigars, etc. was beautifully wrapped and decorated with real tulips, narcissus and peach blossoms. Herman, thinking it would be a shame not to make further use of the posies, fastened them to his new hat and wore the creation for the day.

DESK DATA

Marjorie Frazee, Ray Biggs

Mildred Fore inventoried her collection of earrings and found she owned 30 pair.

* * *

We are glad to see Pat Bancroft back from Indiana University for another summer of work here in the office.

* * *

The memory device taught the class in Human Engineering whereby a list of 15 unrelated words can be remembered by association with a key is a good trick. Clyde Snyder and Frank Osborn (of Dodge Mfg. Co.) decided to mystify their men's church class with Clyde's great memory. Clyde gave the correct answers so often the other members of the class thought Osborn was giving Clyde signals and made him leave the room — but this didn't change things and Clyde's memory still served him well.

* * *

Best wishes to Eleanor Biggs and Ned Wade on their engagement. They have set August 12 as their wedding date.

* * *

Jean Seybold seems to have more bad luck — her latest was a case of mumps.

* * * *

HEATER HINTS

Virginia Ernst and Alice Hutchins

We see Mary Chamberlain is now wearing a diamond on the third finger, left hand. The lucky man is Pvt. Alex Chmiel, formerly of South Bend, but now serving in the armed forces.

* * *

Walter Fox strolled through the shop the other day. He's not able to be at work yet, but we are all glad to see that he is up and around again.

* * *

Mr. and Mrs. Julius Vander Brugghen are going in for gardening in a big way this spring, (two lots instead of one). Ann will be kept busy canning in her spare time. Maybe that is what she was thinking of the night she left the car parked out by the heater building and walked around to the guard house.

* * *

Congratulations to Mr. and Mrs. Robert Mow on the birth of Linda Jean, April 29.

* * * *

VOICE OF ENGINEERING

Agnes Ernst and Chuck Bultinck

Eudoxie Chaillaux felt outnumbered in the Experimental Department so her desk has been moved to Engineering.

* * *

Kenny Rohleder received a shining wedding band from his wife as a birthday gift. Ruth evidently appreciates the peril her man is in these days.



MARYANN GOHEEN has been a member of the Sales Department since June of 1937. Among her many duties is the typing of proposals on standard Wheelabrator equipment. Maryann has served on the board of directors of the Welfare Assn. and is social secretary of the Julianna Club.

The majority of the fellows are taking their vacations early this year so that they can get them over with before the draft takes them. Usually vacations are taken late to get out of helping with housecleaning.

EXPERIMENTAL

Harold Grob

Mary, Mary, quite contrary, How does your garden grow? With silver bells and cockle shells And more damn weeds!

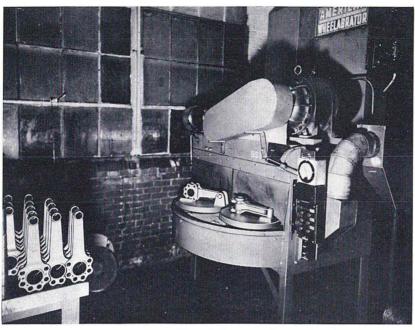
By Virgil.

* *

A quick survey of vacation plans among members of this department shows many varied ideas, as: Kenneth Clark to Centralia, Ill.—Harold Grob to Lake Wawasee (hope they are biting)—Paul Bessemer to the South Pacific?—Virgil Pope will ride his motorcycle to Niagara Falls and Canada. C. E. Unger plans to go to the Dentist. Arcola, Ill. will welcome Lloyd Forner and Grannis Garber will visit Magnolia Springs, Alabama, while Harold Schulte says he's going somewhere Ken Barnes can't find him. George MacNeile and Roscoe Rush will stay at home and get a good rest.

* * *

Mr. Unger has everyone mystified as to how he gets that fifty cent piece into a coke bottle.



