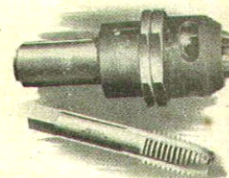


# The Helix



The Path of a Perfect Screw Thread is a True Helix.

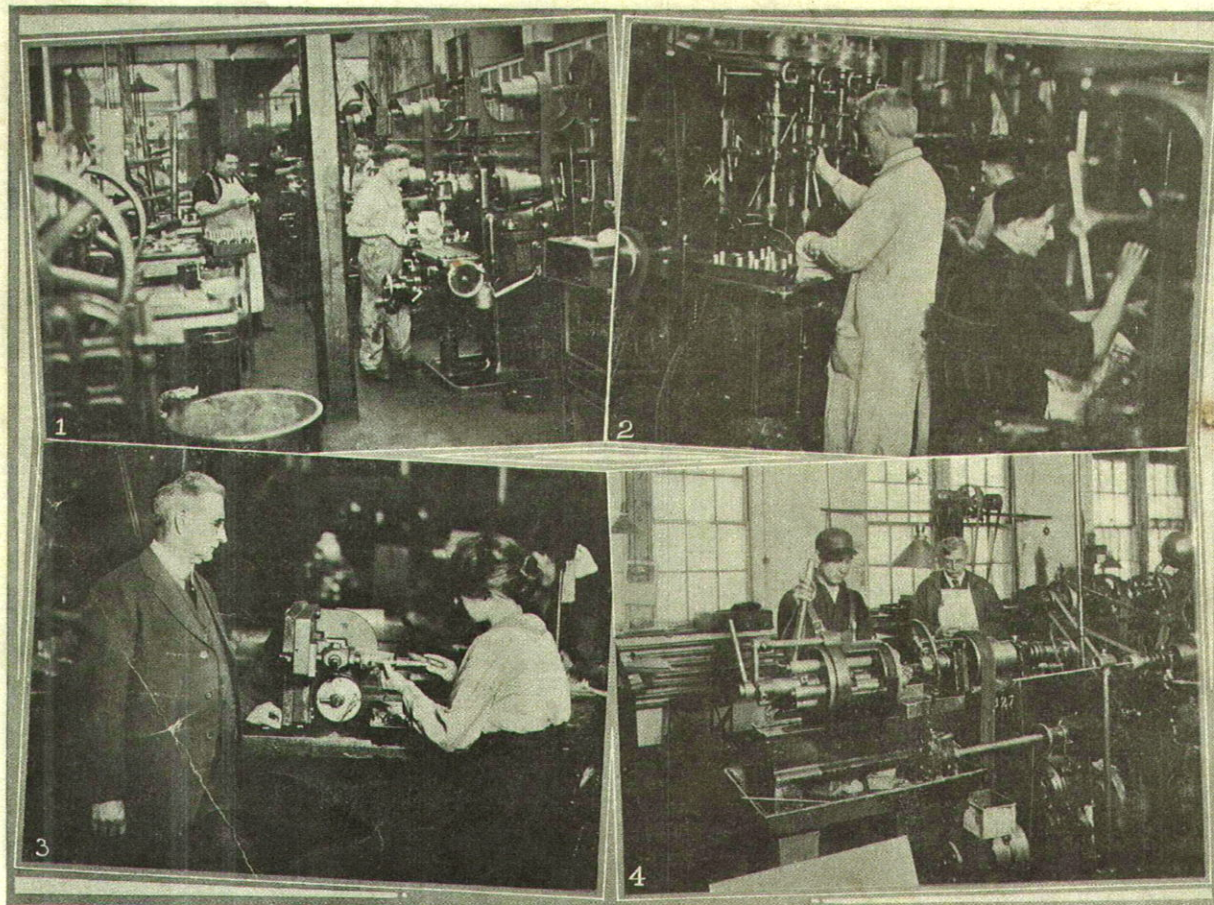


VOL. I

GREENFIELD TAP AND DIE CORPORATION  
GREENFIELD, MASS.

MAY 1, 1918. NO. 1

## GLIMPSES IN OUR FACTORIES



### No. 1. Reading from the left:

L. E. Carpenter, Supervisor, inspecting Acorn Die holder bodies.

Albert DuPuis in the distance may be seen milling opening die chasers.

Harvey Welcome in the right front, milling blade slots in Acorn Die holder bodies, using vertical mill.

Mike Kveeder just back of Harvey, milling blade slots in Acorn Die holder bodies.

### No. 2. Reading left to right:

Fred Henrich operating four spindle drill on Acorn Die holder bodies.

Harvey Welcome testing reamed holes in Acorn Die holder bodies.

Theo. Englehart is hobbing W. S. O. D. chasers.

### No. 3. Hazel Cramer operating machine

for threading Naval Shell Primers with Acorn Die. Limits of thread .619 go .618 no go. Each separate die to be used on this work is tested before leaving the shop. At the left the camera caught a very good pro-

file of our well known salesman, C. H. Ball, who at present is giving much of his time to the sale and promotion of the Acorn Die. Mr. Ball is tremendously enthusiastic over the record the Acorn Die has already made among large users and believes that the growth of this, one of our newest products, will be very rapid.

### No. 4. Shows machine for hobbing Acorn Dies:

Left: Wm. Terrier is shown operating this machine, hobbing No. 3 Acorn Die.

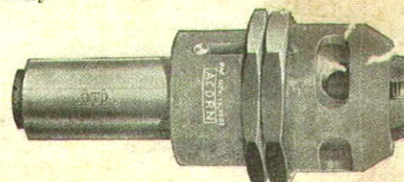
Right: C. W. Lindsay, foreman, inspecting Acorn Dies. Mr. Lindsay is one of our Old Guard and is an expert die maker.

### THE ACORN DIE

By C. H. Ball.

The Acorn Die is a modification of the old Spring or Finger Die. The old die was

adjusted by a clamping ring drawn together with a single screw. In making the adjustment the ring was contracted by the use of the screw. This acting on the fingers of the die would contract two of them, leaving the other two out of adjustment. This method would answer where the requirements did not call for extreme accuracy in the thread. Another method was to use a solid ring with four adjusting screws, one for each of the fingers. With this method the operator would tighten the fingers down, as he thought correct, but it was a matter of judgment with no assurance that the fingers were adjusted correctly.





## THE HELIX

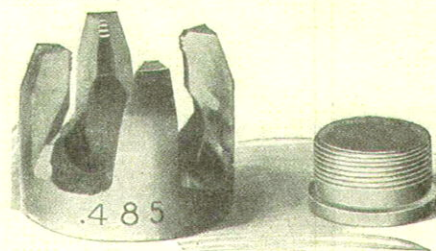
To remedy these defects the Acorn Die was designed, it being made to gages with the bevels accurately ground while the blank is still a solid piece, which gives assurance that the die will fit in the cap that shall hold it while being threaded. Then it is gashed with cutters made for the purpose, which give the proper form for the cutting edges of the lands, positively guaranteeing the proper spring to each land. In hobbing or threading, the die is held in a master holder ground true and held central; in this position the die is drilled, reamed and hobbled, assuring a perfect thread in perfect line with the seat of the die. After the hardening, which is carefully done in furnaces and with tongs made expressly for this purpose, the die is polished that it may be tempered to give it the necessary spring at the base of the land, otherwise in adjusting to the required diameter the land would break.

At this point comes the vital operations of a perfect die, the grinding, as each diameter and pitch of thread require different treatment as does also the work the die is to do. A die that is to cut brass or a similar metal must be ground entirely different from one that is to cut steel. In furnishing dies it is very necessary that we know to what use they are to be put.

The die holder is a very necessary part of the outfit. While holders are furnished that will fit the greater number of machines, we often find that they must be changed in some detail to assure the perfect working of the die, as it is very important that the whole combination, machine, holder and die should be in positive alignment and should work together perfectly.

The holder is made in such a manner that the die is held firmly on the seat and clamped with a hardened and ground cap that holds each of the lands equally, bringing them to a common center and assuring an equal amount of work being done by each land. In this manner we obtain a die that is practically solid. There is no vibration and the die cuts better threads and more of them. It is not unusual to be told of a die that has cut 20,000 threads without grinding. The instance in mind was a die cutting 5-16—18 U. S. S. threads on milled cap screws made from bar screw stock.

The place where the Acorn Die is making its best record is on munition work where the tolerances are very close, as re-sizing primer stocks for naval shells. The finished piece is tested in threaded gages .616 no go .618 and holds a record of 50,000 average to each die in a lot of 1,378,000.



This Acorn Die has threaded 130,000 brass plugs .485, 48 thread per inch, that passed Government inspection between limits of .000 —.002. The work was done on No. 52 National Acme multiple spindle automatic screw machine timed to complete 350 pieces per hour.

