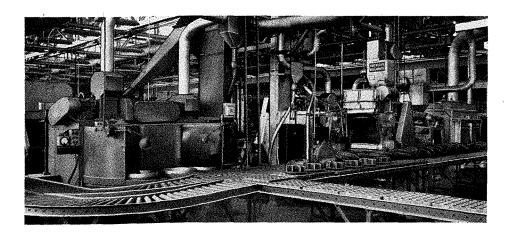


G REETING

*



Airpower-AND YOUR PART IN HELPING IT TO BLOT OUT TOKYO AND BERLIN

AIRPOWER has proved to be the real key to military and naval successes in World War II.

Review each major campaign and you will find that it was preceded by devastating bombing — then, when the actual attack came, it was protected by an air umbrella of terrific power.

The early "blitzkriegs" of the enemy were successful because they ruled the skies and spread panic and destruction at will.

Since Pearl Harbor our airplane production records have been little short of miraculous. The result is evident in practically every news headline—thanks to Yankee production methods, machinery, and the skills and determination of men on the production front.

Every employee at AFECO shares in this vital war effort, because the equipment we

produce is whipping production battles right and left. Scarcely any war production job is untouched somewhere along the line by AFECO equipment.

Those of you have read about the Wright Aeronautical Corp. know that this is one of the largest producers of aircraft engines for our fighter and bomber planes. Incidentally, the planes which bombed Tokio were equipped with Wright engines — and you helped build them. In the Wright engine plants there are more than 78 Wheelabrators.

The photo above shows only a section of the heat treating department at Wright's Cincinnati Plant. In this view are shown the following AFECO equipment: A No. 2 Wheelabrator Tablast; two 27 x 36" Wheelabrator Tumblasts; a 20 x 27" Wheelabrator Tumblast and an American Sand Blast Cabinet.



Doing Your Christmas Shopping Early

ABOUT this time each year you suddenly remember it is only four weeks until Christmas and this year you are going to "do your Christmas shopping early." This thought even occurs to the man who always waits until 3:30 December 24 to buy his wife a 5 lb. box of candy and to call up the florist to send her a dozen American Beauty roses. Why it must always be "American Beauty" roses when they don't go with the furnishings in the home, she prefers white chrysanthemums and florists almost never grow "American Beauty" roses, is a mystery no one has ever answered

The understanding florist sends a dozen red roses and the man draws his robe of self-satisfaction around him — he's done his Christmas shopping again.

But returning to the man who starts his shopping ahead of time — where the fun is really found. You amble into the particular women's specialty shop whose newspaper advertisements your wife longly scans each evening.

Even here the Christmas bustle has intruded, disturbing the usually quiet, dignified atmosphere. After long anxious moments you finally attract the attention of a tired saleswoman and explain you wish a robe — something pretty. The harried clerk asks the size, color and model you want. After fumbling around in your mind you say desperately, trying to hide your red face, "Oh, she's about your size, maybe a little heavier." (The clerk wears a size 9 and must have that shortened.)

After a long interval of waiting she trots back with a slick red job and says it's a size 12, price \$19.95.

No, no, you want a pale blue number with something fluffy around the neck. The red disappears and is replaced by a pale blue filmy negligee well garnished with maribou, the price tag says \$29.95. The price is more than you had anticipated — but visions of your wife looking like an angel invade your mind and you tell her to wrap it up for you.

After your hard shopping expedition you hurry home (your wife will buy your gifts for your parents and sister) and try to sneak into the house with your package. The once-pretty Christmas box has become dog-eared because you dropped it in the jam on the bus — and now, the problem of hiding it until Christmas morning.

You decide on the guest room closet. With a sigh of relief, you reach the closet — you've outmaneuvered the family — open the door to find it full of various sized packages, cached by someone who got there first.

Christmas morning — the children are knee deep in tissue paper, toys and confusion. You received just the gifts you wanted and a box of good cigars — (wonder what black market supplied them) and the little woman starts opening your gift to her. She ohs and ahs over the box



which your sister wrapped for you at the last minute, like a department store display. Finally, she brings herself to remove the ribbon, tear the paper and take off the lid. You sit tense watching the stars of delight appear in her eyes as she tries on the fluffy blue negligee.

After all of this, why did she take it back the day after Christmas and get that smooth red job you didn't select?

If you would like some Christmas gift suggestions for your wife, here are a few that have a lot of feminine appeal: Perfume and cosmetics, jewelry, hose, gloves, purses and mirrors.



S. G. C. Plays Santa Claus

This year's Christmas present to former employees now in the armed forces, from the Servicemen's Gift Committee is an all-purpose zipper kit. The bag is of chevron striped cotton gabardine in olive drab. It folds down to almost nothing when not in use and opens up to 17 x 8 x 7" and closes with a plastic zipper. Inside the bag the serviceman will find a pound of candy and a book "Short Stories for Men." This gift goes to the men inside continental United States.

The Christmas gift to the men outside the United States is a deposit of \$10.00 toward the purchase of a War Bond.

* THE

AMILY ALBUM

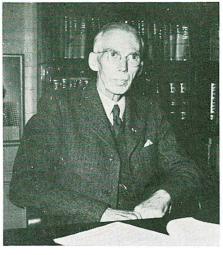
DAVID CHENEY TURNBULL, genial chief engineer for the past ten years, is one of the most popular men in the AFECO organization. His patience, kindness and good humor have caused him to be respected and loved by the entire organization.

Mr. Turnbull, being of Scotch descent delights in telling Scotch jokes. His current favorite is this: A Scotchman believes in the Bible and reads in it, "it is more blessed to give than to receive," and not wanting to deprive anyone of a blessing, is willing to be on the receiving end only.