Jacobs Aircraft Engine Co., Pottstown, Pennsylvania, peen master rods with this No. 1 Wheelabrator Tablast. Peening produces a dense skin on the steel which resists fractures and reduces service failures to the absolute minimum. Service failures might cost the life of a fledgling pilot, because Jacobs engines are used in training planes.

Third Place Winner

The American Foundry Equipment Co. team entered in the Ladies B league at Rose Recreation ended the season in third place. The girls bowled on Thursday nights and their averages for the year were:

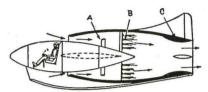
Betty Linsenmier	126
Peggy Shipley	124
Odelia Schaut	118
Tweet Harris	116
Pat Forbes	96

If you allow your winter dresses to hang in the closet all Spring and Summer don't be surprised if your favorite dresses don't look as well on you next Fall as they did last year. Clothes that hang for several months are bound to stretch themselves out of shape. Have them cleaned, folded in tissue, put into those dress boxes you've been saving, wrap them in tar paper and seal the openings. When you take them out next Fall they'll be the same size and shape as when you put them away.

Jet Propulsion

By ROWLAND BURNSTAN

Have you been wondering, like so many others, if the new jet propulsion planes in some way resemble "Buck Rogers Rocket Ship"? There is a great similarity between the rocket ship and jet propulsion. The rocket, speaking precisely, is propelled by one heavy impulse or succession of im-This principle may be used on aircraft for quick starting from a runway or some temporary additional power under some unusual condition.



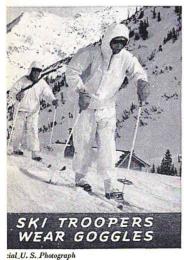
One Method of Jet Propulsion
A. Air Flow Guide
B. Fuel Burners
C. Fuel Preheater

Jet propulsion, which has been in the news recently, employs the same basic principle, but there is an even flow of power from the propulsion unit, in contrast with the intermittent impulses from the rocket. Jet propulsion employs no propeller or air screw. It involves a rush-ing discharge from the rear of the plane in the form of a jet of air or gas which moves the aircraft forward. This is not a new idea and planes have been flown for some time in Europe on this principle. Scientists claim the real attraction of jet propulsion units is that it will provide a powerful forward movement in proportion to its weight, making possible higher speeds than presently obtained.

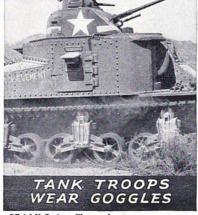
War Bonds are ammunition in the Fight for Victory.

OLDIERS ALL

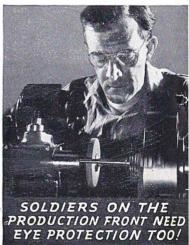
UNANIMOUS



NAVAL GUNNERS WEAR GOGGLES Official U. S. Navy Photograph

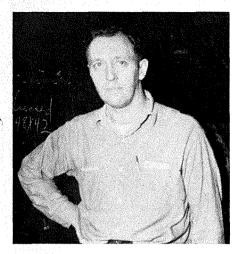


Official U. S. Army Photograph



American Optical Co.

RIDING YOUR HOBBY



RAY HUTCHINS

Trudging in back of a plow pulled by the old gray mare, a small Michigan country boy, dreamed of the day when he could ride the horses instead of walking behind them. Most country boys could stay on the back of "old Nell" as she plodded down a dirt road, but Ray Hutchins had visions of becoming a great equestrian.

Then came high school and since the nearest school was in Hillsdale, Michigan, over three miles away, transportation became a problem. Great was Ray's joy when he was allowed to ride one of the horses to school. Digging up an old saddle and a makeshift riding outfit, Ray took his first step toward fulfilling his dream. Ray's "horsing around" lasted all through school.

After a year at Hillsdale College, he came to South Bend where he took a job as production clerk at Oliver Plow Works. It wasn't long until the general superintendent came to his desk and inquired about his knowledge of horsemanship. Evidently Ray gave the right answers since he was told, "you're just the man for the job."