G. T. D. Acorn Die workers will read with satisfaction the following testimonials, a few of many such that have come to us entirely unsolicited and that reflect much credit to the accuracy and good workmanship of the departments concerned:

"A few words of appreciation are due you, covering the service and satisfaction we have had in using the Acorn Die and Die Holder, which you delivered to us about two months ago. This out-

fit has been used on a National Acme Automatic on a special threading operation, which caused us infinite difficulty before we received your Die Holder. Since beginning this operation with your equipment, we have run off in the vicinity of 50,000 pieces without a single hitch. We have only used one of the Dies so far and from the appearance of it we should say that it would be good for at least 100,000 more, barring accidents. In view of the difficulty experienced with other equipment, we cannot speak too highly in praise of the Acorn outfit."

"We have made as high as 25,000 screws (thread 1/4 inch long) with one die before grinding. This was done with free cutting Bessemer rod on a No. 00 Brown & Sharpe Automatic Screw Machine. For a die to do a little more than other dies, I recommend the Acorn."

"Material threaded ordinarily cold rolled screw stock, limits allowed minus .005, cutting compound 30 per cent. lard oil mixed to our own receipt. The life of the die varies to some extent but in three weeks' time we haven't lost a die and in several cases one die has already done over 15,000 pieces of work and is still running. We are very careful with our lead and have gotten extra fine results with your Acorn Die on this particular feature. The one thing we are very fussy about is our perfect thread and we have spared no expense in obtaining same and from all reports that I can gather from the old-timers here at the factory, your Acorn Die is the best proposition we have come in contact with. One of the nicest features of your Acorn Die is the quickness with which we can set up our machines. This alone is saving us a good many dollars a week."

## NAMES ON REQUEST.



Mr. Everett M. Howard, proprietor of the Howard Studio of this town, is now associated with the Advertising Department as the Official Photographer of the Corporation.

The photographic work room and dark room in connection with the Advertising Department in the administration building is being put into first-class shape for the most efficient handling of all work of this nature.

Photographs will be made more of a factor in the publicity work of the Corporation. Loose leaf photo books for salesmen's use will be prepared and added to from time to time as useful and interesting pictures are taken.

The Helix extends to Mr. Howard a hearty welcome. Many of the photographs reproduced in this issue are the result of his very efficient work.

## EMPLOYEES' RELIEF

By Miss C. J. Morgan, Treasurer.

For many years the different plants which now comprise the Greenfield Tap and Die Corporation, have maintained relief organizations for the benefit of their employees during sickness and disability. In July, 1917, these organizations were merged into one under the name of the Greenfield Tap and Die Benefit Association.

Any employee of the Corporation is eligible for membership who is in good health and good moral standing. The admission fee is 50 cents.

In case of sickness, a member receives, after the first week, one dollar per day, not to exceed \$91.00 in one year, and in case

of death, the Association pays \$100.00 to his or her heirs.

Assessments are made four, or at the most, five times a year, so that the minimum cost is only \$2.00 and the maximum \$2.50 per year.

Since the organizations consolidated in July last, sick benefits have amounted to \$1,355.00 and death benefits to \$500.00.

At the present time, when the high cost of living has become such a problem, the advantages of the Association should be apparent to all. We know of several instances, however, where this extra money was badly needed, but the people, though worthy, were not members of the Association. It is economy to spend money, if we spend it judiciously, and every employee by contributing this small sum of \$2.00 per year, can help himself and his fellow-workers over the hard places. At this time, 44% of our employees belong to the Association but this percentage should be much higher. Let us have still more of this cooperation. What blesses one, blesses all.

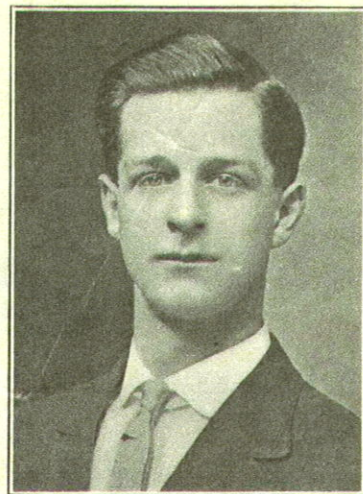
We therefore urge that everyone in the Corporation who is not a member, enroll at once and those who are members use every effort to increase the membership.

## DEATH OF HARRY B. STEWART

Friends of Harry B. Stewart regretted to learn of his death April 19, 1918, at his home at Traver Court in this town. Death was due to heart disease.

Mr. Stewart was away from work about one week. Although suffering for some time, he was very courageous, uncomplaining and cheerful to the last. He won many friends through his likable qualities and loyalty.

He worked for the Corporation in the shipping department at two different times, starting Oct. 4, 1916, and continuing to June 30, 1917, returning again on Oct. 3, 1917. He had recently been transferred from the shipping department to the office where we had hoped lighter work would prove beneficial.



Mr. Stewart was 27 years old and a native of Montague, but spent most of his life in Greenfield. He attended the Greenfield schools and graduated from the high school in 1910.

He leaves besides his parents, one sister, Louisa B. Stewart, at home. His father, Andrew Stewart, is in charge of maintenance and repairs at the Wiley & Russell plant and has been in our employ since 1901.

Mr. Stewart was an athlete of some note in his school days, excelling in the high jump.

The funeral was held Saturday afternoon, April 20th, Rev. A. P. Pratt officiating. Burial was at Federal Street cemetery.



# WHICZWHO

IN THE  
GTD FAMILY

*Childs*

## FRANK O. WELLS

At the annual meeting of the Greenfield Tap and Die Junior and Old Guard organizations, in an informal talk to the 300 men present, our President, Frank O. Wells, made this remark: "I like gatherings of this kind because it brings us closer together and makes for that spirit of co-operation and good will between employer and employee, without which no industry can attain any great success."

In our Who's Who column we aim to bring our employees into more intimate and personal contact with our executives. It is fitting that our first sketch should honor our founder and president, through whose vision and enterprise our corporation stands today the Leader in the screw cutting manufacturing world.

Writing in the Who's Who page of the American Machinist in a recent issue, the editor states that in Washington our president is known as "Wells, the Gage Man"; in the American Society of Mechanical Engineers, "Wells, the Screw Thread Man"; in the New England Hotel Men's Association, "Wells, the Hotel Man"; among agriculturists as "Wells, the Farmer"; to the employees of the Greenfield Tap and Die Corporation he is intimately known as "Wells, our President."

Frank Orin Wells was born in Shelburne Falls, Mass., Jan. 6, 1855. His education was limited to the common schools of the village and one term at Petersham Academy. His early manufacturing experience was with the Wiley & Russell Mfg. Co., where he started as a workman forty-four years ago at the wage of one dollar per day.

Five years later he organized, with his brother, Frederick E. Wells, the Wells Brothers Company, with a capital stock of \$1,100. From this beginning the Wells Bros. Co. became one of the leading tap and die industries, later merging with the Wiley & Russell Mfg. Co., forming the present Greenfield Tap and Die Corporation with a capital stock now of three million dollars.

Mr. Wells is most proud of the fact that he started small without borrowing any money and created what finally became a large and prosperous business. His ideals are (1) intense application to one's work; (2) making the most of every opportunity with the one object in view, success; (3) studying other people's success through observation, books and personal acquaintance.

He believes first and last that the one main essential of business success is SERVICE. He always insisted that the product of his factories should "Stand at the Top." By constantly improving methods and machines he soon became recognized by the trade as a leader and not a follower.

Mr. Wells' hobby is gardening. He has worked at and studied gardening and seems to take great satisfaction in its planting and cultivation. He claims that the danger of overwork is minimized if one has a hobby, particularly if it brings him back

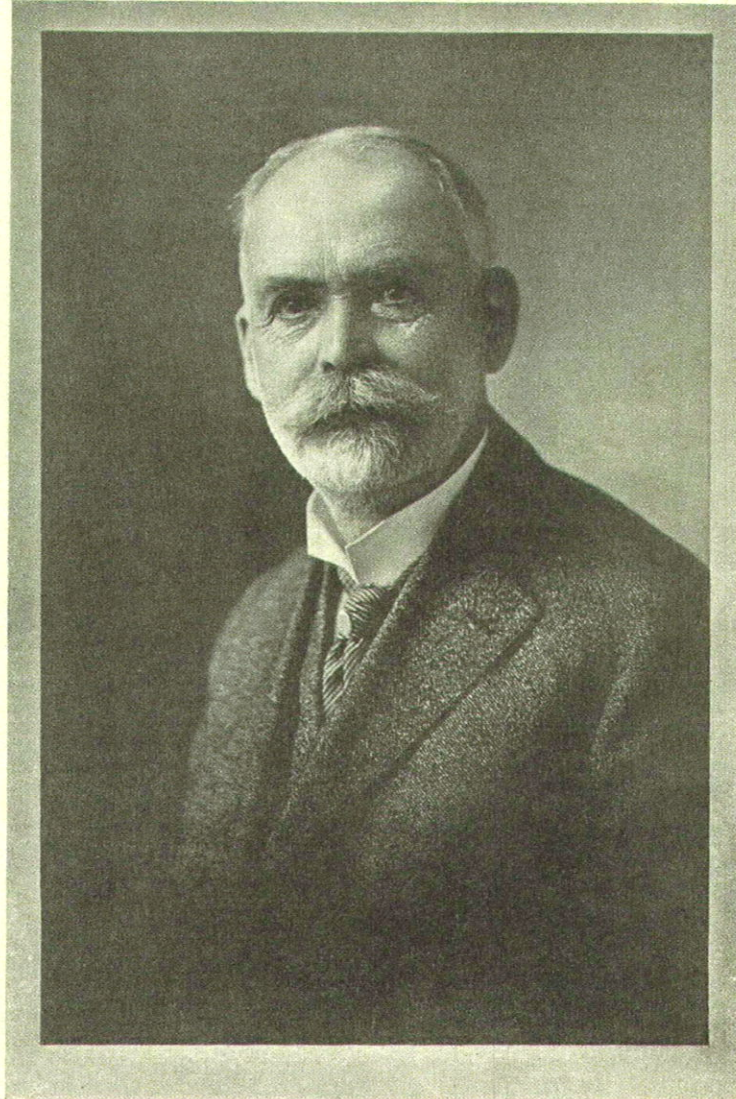
to nature and the open air. Mr. Wells has owned for the last fourteen years a large 300-acre farm at Worthington, Mass., in the Berkshires, and the first sign of good roads in the Spring finds our President spending his week-ends consulting with his resident farmer and taking long hikes over the fields and hills of this attractive New England country.