Mr. Turnbull was born in Defiance, Ohio, October 17, 1881 where the Turnbull Wagon Co. had been established by his grandfather in the late 70's. He attended a procession of schools in New York, Nebraska and Tennessee. He then entered the State Normal College at Florence, Alabama and studied there for three years. For the next year and a half he took special courses in mathematics and taught mathematics at a graded school in Chattanooga, Tennessee.

His father then offered to finance him if he would spend all of his time studying International Correspondence S c h o o l courses in mechanical, electrical and structural engineering. By this method, studying eight to ten hours a day, he completed the three courses in 2½ years! Mr. Turnbull chuckles when he relates how his papers were going through the school's office so fast, it was difficult for them to keep up with him.

Mr. Turnbull's father was one of the first "efficiency experts." He would go into a wagon factory, study its operation and help them rearrange their production methods so that more wagons could be



David Cheney Turnbull

built with the same manpower. As a result the Turnbull family would live in one place from two to four years, then, when father Turnbull had completed his work, move with him when he was hired by another company to revamp their production methods.

While his father was superintendent of the Florence Wagon Co. (Alabama) David began working there at a wage of \$1.00 a day, and later became foreman of the wheel department. When his father and grandfather opened a wagon shop in La-Porte, Indiana, he worked for them a short time. This work wasn't very interesting to an engineer, however, so in 1901 he en-

tered the employ of Dodge Mfg. Corp. as a tracer, and held increasingly important posts during his 29 years' service, the last seven years of which he served as chief engineer.

In May of 1933 he was employed by AFECO's chief engineer, Lewis D. Peik, on a special assignment helping develop and perfect the Wheelabrator unit. When Mr. Peik left the Company in September of that year, Mr. Turnbull was made chief engineer, a post he has held ever since.

Mr. Turnbull has had 21 patents assigned to him, chief among them being, the Tumblast loader, continuous Tumblast, disc separator for abrasive, AR blade metal and special machines.

The Boy Scouts of Mishawaka have long felt his influence. He helped organize the first Boy Scout troop — Troop No. 1 at the First Methodist Church and was on the troop committee for 10 years. For 20 years, ever since it was organized, he has been treasurer of the Boy Scout City Council.

He is a very active member of the First Methodist Church of Mishawaka. His son, Bob, serviceman for AFECO in the Chicago territory, we know because he worked in the experimental department before going on the road. He also has three daughters and a wife whom he says is "tops."

His hobby is stamp collecting and he is an authority on the subject. While his most valuable single stamps are probably worth not more than \$200, the entire collection is quite valuable. There is a lot of fun and profit from stamp collecting and Mr. Turnbull spends his leisure time collecting stamps in odd, out-of-the-way, or unthought-of places.



Origin of a Few of the Christmas Symbols

We accept the flowers, shrubs and trees associated with Christmas with very little thought as to why they might be symbolic of the nativity of Christ. The reason for the more popular decorations are given here

The *holly tree* has come to us down through the ages as a Christmas symbol because to the early Christians holly was a symbol of the flaming love of God that filled the heart of the mother of Jesus.

Rosemary acquired its delicate fragrance when the Virgin Mary laid the tiny garments of the Christ Child on its gray-green leaves. It originally had white blossoms, but because of its adoration for Mary, the bush changed them to lavender, the color of her cloak. An old time English custom is to keep the rosemary wreath until it is withered and dry and then to burn it. The person smelling the sweet ashes grows young again, because rosemary is the plant of eternal youth.

Ground ivy was brought to America by the English. The early Christians believed the fragrant heart-shaped leaves indicated Que Dieu Marcha, or holy spot whereupon God had once set foot. They always placed bunches of ground ivy in their Christmas wreaths.

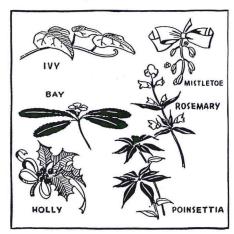
The bay tree is sacred because tradition tells us a tree of this family gave shelter to the holy family during a thunder storm, therefore, lightning will never strike it. Early Christians used the branches and leaves in their homes and to decorate their small hidden chapels during the holy season.

The poinsettia is a comparatively recent Christmas decoration. The flower is a native of Mexico and its brilliant scarlet petals blooming at Christmas has become so much a part of the holy season we feel that it has always been symbolic of the time of Christ's birth.

The custom of kissing under the mistletoe stems from the early Christians standing under a wreath of mistletoe to give each other the sacred kiss of peace and good will. It was called "Golden Branch" by Vergil and has always been part of the winter holiday season. The druids cut it from the oak trees with a golden sickle, 1 tting the waxey berries and shiny leaves



fall upon a white cloth held by a band of maidens. After the completion of the ceremonies, the people placed the berries and leaves over their doors. The plant was supposed to possess healing powers and they called it Guidhel or all-heal. That is why for centuries after Christ's birth, wreaths of mistletoe were hung upon the altars of churches at Christmas symbolic of Christ's healing power.



The Drum With More Than One Life



THE urgent need of steel for war has drastically curbed manufacture of steel drums for industry — and recently resulted in a War Production Board order prohibiting use of steel drums for packing many products formerly shipped almost exclusively in metal containers. Certain other products, among them oil and oleoresinous paints and varnish and varnish stains, may be packed in steel drums only if the drums were owned by the packer or manufacturer on or before last November 7, 1942.