So Ray took over as trainer at the J. D. Oliver farm. Here he was expected to teach the family to ride and had complete charge of their string of saddle horses. In order to keep up-to-date in his teachings, he spent all his spare time reading and practicing the tricks of the trade — showmanship, jumping, racing and riding.

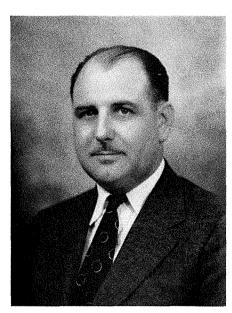
Ray rides army style using an English saddle in which the rider sits, controlling the mount by pulling on the bit in the horse's mouth. Style, posture and control are important in this method.

For five years Ray was employed at Oliver's during which time his horses won many prizes at shows and contests. In 1932 he decided that he'd like to get back into the industrial field and was transferred to the Oliver plant.

Always mechnically inclined, Ray has taken several courses in industrial subjects which assisted him in his work when he started at AFECO in 1936 in the steel shop on assembly work. He still has a soft spot in his heart for horses and during his spare time can always be found on a horse.

If you've never been on a horse don't get the idea that riding is easy. Try it sometime, but first be sure you know which side of the horse to mount. When on the horse try to coordinate your motions with that of the horse — when the horse goes up you follow, or else. Ray will be glad to give any AFECO employee assistance or lessons on riding. He can make a Lone Ranger or a Tom Mix out of you if given enough time.

THE FAMILY ALBUM



Russell Duer

RUSSELL DUER, salesman in the southern Ohio and southern Indiana territory, is a man who really knows what he is talking about when he discusses AFECO equipment. His first job, after leaving school, was with the Sandmixing Machine Co. (the forerunner of American Foundry Equipment Co.) in Cleveland. He began August 15, 1916 — at the bottom — but his progress was fast. He went from sweeping floors to filing gears, to bucking up rivets in building AA Sandcutters — to helper — to mechanic — to machine shop.

When the Company moved to Chicago in 1919, Russ stayed in Cleveland to work for National Tool Co., a large maker of machine tools. After working there for about a year, he decided his mechanical training could more profitably be employed in garages. From then until 1928 he worked as a mechanic advancing to the position of shop foreman.

In March 1928 he came to AFECO as one of American's star servicemen supervising the installation of all types of equipment. Then he was promoted to salesman — his present position — in April, 1939.

When our European licensee, George Fischer Steel and Iron Works, Schaffhausen, Switzerland, started to build Wheelabrator equipment Russell Duer was the man selected to assume the important task of helping them set up their manufacturing procedure. He and Mrs. Duer sailed for France in February, 1938.

Russ has many interesting stories of his stay abroad. He tells of sitting in conferences while discussions eddied around him—he doesn't speak French or German—then, out of the babble of voices a sudden English question would be shot at him which he was supposed to answer immediately. Russ' duties also included supervising installing machinery in such important plants as Renault and Citreon—making recommendations for the proper equipment in other plants in Belgium, Italy, France, Switzerland and Germany.

Russ entered Germany the day the Plebiscite was held to determine whether Austria would become part of Germany. He was very interested in the deplorable working conditions existing in Germany even then.



A woman driver ran into an embankment and bent a fender. It worried her. She went to a garage and asked the mechanic: "Can you fix this fender so my husband won't know how it was bent?"

The mechanic looked at the bent fender and then at her, and said: "No, lady, I can't. But I'll tell you what I can do. I can fix it up so that in a few days you can ask your husband how he bent it."

Boss: "What are you doing with your feet on the desk?"

Office Boy: "I lost the eraser and I'm using my rubber heels."

Pat was driving along the street and his old horse fell down and did not try to get up. "Git up, git up from there, ye lazy critter," said Pat. "Git up, I tell ye, or I'll drive right ouver ye!"

The only War Bond you'll ever regret is the one you didn't buy.