Mr. Wells is a member of the American

countries, including England, France, Germany and Italy. His familiarity with conditions in these countries has in a large measure made possible the development of our proportionately large foreign trade.

Our President was the first manufacturer to study the problem of making gages and manufacture on a war basis. Long before war was declared by the United States, he pressed the necessity of the Government making provision for special tools, gages and fixtures in order that contracts for ammunition might be placed immediately when the need demanded. He discussed the question with prominent Army and Navy officials with the result that Congress acted favorably on the matter through Representative Tillson of Connecticut. (See article in Iron Trade Review, April issue).

Col. George Montgomery, former Commandant of the Frankfort Arsenal at Philadelphia, in a talk to our employees at the Wells Bros. Plant, shortly after the United States declared war, spoke these significant words of commendation: "Our Country owes a great debt of gratitude to your president, Mr. Wells, for the valuable work he has done in awakening this Gov-



Society of Mechanical Engineers, serving on the committee for the standardization of Screw Thread Tolerances. He is a member of the Hardware Club of New York City, the Greenfield Club and the Country Club of Greenfield.

He has travelled extensively in foreign

ernment to the necessity of standardizing drawings and the immediate production of gages to make possible the rapid manufacture of small arms and ammunition."

Mr. Wells has been associated with many public interests which have involved liberal

CONTINUED ON PAGE 4



## THE HELIX

## OFFICE MAKES GAY

## HEARD ON THE DICTAPHONE

Mr. Henry Sauter of the advertising department, spent the week of April 13th in Boston studying the intricacies of the Moon-Hopkins Billing Machine and Underwood Typewriter, preparatory to taking up, with his other duties, that of general repair man.

We extend a welcome to Miss Grace Reilly of West Rutland, Vt., who has taken a position in our stenographic department, also to Miss Anna Reilly, her sister, who is in the cost department and Miss Tirza Allen in the billing department.

A great treat is in store for all who will attend the May Party, Thursday evening, May 9th. Mr. John "Efficiency" McArdle, the Vernon Castle of today, will "do a turn." The new dances he will demonstrate are the "Dizzy Dip," the "Walrus Wabble," "Grizzley Bear," and if time permits the "Kitchen Sink." Mr. McArdle also shares the honors with our own "Roy" and "J. T." as being the social lions of the office.



## OFFICE SOCIAL, APRIL 9TH

A recent newcomer to the office is Miss Katherine Flaherty. She is a graduate of Hopkins Academy and has been employed by the American Optical Co. At present Miss Flaherty will be in the Stenographic Department and later will be identified with the Employment Department, where she will assist Miss Coates.

On Tuesday, March 31st, at 4 o'clock in the afternoon, Miss Caroline Guiney, a member of the Production Department, was united in marriage to George Keltie, who was at one time employed at the Wiley & Russell Plant. The ceremony was performed by Rev. J. Cecil Hayes at the Baptist Parsonage. Mr. and Mrs. Keltie will make their home in Gardner, where the groom is employed by Cooley & Marvin as industrial engineer.

Miss Dulcie E. Bowles of Littleton, N. H., becomes a member of our office in the capacity of stenographer and assistant to Mr. Seller in the secretarial duties of the Corporation. Miss Bowles is a graduate of the Albany, N. Y., Business College and has been for two years Office Secretary of the Bennington County, Vt. Improvement Association. She will give considerable time assisting in the publication of the Helix.

Office Girl (in dining room): "What kind of ice cream have you?"  
Waitress: "White."

The office force held its regular monthly catch-as-catch-can, all comers, dancing match at the Administration building on Tuesday evening, April the ninth. The slight drizzle could not prevent a wealth of beauty and grace from attending in force, although many had to come in U-Boats, flivvers and other engines of death.

The offices were tastefully decorated for the occasion with a dozen pinks; refreshments consisting of sparkling luke-warm water were served a-la-bubblor, which proved on investigation to be astonishingly wet. Really excellent music was furnished by Bickford's Orchestra. Julius Gould was right there with the umm-pah stuff and our own Earl Bardwell put the well known step in the one-step.

The festivities were opened with a singing bee. The Choral Society being capably led by Miss Mildred Buswell. Many sweet old melodies, such as "Annie Laurie" and "Over There" were given with such harmony as has never been heard before (and never will again, we hope).

As the evening progressed many spirited contests took place. The most conspicuous being the exhibition dance by Michael Mordken Smart, sometimes known as "Ned" and Anna Palowa Sheehy known off-stage as "Nellie." The startling or-

iginality and grace of these two took first prize. The best description we can give of their dance is that it looked like a glorified cake walk. Mr. Lamb introduced many of the latest New York steps, one of the most intricate being the Biltmore or Belmont or something like that. Harry Sawyer of Round Die fame, did a combination fox trot-waltz-onestep which was very interesting. "Efficiency" McArdle won the endurance contest and was presented with a beautiful bouquet of poison ivy.

The noted photography firm of Schoof and Bysshe took a flashlight of the winning couple which, according to the statement of Genial Jay Tee Seller, will be published in the Police Gazette. The Honorable Jay Tee was everywhere as usual and contributed much to the jollity of the occasion, especially as it marked the initial entree of the Seller Bros. into the mazes of The Dansant.

Seriously, the committee consisting of Miss Meehan, Miss Courtney, Miss Fenton, Miss Peon and Miss Margaret Harrington, who acted as chairman, deserves much credit for success of the dance which was enjoyed only as such jolly, get-together, informal functions can be. It should serve as a good example to other departments of our organization to go and do likewise. Their next festivity will be held May ninth and will be a May basket dance; the participants playing basket, basket, who's got the basket. Each girl will bring a basket which will be auctioned off to the highest

bidder, the money going to the Red Cross and the bidder to the hospital.

"Spring is here!" Everything is budding out, even "Zuke" in a green suit.

"J. W. H." our genial Purchasing Agent, is now budding out in a "Clover Leaf." How do you do it, Jim, with "H. C. L." still "going up?" He wished the Helix to announce that it will be a great pleasure for him to take out parties (ladies preferred) during some of his spare time and incidentally pay for the car. Mr. Harrington is fortunate in securing the services of Mr. Raymond Carpenter as chauffeur. (See ad below).

FRANK H. SNOW  
ACCIDENT AND LIABILITY  
INSURANCE

George H. Eberlein of the advertising department, left Greenfield on Wednesday, April 24th for Cambridge, Mass., to be enrolled in the Harvard Radio School. Mr. Eberlein enlisted in the Naval Reserve Force as radio operator and expects soon to see active service.

## BICKFORD DIVISION

Earl Crane and Dan McKenzie were in Boston with the State Guard a few days ago.

Leon Jones has purchased an automobile of the Buick Motor Co. of Miles street.

Frank Harmon, for many years an employee of the Goodell Pratt Co., has taken a position in this division of G. T. D.

J. H. Johnson of North Adams is a newcomer, being employed as a draftsman.

Ernest Fairbanks met with an accident the other day, losing the end of a little finger.

John Heywood has been sick with the mumps.

E. F. Johnson of Erie, Pa., is at work in the lathe department.

Putnam and Alexander both report the loss of a fifty cent piece. They say it is a genuine case of "fifty-fifty." Liberal reward offered to the finder.

Kenneth C. Porter, son of Herbert S. Porter, employed by the Bickford Division, has enlisted in the Naval Reserves.

Chas. E. McKenzie, son of Dan McKenzie, has enlisted in the Coast Artillery. Mr. McKenzie's daughter, Edna, is filing clerk in Secretary McAdoo's office in Washington, D. C.

## F. O. WELLS CONTINUED

giving of his time and attention. He has been a former president of the Franklin County Agricultural Society for many years and did much to develop the agricultural interests of the county and place the society on a firm financial basis. The gift of the beautiful entrance and gate dedicated to the society at the last annual County Fair was a striking testimonial to Mr. Wells' interest and generosity.