New steel drums are being manufactured today for only a few limited uses — principally for Army, Navy and Lend Lease, and for some products vitally needed by war industries that cannot be shipped in reconditioned drums or in containers of wood or other material.

CONSERVATION A NECESSITY

The necessity of conserving steel drums now available is one of the serious problems facing the paint industry. Neither new nor used drums can be purchased for packing paint products, and the industry is forced to conserve containers it now has available.

A steel drum, properly handled by the packer and the packer's customer, and if properly reconditioned after each use, can make 15 or more trips before its useful life is at an end.

"LAUNDERING" STEEL DRUMS

Some paint manufacturers have been doing their own drum reconditioning, while others have had commercial drum "laun-

dries" handle this work for them. The importance of commercial reconditioning plants to the paint industry has grown recently as manufacturers who previously had been using new drums exclusively are now required to reuse their containers—and as other manufacturers who had divided their production between new and reconditioned drums are now restricted to reconditioned drums and limited in reconditioning capacity.

The Newark Steel Drum Company, with a large plant at Linden, New Jersey, is one of the pioneers, and probably the largest steel drum "laundry." This company has introduced cleaning practices that have been adopted by similar commercial plants, and incorporated in drum cleaning departments of drum users.

Production of the Linden plant is above one-half million reconditioned steel drums a year. Up to 90 thousand drums, a great majority belonging to drum-using companies, are in the company's yard for rereconditioning. (See photo above.)

HOW DRUMS ARE RECONDITIONED

Drums arrive at the plant by rail and truck. Covers of full-removable-head drums and bungs of tight-head drums are left on to keep rain and moisure out, and to prevent, as far as possible, exchange of air within the drum while in the yard. Exchange of air would bring in new moisture to rust and corrode the metal.

Cleaning operations at Newark Steel Drum Company differ from those of oth c cleaning plants in that equipment employing an abrasive blast stream is used to clean the exterior of all drums, and the covers and interiors of drums with full removable heads. The inside of tight-head drums is cleaned in the conventional manner — by soaking and flushing in a solution, with composition of the solution dependent upon use to which the drum previously had been put.

WHEELABRATOR BLAST EQUIPMENT USED FOR CLEANING OPERATIONS

Drums are placed on an inclined track or conveyor leading to an American Wheelabrator blast cleaning machine. In this machine, designed for Newark Steel Drum Company by American Foundry Equipment Company, drums are introduced one at a time and subjected to abrasive blasts thrown by two centrifugal wheels as the drums are spun on rollers under the abrasive-throwing wheels. The abrasive blast strips the drum exteriors clean of all paint and rust, and the machine handles 150 drums an hour. One man charges the drums into the machine, and another receives the drums as they are discharged.

Another American Wheelabrator blast cleaning machine, also specially designed for drum cleaning, is used to clean the interiors of full-removable-cover drums. The open drum is inverted over a single abrasive-throwing wheel. The drum revolves as it is cleaned. In operation of the machine, the operator places one drum on the loading station while a drum previously loaded is being cleaned. As the clean drum is discharged from the machine, the drum to be cleaned enters the cleaning chamber and is positioned automatically over the abrasive-throwing wheel. The operator controls the cleaning time in accordance to the condition of the drum.

A PERFECT FINISH

The force of the abrasive on the steel drum not only provides a truly clean surface, free of dirt and other foreign matter, but it slightly roughens the metal. This roughened surface is particularly desirable when drums are refinished, as the paint or other coating makes a better bond than on a new steel drum or on a drum that had (Continued on page 11)



TUMBLAST ASSEMBLY Ray Hutchins

The shortage of shotgun shells is no worry to Delbert Dare. His favorite pastime, (he claims) is to go fishing and at the same time entice wild ducks to his boat so he can hit them over the head with his fishing pole.

* * *

Anyone who hasn't seen Bill Rapp's new act of balancing sheet steel while standing on a ladder should ask him for a demonstration. Don't tell the Safety Committee about this though.

* * *

People are still asking Charley Davis from where does cider come. Is it obtained from apple trees like maple syrup from maple trees, Charley?

EXPERIMENTAL Endoxie Chaillaux

When rumors started flying around that a girl was going to be hired to work with the men in this department, things began to perk up. Several girls were interviewed and shown around and the comments flew thick and fast. We all think that a good choice was made when Mrs. Betty Broad was hired. We welcome you, Betty, and hope you like your new job.

* * *

Question: Why are bald headed men so sensitive?

Answer: See Paul Bessmer for a complete answer to this question. (Confidentially, though, I don't believe you will get him to tell all.) Compliment him on the beautiful neckties he wears and I believe he will forgive you for asking.

SHIPPING

Juanita Hanna

The shipping department gang have been exceptionally quiet since having their fill of doughnuts and cider at the Halloween party. Everyone must have eaten too much to be up to their old tricks.

* * *

Ray DeSmet says Uncle Sam wrote him a letter. So we gave Ray a good snowball fight the first snowfall, just to make sure he doesn't forget us when he leaves to pay his respects to Uncle. The fellows and girls miss Mrs. Kadowski's cakes and cookies since Bill has been off work sick. Hurry and get well Bill, our sweet tooth is being neglected.

MACHINE SHOP

Irene Grams

Frank Gehl, trying to be a good friend "adopted" four tiny squirels. They were such cute little squirrels and would eat out of the hands of the Gehl family. Everything was going along fine — when someone told Frank he had to have a license to keep wild animals, otherwise there is a stiff fine. Frank got a license to keep one squirrel and had a very hard time deciding which one to keep, finally the one with the bushiest tail was selected. Just goes to show you even human kindness has a price on it nowadays.