Harder Than Nails



WITH air blast metal cleaning equipment, abrasive is directed upon the work to be cleaned through a hose in which air and abrasive (either sand or steel shot or grit) are mixed in the right proportions. In the same manner that a nozzle is required on your garden hose to control the flow of water, so is a blast nozzle utilized on this equipment.

As the abrasive flows through the nozzle under pressure, the mouth and interior of the nozzle liner is slowly worn away. With excessive wear the opening is enlarged to the point where a greater amount of compressed air is required to maintain velocity of the abrasive.

Since compressed air is costly and an enlarged nozzle reduces the cleaning efficiency, the nozzle which can resist abrasive wear longest is demanded by users.

Prior to the war, the nozzle manufactured by AFECO contained a tungsten liner which was highly resistant to abrasive wear with an operating wear life of many hundreds of hours. The wartime demand for tungsten shut off the supply available for use in these nozzles.

Forseeing this situation our engineers had been working with the Heany Industrial Ceramic Company who had perfected a ceramic material with qualities believed ideal for nozzle liners.

After exhaustive laboratory and actual operating tests demonstrated that the ceramic nozzle inserts had a wear life suit-

able for economical usage, manufacturing processes were established.

This ceramic material called Heanium possesses extreme hardness — in fact only the diamond surpasses it. Other characteristics which qualify the ceramic for nozzle use are its good mechanical strength and close grain texture.

When the ceramic inserts are received at AEFCO they are cemented into a cast iron jacket. The completed nozzle is then painted, baked and labelled with a decal nameplate.

The nozzles have been widely accepted by industrial users for cleaning a wide range of products including the interior surfaces of shell and bomb forgings, pipe, cylinders and the countless other parts handled in blast cabinets and rooms.

PIG BOAT

At sea on a submarine isn't exactly the "life of Riley." In the Battle of the Atlantic, or on the great stretches of the Pacific these sailors know the hazards of their work.

One of the spots aboard these "Pig Boats" that all crew members enjoy is the galley, or kitchen. Space limitations prevent an elaborate set-up, but cooks aboard these vessels are justly proud of the meals they prepare for their crews. Your increased purchase of War Bonds help make submarine life as pleasant as possible

U. S. Treasury Department.

Cabinets Win Duck Pins

The bowling season is over and somewhat curiously, while the *Cabinets* team composed of Mary Brioli, Virginia Sellon, Julius Vander Brugghen and Gene Dickerson won the most games during the season, the *Timber Knockers* team made up of Elizabeth Pracklet, Cathryn Cruise, Harry Holmes and Earl Phillips chalked up 26083 pins during the season for a high total pin score and the *Cabinets* with 24768 scored the fewest pins.

The second place went to the Hot Shots followed by the Tables, Hits and Misses, Timber Knockers and Engineering. Individual standings for the year are:

Ladies	Total Pins	Aver-
· ·		age
Elizabeth Pracklet	6511	127.6
Alice Myers	11632	117.4
Vera Andrews	11364	114.7
Mary Brioli	10159	112.8
Marie Davis	9393	100.8
Martha Federnok	9946	97.5
Virginia Ernst	9845	96.5
Cathryn Cruise	4008	95.4
Agnes Ernst	8823	91.9
Virginia Sellon	7218	89.1
Irene Grams	5463	79.1
Men		
Joe Velleman	14728	140.2
Homer Byrd	14157	138.7
Harry Holmes	14524	138.3
Jack Bowers	10684	131.9
Harry Kozlowski	4355	131.9
Andy Federnok	13067	131.9
Earl Phillips	9326	129.5
Ray Vande Walle	10116	129.6
Julius Vander Brugghen	10099	129.4
Gene Dickerson	11564	128.4
Chuck Bultinck	12824	122.1
Dave Davis	4549	116.2
Gilbert Bair	4455	114.2
Ray Biggs	2198	104.6



"'Chests Out' was what I said! Have I gotta teach you anatomy, too."