He is at the present time president of the Greenfield Cemetery Association. It was through his enterprise that a home for the caretaker and the greenhouse was built and the grounds beautified.





# Gardening



## WAR GARDENING

"As a result of wartime emergency the Home Garden of America has become an institution of world-wide importance. The planting and growing season of 1917 demonstrated that the products thus raised are essential to the feeding of the people of the United States and the Allied nations. Under the impetus given by the National War Garden Commission the people of this country last year produced a crop valued at \$350,000,000 in gardens cultivated in backyards, on industrial lots and on other land previously untitled—the patriotic gift of the war gardens to the nation."

The added hour of daylight which we have just received is our one big opportunity to put in more time in the garden. It is well known that a change of occupation, especially to outdoor activity, is restful; a good stiff game of baseball after a hard day's work is not tiring to anyone who enjoys it and the real tiring thing about work in a shop is not from overwork but from the monotonous grind of one task.

Mr. Hoover has issued no law against hoarding your own products for your own use. While others may keep only thirty days' provisions in stock, you are privileged to lay up six months' supply or more of fruit and vegetables or anything else you may produce in your own garden. It is a comfortable feeling to know that you have a store of eatables to last for months ahead.

Last year our employees had remarkable success in managing small gardens and our plans are under way for a renewal of the work on a much larger scale. Last year the Corporation supplied 151 men and two girls with garden plots one-eighth of an acre in extent.

Miss Olive Long and Miss Eleanor Mahar were the first and only girls from the Corporation to volunteer and so far as we know, the only girls in Greenfield to cultivate war gardens. Hats off to their brand of patriotism!

This year 300 applications are in, quite a number of them being from girls. The Corporation has engaged a practical farmer from Vermont, Mr. Herbert Haskell, to supervise the work and he will remain through the season, keeping in touch with the different tracts and giving such advice as is needed. He will plough and harrow the land, using the company's tractor, and each man will receive his tract ready to be planted. In addition, the company will supply seed and fertilizer at actual cost and 25 tons of the latter have been received.

One-eighth acre seems to be about all

that one man can care for conveniently. One man last year raised 28 bushels of potatoes on his plot in addition to producing enough summer vegetables to supply two families. The total amount of potatoes raised on the corporation tracts was 1,500 bushels.

### How Much Seed to Buy

The following amounts of seed will plant in each case a garden row 100 feet long. Measure your rows and buy accordingly:

String beans.....	½ to 1 pint
Lima beans.....	½ to 1 pint
Cabbage.....	¼ ounce
Carrot.....	1 ounce
Cauliflower.....	1 packet
Celery.....	¼ ounce
All squash.....	½ ounce
Beets.....	2 ounces
Sweet corn.....	½ pint
Lettuce.....	½ ounce
Cucumber.....	½ ounce
Kale or Swiss chard.....	½ ounce
Parsley.....	¼ ounce
Parsnip.....	½ ounce
Onion sets (bulbs).....	1 quart
Onion seed.....	1 ounce
Peas.....	1 to 2 pints
Radish.....	1 ounce
Spinach.....	1 ounce
Tomatoes.....	¾ ounce
Turnip.....	½ ounce
1 or 2 pecks of early potatoes and ½ to 1 bushel of late potatoes are enough to plant to supply four persons.	

### Succession of Crops

Vegetables which reach maturity early in the season should be followed by later crops of the same vegetable or by rotation of other kinds. Onions to be used green may be grown in rows which are to be occupied by late tomato plants, as a few of the onions may be removed to plant the tomatoes. Radishes mature early and as they are harvested the space may be used for cabbage, lettuce, cauliflower, and other plants. Many combinations of this kind may be made.

With some of the important vegetables a series of plantings is desirable. Of string beans, lettuce, radishes, spinach, sweet corn, peas, beets, and carrots there should be several successive plantings, two or three weeks apart to provide a fresh and continuous supply all season.

From the experience of our employees last year, it was found that those who confined their efforts to the staple seed products received the largest returns for the least effort.

While some attention should be given to seasonable vegetables, when the harvest comes the real success of your garden is

measured by your potato, bean, cabbage and onion crops.

As an evidence of the interest the manufacturers of Massachusetts are taking in this movement for more gardens, the ASSOCIATED INDUSTRIES OF MASSACHUSETTS, at the request of Mr. Endicott, recently appointed a committee to work with the Food Administrator. Mr. J. T. Seller has been appointed one of the members of this committee. Last year the manufacturers of Massachusetts cultivated a total of 1,283 acres. Already 48 additional manufacturing plants who did not cultivate last year have notified Mr. Endicott that they will this year provide gardens for their men.

### FIVE DOLLARS FOR A NAME

Our employees have doubtless read the bulletins posted in the factory, offering \$5.00 reward for the best name suggested to use in connection with our new Opening Die Screw Plate. This invention was developed by our Mr. Fred W. Whelpley and gives promise of proving one of the best sellers in the big G. T. D. line of screw cutting tools.

The Corporation therefore announces a contest for a trade name that will suitably represent this product. There is no limit to the number of names from any one contributor. The contest closes May 15th. Now get busy everybody.

It is not only the \$5.00 reward you should work for but the honor of having the name you suggested used as the trade name of this product will be something that you will be proud of in years to come.

The judges will be: R. H. Smart, L. H. Taylor, H. S. Ashmun, L. J. Stoddard, and W. L. Robbins. Send names in sealed envelope addressed to the Helix, G. T. D. Office.

### LIBERTY LOAN SUCCESS DUE TO DEPARTMENT WORKERS

The marked success of the Liberty Loan canvass, netting the grand total of \$76,789, is largely due to the efficient work of the foremen and workers in each of our Divisions. Our readers will doubtless be interested in the following records, tabulated by departments:

Department	No. Subscribers	Amount
Office	107	\$21,500 00
F. E. Wells Son Co. Machinery Division		
P. A. Welsh.....	99	3,550 00

(Continued on Page 10)





Published monthly by employees of the Greenfield Tap and Die Corporation, Greenfield, Mass. Send all communications, signed by the writer, through the factory mail, addressed to the Helix. All matter for publication must be in the hands of the Editor not later than the twentieth of each month.

J. T. SELLER, Editor

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New York Store.....	B. L. Beck
Chicago Store.....	Miss Avis Sorenson

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W. A. Summers	George A. Childs

#### THE HELIX

With the first issue of the "Helix" we make our "debut" in the field of shop news periodicals with the hope that the "doings" of the G. T. D. Family may be properly recorded and that our employees may, through our columns, find a common "meeting place" for the exchange of ideas, the expression of their artistic and literary talents and, most important, may gain a cordial acquaintance with the big family that together has made G. T. D. products "First" in the screw thread markets of the world.

The Helix will appear on a monthly basis for the present and will contain news from the various plants of the Greenfield Tap and Die Corporation, cartoons from our artists, information concerning our products, photographs, etc.

As shown by the editorial staff printed above, each plant will have representatives of the paper. Everyone is requested to co-operate with the representatives in their respective plant, giving as much assistance as possible in the contribution of news items and articles for publication. It will be our policy so far as possible, to publish every item submitted through our editors at the various divisions.

We are particularly interested to publish news from our boys at the front. One entire page will be devoted in respectful esteem to our loyal fellows. We want their pictures, their military addresses, their letters or any information that may be of interest to them and to us. Copies of the Helix will be sent to all the addresses we may have of those in the service.

The Helix is furnished gratis to every employee of the Greenfield Tap and Die Corporation and copies may be obtained at the Employment Department or from the Works Managers at each plant.

## THE HELIX

### OUR NAME

"What's in a Name?" We reply, A Name is what you make it.

The names of the great world leaders of today are emblazoned in fame because of their achievement. A name or trademark in business is valuable in direct ratio to the number of satisfied customers and the confidence it inspires.

In endeavoring to select a name for the G. T. D. house organ, it was unanimously agreed as a fundamental principle that this name should be typical to the greatest possible extent of the product and activities of this corporation. A great many words were considered and rejected because of their association with other periodicals and other lines of business, or because they were only suggestive of a part of our product. Finally Mr. Philip P. Baldwin, who was one of the several earnest seekers for the correct name, suggested the word "Helix." Like many other great discoveries once realized, it seems surprising that any other name should have been considered at all, as the Helix is the only geometrical construction that is absolutely fundamental and basic in all forms of screw threads, taps and dies, or gages for the inspection of the same.

Dictionaries define the Helix as follows: "Helix—a curve the tangents to which make, with the horizontal plane, a constant angle. The edge of the path of a screw is a helix, as is also the path described by any point of the surface of the thread when moved in the nut. A non-plane curve whose tangents are all equally inclined to a given plane. The common helix is the curve formed by the thread of the ordinary screw. It is distinguished from the spiral, all the convolutions of which are in the same plane."

This definition shows that the word covers the spiral, as well as the cylindrical or conical helix, which is, in fact, itself important in some of the developments of our product as, for instance, the new Whelpley Opening Die Stock.