DESK DATA

Marjorie Frazee

Mary Brioli proudly displayed a pair of wings recently given her by her brother who is an aerial gunner. When A. E. Lenhard asked her if the wings were gunner's wings, she said "No, but he's going to get some with a bullet right in the middle!"

Dorothy Jane Wiley recently married Richard Wachs — best wishes Dottie.

* * *

The newspaper announced that Jackie Cooper of movie fame had been assigned to V-12 training at Notre Dame and immediately every female in South Bend and Mishawaka began to plot how she could at least catch a glimpse of the celebrity.

After two weeks in which Mr. Cooper failed to appear anywhere in South Bend, four local girls, including our own Betty Longenecker decided to spend a week-end in Chicago. The high point of her visit to the Panther room in the Hotel Sherman was her conversation with the aforementioned Cooper. Her studied opinion is as follows: The movies don't do him justice, because he's better looking, and a good line and — hmmm.

Betty soon had to return to her own table because her knees were shaking so much she couldn't stand up any longer. What price fame? — Well Betty is my idea of a slick chick.

* * :

Some things go together like ham and eggs and the one I elect to membership into this well worn group is: That brilliant, happy, alls-well-with-the-world smile the girls wear just after they receive a letter from that particular service man.

* * :

New faces in the office incude: Margaret Harrington — mail desk

* * *

That diamond on Virginia Moore's hand is from Ensign Dent Hawthorne — best wishes to you both.

* * *

Alden Lenhard's comment on the flickering fluorescent lights: "My Friend Flicka."



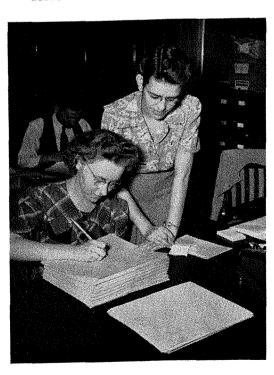
Bob Schalliol, surrounded by Mary Bokhart, Marjorie Frazee, Mary Brioli, June Stoner, Elsie DeBruyne and Eleanor Biggs, cuts into his birthday cake before blowing out the candles. The big smiles are in anticipation because the entire department helped him consume the chocolate cake, and was it good!





RAY STEELE takes a War Bond application from MARKLAND MINER, who was released from the Army September 1 with a medical discharge.

BETTY WEAVER and DOROTHY HOLLINGSWORTH make war bond deductions from individual checks.



You

YOU buy a War Bond. To you it is a simple process—you simply fill out and sign the form authorizing the payroll department to deduct a certain amount or percentage from your pay check each week and sign the delivery receipt when the bond is handed to you — but when you sign that first form — what a vast amount of machinery is set in motion that you may receive your bond.

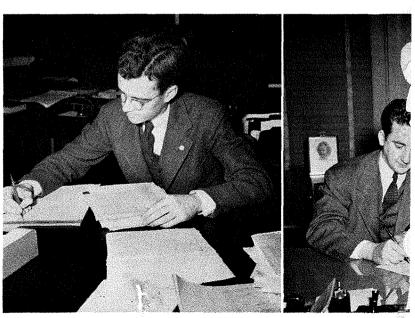
The work of issuing War Bonds is performed by the accounting department in addition to their full time work of paying invoices, recording accounts receivable payments, sending out statements, issuing your pay checks every Friday, making up the numerous reports that must be submitted to governmental agencies, etc.

Bonds are issued three or four times monthly and you receive your bond when the amount deducted from the check distributed the previous Friday completes the purchase price for the denomination bond you are buying.

Every one of the more than 26 different operations that must be performed before you receive your bond is not shown, but here are the highlights:

JOHN WOLF lists bond deductions for office and engineering employees.

J. A. SCHMI1 eral Reserve B



uy A War Bond



MARGIE FRISZ posts deductions from payroll to your individual ledger card. When the amount reaches \$18.75 she writes up a \$25.00 bond for you, running it on the Elliott Addressing Machine.



JEAN GUNNETT delivers a bond to CLARE WARNER who signs the delivery receipt.

the report to the Fedared by PAT GREENE. JULIA BAUGHER lists all new bonds in Bond Journal when they are received.

MARIE DAVIS posts total money paid for bonds, and total money received from employees' checks to the general ledger.







* American Men in Uniform

Pvt. Al Smith writes from Camp Claiborn, La.:

"Just a note to thank the gang at the AFECO for the Reader's Digest subscription. Camp Claiborne is really away from civilization and the engineer corps is at the tail end of the camp handy to the demolition areas, etc.

"For a long time I thought a Wheelabrator was the most destructive thing going until I learned to handle TNT and a new explosive known to us as Composition 0.

"Say hello to the gang for me and tell them thanks. Some day when it is raining so hard we can't drill I'll write more. A mere cloud burst doesn't stop us."

* * *

Pvt. Jack Baugher, North Africa:

"Yesterday I received the August edition of the 'Parade' and I have read it several times and enjoyed every page of it.

"In that issue I read one of the excerpts from Cpl. Truckowski's letter and from it I gathered the idea that he doesn't mind being here so much. But for myself, he can have it, gladly.

"The Arabs here are rather comical and are the world's biggest moochers. Every time we go some place the kids follow us around with a shoe shine kit saying, 'Shine Joe? American polish.' 'Gimme cigarette Joe.' And if we go on a trip we usually are issued 'C' rations. In one can there are several cookies, 3 to 5 pieces of candy and either, coffee, cocoa or lemonade. The Arabs call the candy pom poms and are always asking for them. If we don't give them something they cuss us up one side and down the other. It is amazing how they pick up the American lingo.