We are, therefore, peculiarly fortunate to be able to give to our journal a name which is so fully and unusually typical of our business, and which also expresses mathematically the idea of progress, advance and development along a safe and conservative path.

The spiral is not like a straight line "which is the shortest distance between two points" and which is sometimes followed blindly and without reasoning or judgment, but a true helical path represents steady progress in a given direction with infinite force and without shock or jar. Mathematically it is a steady climb in a predetermined direction which, for the G. T. D. organization, has always meant accuracy, efficiency and thoroughness.

With this, the first edition, therefore, we dedicate the name "HELIX" in modest expectancy that each succeeding issue may add its quota to the fund of favorable publicity until our name, with our trademark, may be made synonymous as the symbols of quality.

### DUTY WELL DONE

G. T. D. employees have again demonstrated their patriotism in loyal support of the Third Liberty Loan, the first reports bringing in the total of \$58,300 together with subscriptions in War Savings Stamps of \$15,325 or a grand total of \$73,625.

As we write, news comes from the trenches of the Western front bearing casualties of the gallant boys of our Greenfield Company L, among them boys from our own G. T. D. ranks. At this critical time then, our hearts must throb with deeper feelings of satisfaction in the thought of the part we have played at home, with the army of loyal men and women who for the sake of America and the boys "Over There" are making possible the success of our Government's call.

Many of our departments rallied behind the loan 100% strong, not one man subscribing less than a fifty-dollar bond. The boys of the Bickford Machine branch did their part royally. In less than two hours the forty-four employees subscribed \$5,000 with no pledge less than one hundred dollars. We all take justifiable pride in this achievement.

To all our employees we say, "It has been a duty, well done," but have we done all that our duty and privilege summons for the men who today are standing in the muddy trenches, fighting in peril of their lives for your safety and mine and for the freedom of mankind?

To win this war the United States must have billions upon billions of dollars to buy food, clothing and ammunition, to build ships, make airplanes and a thousand other things that are necessary. On December 3, 1917, Uncle Sam, through the medium of War Savings and Thrift Stamps, launched a campaign for two billion dollars. We have been asked not to contribute this money out of regular savings, neither should it interfere with our buying of Liberty Bonds. We are asked to practice a little personal thrift—to stop the leak in our daily expenditures—and to lend Uncle Sam our quarters and half dollars.

Cardinal William O'Connell, Archbishop of Boston, in a letter endorsing the War Savings campaign, says: "The War Savings Stamp Campaign presents a splendid opportunity to all Americans to practice an unselfish thrift and to fulfill one of their duties to their Government, and I earnestly hope that the people will enter into this movement with the spirit and enthusiasm which it deserves."

Let our answer to the Government be: We are ready further to do cheerfully our full part. Not one dollar will we stint for the brave boys "Over There" who fight for our lives and liberty.

### EVENING SCHOOL CLASSES

Ten men completed the evening course in practical applied mathematics, the final examination in which was held April 18th. The class in advanced shop mathematics will hold its final examination on May 8th at the usual hour of meeting. Classes in the above subjects have been held weekly during the winter under the direction of the Extension Service of the State University, in charge of Alfred Smead of the F. E. Wells plant, a member of our Industrial Betterment Committee.

The employees who completed the course in practical applied mathematics are:

Elbridge V. Alden, F. E. Wells Division.  
Julius A. Gould, F. E. Wells Division.  
Herbert W. Barnes, Wells Bros. Division.  
Adelard Desautels, Wells Bros. Division.  
Guy W. Lamson, Wells Bros. Division.  
Geo. P. Finn, Wells Bros. Division.  
C. Arthur Oakman, Wells Bros. Division.  
Kenneth M. White, Wiley & Russell Division.

Clarence C. Cook, Small Tool & Apprentice Division.

Frank W. Schatz, Machine Tool Sales Department.

### "DO YOUR BIT"

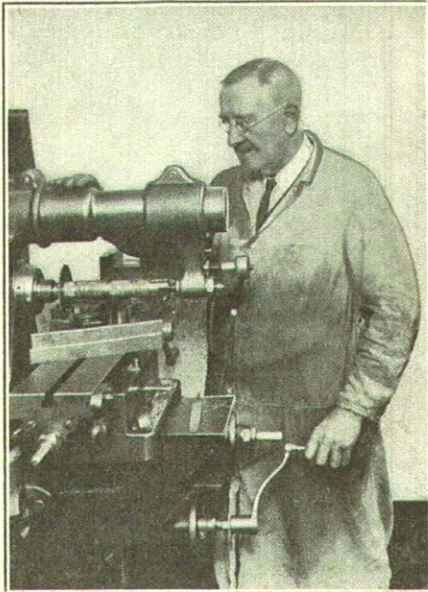
"The workingman who stands faithfully by his duties day by day, allowing no person and no thought to get between him and an honest performance of his work, is rendering the highest kind of patriotic service to his nation and to his family. Stand by your work for your own honor and safety, for the safety and success of your fellow countrymen who go forth to fight, as well as for the sake of workingmen who are now in actual slavery beneath the German slave drivers."



## G. T. D. OLD GUARD BIOGRAPHIES

"These men are our Old Guard. They are the backbone of our industry."

(Words spoken by F. O. Wells at the first banquet of the Wells Bros. Co. "Old Guard," held in 1910).



JAMES F. DUNNIGAN OUR SENIOR  
OLD GUARD

A man who has worked for one concern, or practically one concern, for forty-six years may point with justifiable pride to a record of stick-to-it-iveness and loyalty that is seldom equalled in the annals of industrial development. James F. Dunnigan, the ranking member of the "Old Guard," who has been in the employ of the company for the past forty-six years, has an intimate knowledge of the progress of the Tap and Die industry in Greenfield and can tell many interesting tales of shop life and the growth of Greenfield. Most of his life has been spent in this town and he can well recall the days when Cheapside, at the lower end of the town, had a landing place or dock, where goods were brought into town by way of the Connecticut and Deerfield rivers.

Mr. Dunnigan was born in Ireland in 1847 and came to this country when five years of age. He cannot recall much about the voyage except that he travelled on a sailing vessel and was nearly three months time crossing.

He attended school in the Green River district, which was then a part of Deerfield, graduating from the grammar school. After leaving school he went to work for the J. Russell Cutlery Co., which was located in Greenfield on the site of the present Wiley & Russell plant. From this time until 1871, when the Wiley & Russell Co. was incorporated, Mr. Dunnigan worked short periods in several different concerns, always striving for more and better knowledge of his chosen work, and his advancement was sure and permanent. Among these were the Goodnough Company, located at what later became the old "Grist Mill" and the place where Wells Bros. Co. first started, the Millers Falls Co., the Ames Mfg. Co. of Chicopee, the Parker & Wilson Co., Springfield, Vt., and Green & Amidon of Greenfield, located close to the present site of the "Country Club." It was while in the employ of this concern that they and the Russell Co. incorporated and started manufacturing at the present Wiley & Russell site.

In the course of Mr. Dunnigan's work with the Wiley & Russell plant he was associated with John Grant, one of the pioneers

of the tap and die industry, A. J. Smart, now retired, F. O. Wells, and many others well known in Tap and Die circles.

Mr. Dunnigan helped construct the first automatic threading machine used in making taps. The rights to these machines were purchased by the Wiley & Russell people from a Mr. Goddard and were made in their own factory. They were first used about 1886 and on them were threaded the first machine relieved taps. In 1896 the first automatic turning machine used at Wiley & Russell's was constructed and while at that time they were looked upon as a wonderful machine, they would be something of a curiosity now.

Mr. Dunnigan's time as a tool maker, during these early years, was spent in designing new tools and no little share of the progress made by the Wiley & Russell Mfg. Co. was due to him. The "Lightning" tap wrench is one of his patents. He still uses a Universal Milling Machine which he has worked on since 1886 and a lathe he has used since 1888. The condition of these machines is convincing evidence of the care he has always given his tools. Our chief Mechanical Engineer, Mr. Judge, says that these machines are nearly as good as new.

Care for his tools has not been Mr. Dunnigan's only thought, as he has always taken the best possible care of himself. The lost time in all the years he has worked has been very little and to the best of his recollection he has never been late at his work. He is at present employed in the tool-room of the Wells Bros. Co. Plant, where his interest in the work is as keen as ever and his record is most excellent.

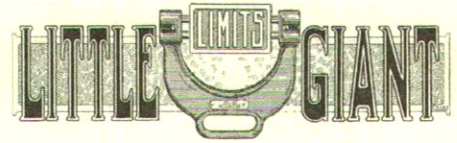
In company with many of our successful, hard-working men, Mr. Dunnigan has a hobby. It is fishing, and he can tell as many interesting fish-stories as tales of the shop. He has also maintained a lively interest in baseball at all times. He used to play on the Green River team when they had a County league. This team had many players who later became prominent in different lines, among them being Mr. Kaulback, former school-committee member, who played with the "Mountains" of Conway, and the late Frank E. Snow, for many years connected with Wells Bros., who played with the "Federals" of Shelburne Falls. Mr. Dunnigan was connected for fifteen years with the Greenfield Band. However, he has long since given up all of these outside activities and now says that he belongs to the "Home Circle."

Every one of Mr. Dunnigan's children went to high school, five of them graduating and two taking up further education. His children at present living are P. H. Dunnigan, holding an executive position with the Worthington Pump Works of Hazelton, Pa.; J. Frank Dunnigan of the Goodell-Pratt Co.; M. E. Dunnigan, foreman of the Gage Threading Department of the Wells Bros. Co. Division; D. J. Dunnigan at the Remington Ammunition Factory in Bridgeport, Conn.; Mrs. C. T. Ward of Greenfield; Miss Margaret Dunnigan, a nurse practicing in Washington, D. C., and Mrs. F. W. Weissbrod of Holyoke. The late Dr. J. P. Dunnigan, who practiced for many years in Washington, was also a son.

Mr. Dunnigan's motto for today for our country's cause is not only "Do your bit," but "DO YOUR BEST."

Our Employees and Executives join the "Helix" in hearty congratulations to James F. Dunnigan on his many years of faithful and conscientious service.

Capt. Herbert N. Kelley and Bugler Raymond A. Kelley of the 5th Pioneer Regiment, sons of Frank B. Kelley, who is employed in the pipe tool department of the F. E. Wells & Son Division, are stationed at Spartansburg, S. C. Capt. Kelley is at present enjoying a 20-day leave of absence.



Our War bonus for the past month was 8.8% in the Gage Department. Increase has been constant each month. Watch them grow.

Last month set a new record in gage production, largest daily average ever attained by this department.

Gage men with the Colors: Corporal P. Marley is right at the front as he went out with Co. L and they have always led all others. Ed. Conlin writes of life in the Aviation corps and what they will do to Fritz when they get agoing. Manuel Campbell has arrived "over there" safely with the Artillery unit to which he belonged. Our boys in the service on this side are Corporal Raymond Fournier at Camp Gordon, Sergeant Ed. Bellows of the Medical Corps at Spartansburg, N. C., Winfield Hancock in the Ordnance Corps and Homer Poiner in the Naval Reserves.

The Gage Department War gardens are starting and judging from the number going into this and their reputation for doing things agricultural we may expect a fine crop of stories should the other crops not materialize.

The Gage Department does not keep posted on the train time but when we want to go East we ask Tom Maher; if going South we ask Jim Grierson. West we are not concerned with beyond Shelburne Falls, as many of our boys cannot pass there. On the North, Brattleboro is the limit as they have a haven for "nuts" there, and we have a few, though this is nothing personal.

General Foreman E. W. Birge says: "We work to limits in the gage division, not personal or human limits but precision gage limits and there is no limit to what we can do."

The boys from Turners Falls have been satisfied for some time with their car service, but complaints are now being registered on transportation facilities from Ward 2 and we are looking for relief from this condition from Messrs. LaPointe and Birge.

Mr. Bysshe, who has lived in Toronto for many years, states that he had to come to Greenfield to find a real winter. If there is anything we cannot supply here, we will appreciate those coming to acquaint us of the fact and there will be no further cause for complaint.

Liberty Bond Sale: G. E. Stevens, foreman W. S. O. D. Department, reports every man in his department took a \$50 bond.

It is whispered that "Tommy" Maher takes occasional trips to Jamaica Plain, but rumor has it that his railroad expenses will not be so heavy in the near future.

"Charlie" Feyier, well known as "Sully's" elongated assistant, claims he can walk 3 miles in 25 minutes—from his home on Canada Hill to the factory—leaving home at 6.30 a. m. and getting inside the bonus by 5 minutes. He would like to challenge any G. T. D. "Bonus Beater" for a walking match, any distance, for fun, money or marbles.



# WITH THE COLORS



## OUR GALLANT LADS

G. T. D. employees are justly proud of the part their heroic fellows are taking in the mighty battle now raging on the Western Front. Our wounded Heroes, we salute you! Your gallant record is already written enduringly in the hearts of every G. T. D. comrade.



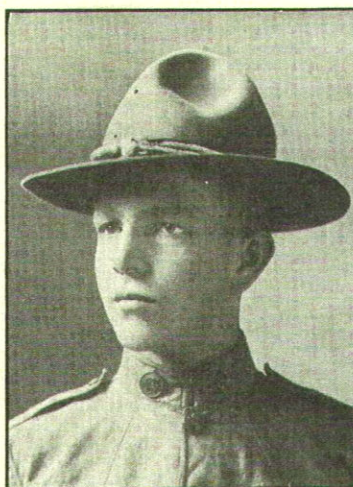
**JOHN COLLINS**  
Severely Wounded

John Collins of Turners Falls, reported among those severely wounded, worked for nearly two years in the W. S. O. D. department. He was a particular friend of his shop-mate, Harvey Welcome. Harvey says that there never was a better natured fellow than John. "You could do everything but hit him and he never ruffled. He was a good worker, too."

John is the son of Mr. and Mrs. James Collins of Galway, Ireland, and since coming to this country, about four years ago, has resided with his aunt and uncle, Mr. and Mrs. Thos. J. Collins of 32 Central street, Turners Falls.

John's friends are of the opinion that the War Department will send him to his native home in Ireland to recuperate.

We regret our inability to use all of the soldiers' photographs and letters that have been sent in to the Helix in response to our appeal. We shall plan, if necessary, to again devote two pages to "With the Colors" in our next issue, so please keep up the good work and keep the editor well supplied. We assure you that all news from the ranks shall be published.



**EARL D. SCOTT**  
Wounded

On April 9th, Mrs. Lela B. Scott of Woodleigh Ave., Greenfield, received a telegram from the War Office stating that her son, Earl D. Scott, had been slightly wounded in action. Earl will be remembered by the employees of the Thread Gage Department, where he worked at the time of his enlistment.

The last letter received by Mrs. Scott, dated Feb. 26th, told of the close proximity of their company to the firing line. They were so close that they could see the smoke from the aircraft guns as they fought off the German fliers and battles in the air were almost a daily occurrence.

He further stated that he expected very soon to be "doing his bit" in the front line, after which they would be allowed a ten days' relief.

Word has just been received from our representative in Sydney, Australia, Mr. A. Asher Smith, of the death of his twenty-year-old son, who was killed in action in France. Young Smith enlisted in the Australian Imperial Forces in December, 1916. In Mr. Smith's letter he enclosed a picture of his boy in khaki underneath which were written these words: "The record of a boy who did a man's part for the cause of humanity." Mr. A. Asher Smith has been the representative of the Wells Bros. Co. in Sydney for the past twenty years and it was through his enterprise that the Little Giant line is now well established in Australia. Mr. Smith now represents the entire G. T. D. line. We extend our sympathy to Mr. Smith and his family in their irreparable loss.



**PETER LEVENDOWSKI**  
Wounded

Peter Levendowski, reported in the casualties of April 14th and 15th as having been wounded in action, was another member of our G. T. D. men with the colors. Peter worked in the polishing room at the Wells Bros. plant. Although only in our employ about three months, he was making good as a tap grinder. He is a native of Rojan, Russia, and was a friend of Joseph Prusick, who recently gave up his work with the corporation on account of ill health.

Peter Levendowski is one of a group of loyal Polish young men of Greenfield, who volunteered to fight for Freedom's Cause. Eleven of them left recently for the Polish army camp at Niagara-on-the-Lake.

Through the courtesy of Mrs. Leo Jacques of Lincoln street, we publish in full a very interesting letter received from her husband, Sergeant Jacques of Company L, describing the 104th's first trench service. Leo is the son of one of our oldest employees, Louis Jacques, who is exceedingly proud to know that his boy is now doing his bit in our Country's cause.

Leo is an expert marksman, holding the record of 48 out of 50 bulls-eyes in target practice at the Border. The pride with which he speaks in his letter of Arthur Fiset's first German victim indicates that he is only waiting his chance to make good his sure aim.



**SERGEANT LEO JACQUES**  
Somewhere in France,  
March 23, 1918.

Dear Wife:  
We are out of the trenches at last and



the best of it is, we came with our entire company—never lost a man and had none wounded. Of all the exciting games I ever tried, this is the most exciting. You never know when you're going to get it and if you don't get it, you are lucky. The Germans have started their offensive and things are sure to be lively for some time.

Gas is the worst thing we have to put up with. As for the trenches themselves, they aren't half bad. Every man has a good bunk in a comfortable dug-out; most of these are shell and bomb proof but not gas proof.

Airplanes play a big part in this war. I wish you could see one, not over forty feet from the ground, following a trench and sweeping it with machine gun fire.

One of the hardest things to stand is the noise. Although it isn't continual, it is hard to stand when it starts.

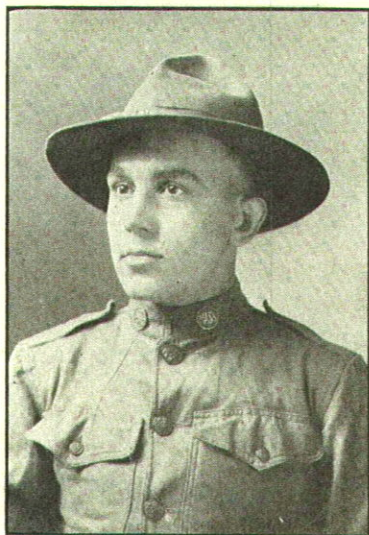
Tell Napoleon that Fig Fiset got the first German and got him right.