"Cpl. Truckowski is right about the beer and wine situation, but I still have to get used to downing the stuff. The beer is about one half of one percent and the way to served is really something. I've seen it handed over the bars in everything from half pint fruit jars to flower pots.

"Last week I went into town to buy a souvenir and it is a very tough situation. The Germans cleaned the stores out when they occupied the town and the shop keepers are unable to replace the merchandisc.

"I think it would be a swell gesture if you could publish the address in the 'Parade' of the boys here in North Africa so we could get in touch with one another. I know I would like to see some of the guys again.

"Last Sunday in church I met one of the boys from home. It was Lt. Angelo Nicolini, we had a short talk but I had to grab the truck back to camp."

From Fort Bliss, Texas Pvt. Joe Kuzmanovich writes:

"Was very happy indeed to learn that my old friends remember their buddies and fellow workmen. "Your gift was quite welcome and appreciated too. It came at an opportune time as this weekend was the first chance to get away from camp since we left home. Made quite an occasion of it, thanks to all of you, taking in the sights of El Paso and Juarez, Mexico.

"Trying my best to make a soldier, and believe me, our superiors are trying twice as hard to make one out of us."

* * *

Coast Guardsman Edgar Mumby stationed at San Francisco writes to Ralph Whittaker:

"Haven't had much time to sit down and take time to write you fellows, but guess the letter deal is a two way proposition. From letters from home I know you fellows are putting in long hours and see every day the results in a round-about way heading over seas.

"I feel quite fortunate to be based here in the good old U. S. A. again since transfer in September. Since being up and down this coast and across the pond one can realize what a wonderful place we have here after all.

"Bumped into Al Ward right here in Frisco a while back and he was the first guy I have ever bumped into that I had known before entering the Service.

"Sure was glad to see that vacation check too. I have cashed it into real backs and have it neatly tucked away into the jack pot and hoping to use it for train fare in November on the fastest thing on rails to get back to Indiana.

"You can be sure I'll be in to see you boys if I can slip away from home that long. I'm full of stories and would like to take a gander at some real civilians again. This is the third letter tonight so am about to hit the sack. Am hoping to hear from you guys too."

* * *

Pvt. Ward Correll mentioned on a recent post card:

"It may interest you to know I received your letter out in the middle of a woods on top of a jeep at 7:00 P. M. We were out on a three-day bivouac."

* * *

From Pvt. Peter B. Kalil:

"Here I am way out in no man's land. All we see out here is jungles and more jungles. There are plenty of pineapples, cocoanuts and bananas out here so we get plenty of them. The food here is good and we get plenty of it.

"I receive the 'Reader's Digest' that you send every month and I am telling you it sure comes in handy out here. I read it in my spare time and then pass it on after I finish reading it.

"I have been overseas two months now and it seems like two years. I've been on three islands since I left the States and sure wish I was back there now.

"The name of the island I was on is New Caledonia. I can't tell you the name of the other two right now."

* * *

Bob Barkdull says he visited New York City for three days recently and it sure was keen. He saw four big name bands while there.

Seabee Ralph Mumby tells us:

"I want to thank the committee and all the fellows who donated for the three bucks. It sure came at the right time. I had just finished training for the day and had liberty. The mail man came in when I was getting dressed with the letter, so I got it before I went to town.

"It costs \$2.00 for a round trip ticket to Richmond, Va., so that is where most of it went. I was surprised to get money. I didn't know you send it to servicemen. Anybody who takes care of servicemen like you do is what they call 'on the ball' in the Navy.

"I am going to school now to learn the Navy way of building guonset huts and tent frames. The schooling isn't bad. The worst part of it is we have to march two miles to the school and that is four times a day.

"It has been raining quite a bit here and things are plenty muddy. Even my clothes from hitting the deck. So I will have to sign off and get on the scrub brush."

* * * *

Seeing is not always believing. There are a great many people you can see, but not believe.

Pfc. Darrel L. Dimos

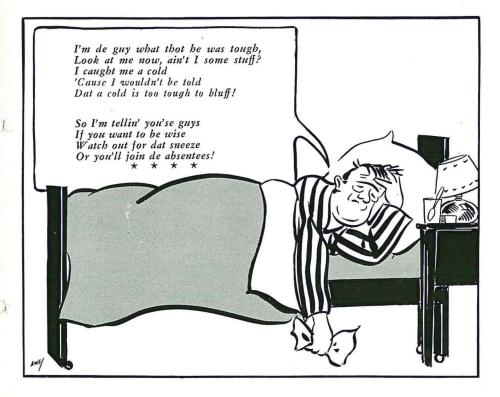




Pfc. William H. Doty



You Gotta Cold?



Colds cause more lost work time than almost all other "absentees" combined over 100 million days a year.

If we are able to avoid just one cold a year or shorten a cold by just one day we help in speeding the day of final victory.

Live Normally - avoid excesses. Eat simple food, drink plenty of water, get plenty of rest and sleep. Colds Are Catching - stay clear of careless coughers and sneezers. Don't share towels, drinking glasses, half-consumed apples, candy bars or cigarettes with anyone.

Colds are Highly Infectious - they are spread by people who carelessly sneeze, cough or spit.

Neglected Colds Frequently Lead to Dangerous Complications — to avoid much of the suffering and misery that may follow, treat a cold at the very first symp-

Disease-producing bacteria of many types - pneumococci, streptococci, staphylococci normally live in the noses and throats of healthy persons. Usually these germs are harmless. But they often "act up" and invade tissues that have been inflamed and weakened by a cold.