We are rated as the best division of American troops over here and I guess we are, as we were the first National Guards to go into the trenches.

I will close now with lots of love.

Your husband,

LEO.

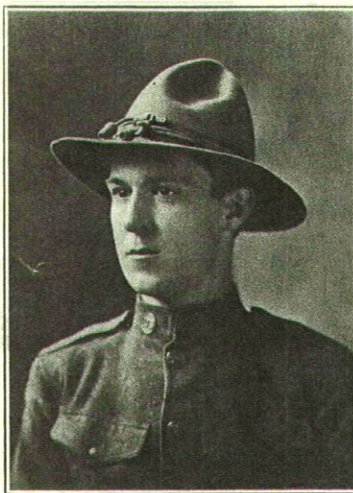


CORPORAL ARTHUR FISET

Corporal Arthur O. Fiset has become the idol of the Wiley & Russell plant with the news contained in Sergeant Jacques' letter stating that he "got his first German" and "got him right." As one of his W. & R. mates remarked: "That sounds just like Arthur, for he never did do things by halves."

Corporal Fiset has been a member of Co. L for six years and is a fine example of a well-trained soldier. He is now 23 years old, having enlisted when he was 17 years old. He lived in Greenfield all of his life and attended the graded schools. On leaving school he worked at our Wiley & Russell factory as a machinist. He saw service on the Mexican border with his company and while there was promoted to the rank of sergeant. He returned to work at the Wiley & Russell factory on returning from the border and when war was declared again went with the colors. The last letter received from him in France was on March 25th and stated that his new surroundings were like July 4th here, only a little louder.

Arthur worked on the small tap squaring and fluting automatics. Before enlisting he took an active part in athletics. He was rated one of the best catchers G. T. D. baseball teams ever had. He was also a good boxer. While at the border he was the champion boxer of his weight in his regiment.



R. L. BICKFORD

Raymond L. Bickford, son of O. S. Bickford, formerly employed at the Bickford Plant, enlisted at Springfield, May 14, 1917, as a cavalryman. After spending several months at Fort Ethan Allen, Vt., and a few weeks at Camp Devens, he left as a member of Headquarters Troop, 2nd Division, and arrived in France on Jan. 1st with the staff officers of the Division.

A few extracts from his letters since arriving in France are as follows: "We are being fed fine and have cake and pie about once a week, with doughnuts and biscuits as often. Have good American butter, jam and syrup, either one way or another every day. The bread is not like garrison bread but is all wheat. It is called field bread and is made in round loaves. Some canned food is used but we have plenty of fresh beef and potatoes. Bacon is served frequently and well cooked. Oatmeal is a rare thing and appreciated when we get it."

"We furnished an escort for General Pershing a short time ago."

"The Red Cross is the best organization that is working for the soldiers in France, bar none, but the K. of C. and the Y. M. C. A. also do good work."

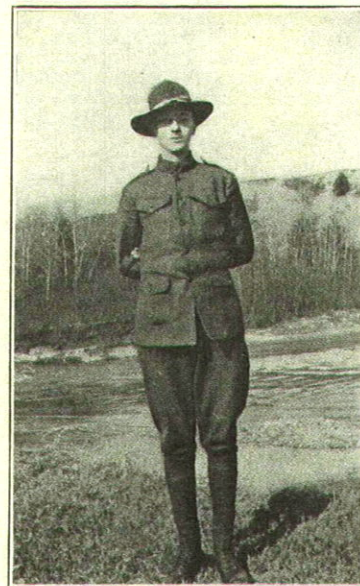
Mr. Bickford was married about two weeks before leaving for France, to Miss Ruby L. Franklin, daughter of Charles Franklin of Federal street. Mrs. Bickford is a member of the G. T. D. office force.



ERNEST TAYLOR PUTNAM

Ernest Taylor Putnam has the distinction of being the youngest man in his regiment. After graduating from the Greenfield High School with the class of 1917, he worked during his vacation at the F. E. Wells & Son Plant in the machinery division. He enlisted in the U. S. School of Military Aeronautics at Princeton, N. J. in September, 1917. In his letters he writes:

"They work us very hard here. We have so much to learn in so short a time that many do not get by. It takes four years at West Point to make an officer and four years at 'Tech' to make an engineer but we get it, with other courses, in twelve to sixteen weeks. Have just been learning Lewis gun parts. Col. Lewis himself gave us a lecture. At the end of a two-hour lecture by an officer today he said: 'Gentlemen, I was just three months in college learning what you must know by tomorrow.' We eat in 'Commons' and no one here kicks about the food. One day I was put in charge of 15 men to tear down a 165 h. p. motor and as I was responsible for all the multitudinous parts, locks, nuts, etc., I was scared stiff. I had never seen such a motor before but we got it all together again. Saturday night we had a wonderful vaudeville show here—a former opera singer, one of the best actors at Keith's, the Regimental Band, and others. It lasted four hours and surely was great."



HAROLD E. HAMLIN

Harold E. Hamlen is another of our Wiley & Russell enlisted boys. Everyone knew Hammy as the shortage chaser on dies. He has not actually been on the firing line but he has lately gone through two great battles. One against spinal meningitis, the other the "strife of Matrimony." He is still alive and will soon return to service with best wishes from G. T. D.

A letter has recently been received from Private R. J. MacFarland. He tells of the routine for each day in camp, beginning with reveille at 6.00 a. m. Breakfast is at 6.15 then drill from 7.10 to 11.30, followed by dinner at 12. In the afternoon there is more drilling from 1.10 until 4.30, with retreat at 5.30. He says: "Then we are usually through for the day. Everyone has to box in the army. There is only one hard part of this life with most fellows and that is that they are used to being their own boss and the discipline here is hard on them to get used to." Mr. MacFarland has been employed in the pipe tool department of the F. E. Wells & Son Division and his present address is 2nd Co., 1st Battalion, Depot Brigade, Camp Devens.



WITH THE COLORS CONTINUED

Private Arthur W. Maser of Headquarters Company, stationed at Camp Dix, spent a brief furlough with his parents, Mr. and Mrs. G. Maser of Melville street, a short time ago. He enjoys army life and speaks well of the Y. M. C. A. work at Camp Dix. Mr. Maser was formerly employed in the hardening room at the Wiley & Russell Plant.

Alexander Stodolski, who has been employed by Mr. Toomey in the milling department at the Wiley & Russell Plant, is now in the School of Infantry at Niagara-on-the-Lake, Ontario, Canada. There are three battalions of infantry at this camp. Frank Matuszewski, of the polishing room, is also at this school.

Capt. Lea Seller, a cousin of our Secretary, Mr. J. T. Seller, has recently secured the coveted Military Cross for conspicuous bravery with the Canadian forces. Enlisting early in the war at Winnipeg as an instructor in signalling, he rose rapidly until attaining the rank of Major. He fought with the Princess Pats, reverting in rank to a lieutenant to get over to France. Having been gassed and in the hospital for two months, he was given a furlough to Canada but on arrival was delegated shortly to raise and train a battalion in Winnipeg and with them again made a second trip overseas. From lieutenant he has risen in rank and is now captain with a most promising career ahead of him. Capt. Seller also has two brothers in the service, Sergt. Stanley Seller, now in England, having been wounded, and Harold Seller with the Flying Corps overseas.

On Jan. 24th the Chicago Store was visited by Lieut. Sims, who was en route from Clintonville, Wis., to Peoria, where he is to take up a course of instruction relative to the repair and operation of Artillery Tractors. He hopes to be assigned to the 76th Division, located at Camp Devens until such time as he may be ordered overseas. Lieutenant Sims will undoubtedly be remembered as having previously worked in the drafting room of Mr. Judge's department at the Wells Bros. Plant.

A letter was received a short time ago from John Wall, formerly electrician for Wells Bros. Co. He wrote from Camp Gordon, Georgia, and states that he is feeling well and getting plenty to eat. He doesn't know where they get so many beans to bake. There is quite a little sickness in the camp on account of the unusual climate. His address is 325 Inf., Headquarters Co., Camp Gordon, Atlanta, Ga.

Roger Streeter has resigned his position, that of assembling W. S. D. O. Heads, to spend a few weeks at home before going into the service. His work has always been of the highest order and we shall miss him.

Homer Nims, well remembered by the assembling and shipping departments of the Wells Bros. Plant, is now flying alone at the San Diego, Cal., camp. He spent the winter at an aviation school in Berkeley and passed all examinations. Here's wishing him good luck.

Elijah A. Robbins, who was employed in Dept. A. of the A. J. Smart Mfg. Co. Division joined the colors on Sept. 21, 1917. He first went to Camp Devens, leaving there Nov. 11th for Camp Gordon, Georgia, where he is now located. Private Robbins says he enjoys military life but misses the association of the boys at G. T. D. and will not be sorry when the Kaiser is finally trimmed and he can return to Greenfield. His address is Private Elijah Robbins, 327th Inf. Co. L, Camp Gordon, Atlanta, Ga.