If this happens, and the excited harmful bacteria are not checked in their invasion of the membrane lining the nose and throat, "complications" may set in, and a cold becomes more than a cold. That's why "just a cold" is a serious disease!



Questions About AFECO

1. Approximately how many tons of coal will AFECO use this winter?

2. How many service men does AEFCO have in the field installing and servicing Wheelabrator machines and other American equipment?

3. How many AFECO sales representatives are there?

4. Approximately how many parts are kept in our stock room and in process?

5000, 13,000, 24,000, 45,000 or 75,000?

5. Who is the general foreman in the steel shop, night shift?

Who is the superintendent of the shipping room and how long has he been with AFECO?

7. When did AFECO locate in Mishawaka?

8. What are the names of the three telephone operators?

9. Who is sales manager for the Electric Air Heater division?

10. How many plant guards do we

See page 11 for the correct answers.



A couple of colored boys were crouched in a shell hole while a barrage whanged away over their heads. "Look here, Rastus," said one, "ain't you skeert?"
"Not me," boasted the other. "Ain't no

shell gonna come along got my name on

"Me neither," said the first fellow. "I ain't worried about my name on no shell. What I am worried about is, maybe there's one marked 'To whom it may concern'.' :::

* "Miss Alice ain't home," said the colored maid to a caller. "She's done gone down to de class."
"What class?" asked the caller.

"Miss Alice gwine to be married, you know, an' she's taking lessons in domestic

Can you read any one of these lines perfectly three times in succession?:

Chop shops stock chops. Bob bought a black back bathbrush. I sniff shop snuff — you sniff shop snuff. Old oily Ollie oils oily autos. Frank threw Fred three free throws.

"It's not just the work I enjoy," said the taxi driver, "it's the people I run into." **

Have you heard about the moron who held the blotter to his ears to listen to the Ink Spots?

The new customer walked into the store. "How many chickens have you today?" "Oh, about six, ma'am." "Tough or tender?"

"Some are tough and some tender." "Well, I keep boarders. Pick out three of the toughest, please."

To this unusual request the delighted grocer complied at once, saying, "Please ma'am here are the tough ones!"

Whereupon the customer coolly laid her hand on the others and said, "Then I'll take these."

Customer: "My goodness, eggs are high!"

Grocer: "Sure, part of the war program."

Customer: "How?" Grocer: "All the hens are making Grocer: shells."

Who can recall the grand old care-free days when gasoline was so unrationed that women could use whole panfuls of it to clean their gloves, and have enough left over to blow up their kitchens? * *

Modern war seems to be just one banned thing after another. *

Doctor: "Your throat is very bad. Have you tried gargling with salt water?"
Skipper: "Well, I've been torpedoed six



The cutting tools you work with are the business end of war production.

Treat them as a good soldier treats his weapons — handle them with the same respect and care you'd give your fine precision gun if you were at the fighting front.

You are carving out the fine mechanized equipment that is winning this war. And, right now, it's materials and time that count the most. Careful tool handling will cut production time right down the line—back through the tool shop, tool steel plant, shipping—back to the distant mines where the precious tool metals like cobalt, vanadium, tungsten, start their long and dangerous journey to your hands.

A BROKEN TOOL IS A BREAK FOR THE ENEMY

Those cutting tools you use every day ---

★ Tools Are Weapons-Treat 'Em Right

drills, reamers, milling cutters, tool bits, saws, files, broaches and dies — have the teeth that really get the grip on the seats of Axis pants.

The tool experts at the War Production Board in Washington and the editors of magazines writing about tools and machining estimate that we can average at least 10% greater production from our cutting tools. That means the boys at the front would have 11 tanks instead of 10, 110 planes instead of 100, 1,100,000 rounds of ammunition instead of just a million. And don't forget it's that extra tank — those ten extra planes, those 100,000 extra rounds of ammunition that will give them the last shot instead of the enemy — that very often makes the difference between victory and defeat.

Proper care of tools is vital to victory now because it is difficult to replace tools that are unnecessarily broken, dulled or damaged.

NINE RULES OF TOOL CARE

- 1. PUT YOUR TOOLS AWAY.
- Tools are weapons; they must be kept sharp.
- 2. CHANGE BITS BEFORE THEY GET TOO DULL.
 - You can work faster, better with a sharp tool.
- 3. KEEP ROCKER REST FLAT WITH SHIMS.
- Your tool point takes a better bite when the tool rest is flat.
- 4. PUT BLOCKS CLOSE-CLAMP WORK TIGHT.

 If blocks are too far apart, work is
 - If blocks are too far apart, work is springy, may snap drill. . . . If clamps are loose, work may turn and hurt you.
- LOOK OUT FOR POINT OF DRILL. Adjust tool stop so point won't be damaged by the harder backing plate. Don't let drill point hit table when removing.

6. KEEP TOOLS LUBRICATED AND COOLED.

Nothing will damage tools more quickly than operation without proper lubrication and cooling.

- 7. FIT CUTTER SNUGLY AND EVEN-LY ON ARBOR.
 - If you force or pound the cutter on, it won't run true.
- KEEP YOKES CLOSE TO CUTTER.
 Otherwise you will get chatter and runout.
- KEEP SPACING COLLARS CLEAN AND PARALLEL.

Drunk milling cutters wobble, causing run-out.

TOOL WASTAGE IS A WAR-TIME SABOTAGE

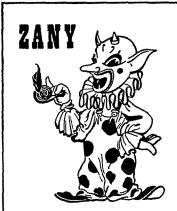
Our armed forces — your sons, fathers, husbands, sweethearts, brothers and neighbors are depending on you for the equipment they need to drive the aggressors back to Berlin and Tokio.

Broken, dulled and damaged tools not only shut down your machine for replacement but often ruin much careful work which has previously been done on the part you are working on and may hold up production all down the line. Moreover, their replacement requires scarce critical alloys that could be used in making steel for the weapons our boys need at the front and the work of skilled craftsmen who might otherwise be producing these weapons.

Don't hinder the flow of fighting tools to the fighting fronts by carelessness with the tools of production on the production front.

MEET THE AXEES

The Gremlins of Accidents



Zany thinks he's oh, so cunning With his rough and reckless funning, But he causes, with his clowning, Shootings, broken bones and drowning. It is neither brave nor brainy To be a joker a la Zany.

NATIONAL SAFETY COUNCIL

AFECO Raises \$7541.52 In War Drive

Employees of AFECO responded generously to the recent War Chest drive for contributions. 77.4% of all employees pledged one hour's pay or \$1.00 per month during 1944 and a total of \$7,541.52 was raised.

Two-thirds of this amount or \$4800 will be turned over to the Mishawaka Community and War Fund for aiding 23 agencies and the balance is to be given to the Red Cross during their Spring drive for funds.

The Labor-Management Committee and its crew of solicitors deserve the greatest praise for their successful campaign and their work in contacting every employee.

The chart below indicates by percentages the standings of each plant department in attaining the goal of every employee contributing one hour's pay per month:

Data with and	n
Department	Percentage
General Accounting	100%
Cost Accounting	100
Night Coremakers	100
Machine Shop — Days	100
Machine Shop - Nights	100
Payroll	
Purchasing	
Sales	
Stock Room — Nights	93
Heater	91
Steel Shop — Nights	88
General Office	88
Engineering	86
Foundry — Days	75
Advertising	75
Shipping	70
Experimental	64
Steel Shop Dave	60
Steel Shop — Days	60
Inspection	
Maintenance	54
Foundry — Nights	50
Stock Room Days	
Parts Service	31

Fate Is In YOUR Hands

N the last hour of the last day of World War I 1,017 American soldiers were killed in battle.

Think of the irony of that. If the war had ended an hour sooner those men would have been spared to live happy, useful lives.

We have the same situation in this war. It isn't so much a question of our winning the war — we are pretty well convinced of that — but we want to end it quickly. Every day, every hour that the war continues means the sacrifice of just that many more lives of our American fathers, sons, brothers and friends.

It is the responsibility of every AFECO

employee, as a good American, to assist in terminating the war quickly and successfully by a conscientious performance of his or her duties. We are all doing vital war work and every employee is an important cog in the war production effort — our winning of the Army-Navy "E" proved that conclusively.

Aside from our all important production effort there is another extremely important way in which we can assist in the war effort and that is to contribute Suggestions regularly. Every good idea helps the men behind the guns to wipe out a gang of Japs or Nazis just that much sooner. Send your ideas in today.



Minutes Count . . .

Minutes count. Do you know that in the last hour of World War I, 1017 Americans were killed? . . . Minutes count. Your minutes. The minutes of the worker at the next machine. Minutes crammed to the hilt with maximum production means minutes—hours—days—weeks cut from the war's duration. . . . Yes—your attendance will win the war—your attendance will save lives of the American Boys who need what you are making—whose very lives depend upon your steady, uninterrupted production.

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Your Job is Vital to Victory!

Answers to Questions About AFECO

- 1. 1500-2000 tons or 4,000,000 pounds.
- 2. 12
- 3. 22
- 22,000 different parts or assemblies in stock and over 1,000 parts and assemblies in process.
- 5. Walter Nelson
- 6. William Crowell, 9 years
- 7. 1926
- Mildred Fore, Virginia Sellon and Peggy Shipley
- 9. Robert E. Pequignot
- 10.

Make it a point to submit at least one idea every week

Every day is a Navy day for millions of men and women in war plants. The men in blue depend on you. Remember, victory begins with you. When you beat your schedules, you help your Navy hasten the enemy's defact!

Your war job is your battle station. Stay on the job and produce for your Navy!

Suggestion Winners and Their Ideas

HOMER L. BYRD

Make part No. 36223 from 1-3/16" x 1-1/2" x 3-1/8" bar stock.

EUGENE HEIGHWAY

Pattern changed on the H-4 rams where the cutting die goes.

RAY HUTCHINS

Enlarge hand wheel on 15×20 " Wheelabrator Tablast from 9" to 12".

DENVER JOHNSON

Place electric receptacles so that the cables for grinders and drills will not lay across the aisle. Put a light in the jeep.

DECATUR B. JAYCOX

Punch a slot in part No. 54010 instead of a distorted hole caused by bending.

J. E. MINNES

Even-up dies that are used to break up 48 x 48 x 72" reinforcing bars.

ALFRED ODLE

Change welding on the 48×48 " Wheelabrator Tumblast back plate hand hole to spot weld.

NOLLON RENNER

Eliminate tapping holes in side frames where door angles are fastened.

JACKSON SNYDER

Removing front plates on spot welder where points go through drill and slot so points stick out in front.

ODELIA SCHAUT

Numbering machine for shop orders.

The Drum With More Than One Life

(Continued from page 4)

not been subjected to the abrasive blast. Certain synthetic resins used to line drums for the chemical industry, for example, could not be applied satisfactorily to steel drums with a smooth finish, but adhere perfectly to drums blast cleaned by this method at the Linden plant.

A third blast cleaning machine is used to clean the removable covers of open-end drums. The covers are placed flat on a revolving table that passes the work under an abrasive wheel within the machine. Covers are turned over and passed through the machine a second time to clean the opposite side. The machines are grouped together, and are vented through a single American Dustube cloth-bag type dust collector.

Cleaned drums are inspected and graded—some to be painted, others to be relined and painted. Drums are completely assembled and ready for delivery before spray-painting the exteriors, and any color or combination of colors is used to comply with the customer's specifications. Many full-removable-cover drums reconditioned by Newark Steel Drum Company are interior-finished or lined with synthetic resins before exteriors are painted. All finishes are baked.

This is one of the many ways Wheelabrator is helping in the steel conservation program and helping to lick the problem of transporting needed war materials, quickly, safely and efficiently.

Our reward for continued excellence of war production — the Army-Navy "E" star award. ART MUR-PHY and HIRAM BRESSLER prepare to raise the star award flag to its proud position beneath Old Glory.



CLASS OF SERVICE

This is a full-rate relegram or Cablerram unless its deerred character is inlicated by a suitable

WESTERN

SYMBOLS
DL-Day Letter
NL=Night Letter
LC=Deferred Cable
NLT=Cable Night Letter
Ship Radiogram

the filing time as shown in the date line on full-rate telegrams and day letters, and the time of receipt at destination as shown on all messages, is STANDARD TIME,

WALOG GOVT NL = WASHINGTON DC 25

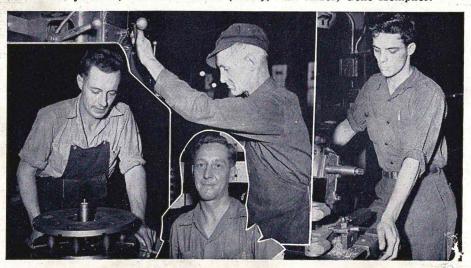
TO THE MEN AND WOMEN OF THE PRODUCTION LINES =

ON BEHALF OF OUR FIGHTING SAILORS, MARINES AND COAST GUARD, AT CLOSE GRIPS ON THIS TRADITIONAL DAY OF PEACE WITH ENEMIES WHO HAVE SPREAD WAR AND CARNAGE OVER THE EARTH, I EXTEND WARMEST GREETINGS TO YOU MEN AND WOMEN BACKING US UP SO MAGNIFICENTLY ON THE HOME FRONT. WE HAVE ALREADY DEALT THE FOR MANY HEAVY BLOWS. WE SHALL STRIKE HIM WITH EVER INCREASING FORCE AND DECISIVENESS AS YOU CONTINUE TO STRENGTHEN US WITH THE ARMS WE NEED. THE COURSE ON WHICH WE ARE SET WILL NOT BE TRAVERSED, HOWEVER, WITHOUT MUCH LABOR AND BATTLE. BUT UNITED AND UNDAUNTED, WE CANNOT FAIL. WE WILL WIN THROUGH TO THE LASTING PEACE THAT LIES BEYOND VICTORY =

ADMIRAL ERNEST J KING COMMANDER-IN-CHIEF U S FLEET

Know Your Union Stewards * MACHINE SHOP

Dave Johnson, Lawrence Bickel (inset), Earl Kizer, Gene Kempner.



Some of the War Materials Being Processed By the Wheelabrator

It is easy to see how you are contributing to the war effort when you are the man behind the man behind the gun, but when it gets to the point where you are the man behind the man behind the man behind the gun this is much more difficult to understand.

Wheelabrator equipment is cleaning a multitude of war materials, so here is a list of some of the war parts Wheelabrator airless abrasive blasting and pressure blasting are cleaning.

AIRCRAFT

Engines:
Engine cylinders
Cylinder barrels
Cylinder heads
Cylinder sleeves
Chills for cylinder

heads
Engine parts
Valves
Valve springs
Rocker arms
Connecting rods
Crankshafts
Crankcases
Carburetors
Fuel pumps
Spark plug rings
Master rods
Piston rings
Pistons
Bearing races
Gears

Superchargers:
Supercharger parts
Supercharger
propellers
Supercharger impellers

Propellers:

Propeller blades
Propeller hubs
Propeller washers
Propeller rings
Propeller governors
Variable pitch
propellers

General:
Wheels
Struts
Landing gear
Parachute hardware
Wing flap tracks
Springs
Meters
Forgings
Castings
Stampings

TANES

Armor plate
Treads
Tread pins
Tread links
Tread links
Tread inserts
Bogie wheels
Sprockets
Wheels
Cover plates
Doors
Housing pieces
Turrets
Track connecting links
Tank destroyer parts
Transmissions
Gears
Shafts

TANKS (Cont.)

Generator pieces Motor parts Bearings Castings Forgings

GUNS

Machine gun supports
Machine gun barrels
Machine gun parts
Gun magazines
Gun castings
Gun forgings
Gun trunnion blocks
Gun receivers
Gun mount gear cases
Garand rifle parts
Springfield rifles
Mortar parts

AMMUNITION

Torpedoes Torpedo air flasks Shells Bombs Bomb parts Armor—piercing shot Grenades Fuse bodies Fuse parts Shell caps Cartridge belt links Mortar shells 30 cal. gun barrels Cannon parts Rifle parts Gun sight pieces Carbine triggers Bofors gun mounts Bofors gun barrels Bofors gun parts Anti-aircraft gun mounts

NAVAL

Armor plate
Anchor chain
Engine castings
Bearings
Motor frames
Transmitter cases
Generator parts
Valves
Fittings
Turbine parts
Marine lanterns
Marine engine parts

GENERAL

Short wave radio transmission frames Army truck parts Bayonets Armor plate