ADELARD LAMBERT

Adelard Lambert was the first man to enlist from the A. J. Smart plant to go into service. He was employed in the threading department and went to Camp Bartlett at Westfield with Co. L. While at this camp he was orderly to Major Beckmann. His present address is Co. L, 104th Bat., A. E. F. Mr. Lambert also saw service with Company L at the Mexican border.

## LIBERTY LOAN SUCCESS CONTINUED

Shipping Room		
Henry Matthews.....	6	350 00
Class' Department		
P. H. Class.....	3	200 00
Forge Shop		
Morris Pierce.....	9	500 00
Pipe Tool Dept.		
C. W. Sturdevant.....	14	700 00
Office		
L. H. Houghton.....	9	1,100 00
Bickford Machine Co.		
	44	5,100 00
Box Shop		
H. G. Seller.....	37	1,058 00
A. J. Smart Mfg. Co.		
Dept. A.		
G. W. Bouker.....	10	744 00
Dept. B.		
Mathais Babits.....	19	900 00
Dept. C.		
William Lane.....	14	825 00
Dept. D.		
Henry Grandmason.....	14	625 00
Dept. E.		
Edward Davis.....	23	1,140 00
Dept. G.		
Raymond Griswold.....	22	1,102 00
Dept. SA.		
S. C. Barnes.....	12	650 00
Wiley & Russell Mfg. Co.		
Dept. AT-7		
Lucien LaPalime.....	2	50 00
Dept. AT-8		
Lucien LaPalime.....	14	350 00
Dept. AT-5		
Daniel Downes.....	5	250 00
Dept. AD-1		
Edward Haigis.....	17	675 00
Dept. AD-10		
E. A. French.....	23	850 00
Dept. AT-6		
A. E. Stark.....	3	175 00
Dept. AD-4		
C. W. Lindsay.....	11	470 00
Dept. AT-4		
Harry Koonz.....	22	1,550 00
Dept. AP		
James Casey.....	46	2,350 00
Dept. AG		
W. J. Toomey.....	16	775 00
Dept. AM-1		
Andrew Stewart.....	15	800 00

Wallace Guilbault, formerly employed in Geo. Hempstead's department, was at Wiley & Russell Plant recently to see the boys. He is now stationed at the Training ship "Gov. Dingley," 172 Border St., East Boston. He expects to see service in about six weeks on a freighter.

Leon Fontaine, formerly employed by Foreman Edes in Dept. O of Wells Bros. Division is now training in Texas. His address is 148 Aero Squad, No. 2, Aviation Field, Evermond, Texas.

"Does your wife show any interest in the war?"

"Yes, indeed. She talks about it."

"What does she say?"

"Why, she says that she wishes I could go."—Tit-Bits.

Dept. AN-4	28	875 00
Dept. AH		
William Donovan.....	10	575 00
Dept. AC		
Gottlieb Rau.....	8	450 00
Dept. AT-3		
Walter Bulman.....	9	550 00
Dept. AM-2		
Emery Bonnevill.....	9	450 00
Dept. AR-2		
T. Toomey.....	17	900 00
Dept. AT-4-5		
Harry Koonz.....	7	325 00
Dept. AD-7-8-9		
Daniel W. Finn.....	37	2,600 00
Dept. AR-1-2-3		
Thos. Collins and T. Toomey..	21	1,050 00
Dept. AA		
Geo. Hempstead.....	10	500 00
Office		
	22	1,550 00
Wells Bros. Co.		
Dept. BW		
D. A. Keyes.....	4	240 00
Dept. BN		
Thos. Maher.....	6	450 00
Dept. BC		
Chas. Braun.....	1	50 00
Dept. BH		
Sofres Christianson.....	6	500 00
Dept. BO		
Louis Edes.....	9	350 00
Dept. BR		
C. C. Phillips.....	6	350 00
Dept. BZ		
E. W. Birge.....	2	100 00
Dept. BT		
P. T. Sullivan.....	5	300 00
Dept. BY		
Emery Blackbord.....	21	1,050 00
Dept. BV		
P. T. Sullivan.....	31	1,850 00
Dept. BP		
Wilfred Petrin.....	12	600 00
Dept. BM		
F. H. Daniels.....	13	700 00
Dept. BJ		
M. E. Dunnigan.....	19	1,350 00
Dept. BG		
Adelard Desautels.....	12	700 00
Dept. BK		
Fred Jacobs.....	12	600 00
Dept. BX		
S. H. Hill.....	2	100 00
Dept. BV		
S. R. Carpenter.....	23	1,400 00
Dept. BL		
W. F. Tripp.....	31	2,020 00
Dept. BD		
G. E. Stevens.....	40	2,100 00
General Factory		
F. W. Whelpley	15	900 00
Shipping Room		
G. W. Carpenter.....	55	2,340 00
	1015	\$76,789 00
G T. D. Total Subscribers, 1015.		
Total Amount, \$76,789.00.		



## The Mechanic's Part

AMID the battle's reek and noise,  
"Somewhere in France," across the sea,  
There is a bunch of Yankee boys  
Whose life or death depends on me;  
I do not know who they may be---  
They do not know my face or name,  
But to my skill and loyalty  
Their fate's entrusted, just the same.

A RIFLE or machine-gun part  
Wrong by a thousandth of an inch,  
May make a company lose heart  
Because it failed them in a pinch;  
I must not slack my task nor flinch  
From drudgery and dull detail,  
Lest in some crucial battle-clinch  
The arms we send our boys should fail.

SO WHEN I chafe at jobs that irk  
Or fret at wearisome routine,  
I must remember what my work  
And care and watchfulness may mean;  
And how our fighters must lean  
On men like me for tools of war  
That, when conflict waxes keen,  
Will do the work they're needed for!

—By BERTON BRALEY in *American Machinist*



## STENCILED IN SHIPPING DEPT.

Mr. John Touher and Amy Stark have received letters from Private E. J. Conlin of the 102nd Aero Squadron, "Somewhere in France."

Miss Julia Pratt, stenographer in the Billing Department of the shipping room, gives up her position May 5th on account of her health. She goes to her home, the Eden Valley Farm in Bernardston. We all wish her a speedy recovery.

Harry Clapham of the plate department, took his first degree with the Masonic lodge last night. He says he escaped without serious injury and seems to be much alive this morning.

Miss Julia Barr of the shipping department received word from her brother, Lieut. Barr of Company L, that he is still in a hospital in France and has been in the hospital since January.

E. E. Danforth, foreman in the main stock room, has been out sick with "German" measles. He says he doesn't mind the measles but objects to the Kaiser's "trade mark."

Lester Reynolds of the freight checking department has also been sick with German measles—Liberty measles we should have said.

Miss Zadia Clark, formerly with the shipping department of Wells Bros. Co. is now located in Boston.

W. D. Howland has received a letter from E. J. Conlin with the 102nd Aero Squadron, Somewhere in France. He reports all well and happy to receive the tobacco and other articles sent him by the Shipping Department. He has enjoyed his first good smoke since leaving America.

Step up easy, boys, and let us whisper in your ear. Oscar Haigis, lucky scout, received a ten days' vacation recently and returned with a certificate granting him a partner for life, provided he will Love, Honor and Obey. Congratulations, Oscar. Mr. and Mrs. Haigis spent their honeymoon visiting different points in the South.

Miss Blondine Verrier, one of our faithful employees, left recently to join her father near Baltimore, Md. Blondine has been in our employ continuously for the past eight years. She has our best wishes.

## Lightning Flashes

Tucker Evans, one of the Wiley & Russell representatives of the Helix has proved himself to be a real ladies' man. He is now boss of four nice young ladies and their hobby is "Hobbing." Oh, Boys, now watch the Graphic Hobbing Chart.

Carl Chapman, dispatch clerk for W. & R. is sick with "Liberty" measles.

The women employees at this factory are doing splendidly in their work considering the brief experience most of them have had. No women "slackers" at the Green River division!

The Stamp Department has just installed an automatic engraving machine for cutting out steel stamps. It is proving highly satisfactory.

Gus Flurrie has purchased a new Oldsmobile.

Fred Scheidler has resigned his position at the Lawler Theatre and accepted a position at the Wiley & Russell Plant, making tools to help lick the Kaiser.

Miller, our instructor on round dies, sprained his neck while in Boston looking at the high buildings. Herrick also got lost and asked one of the traffic cops if he had seen any of the fellows from Greenfield.

Brunelle is a great purchaser of Liberty Bonds and contributor to the Red Cross. If you don't believe it, look at the buttons on his vest.

Fred Premo motored to Conway, April 17th, returning the same day.

Joe Dunn, our silver-tone tenor, wishes to have it known that he is ready to fill all engagements for parties and concert work. Joe says he can yodel a little, too.

Mr. L. F. Betters has recently added to his goods and chattels a new Ford.

Miss Anna Lamere, employed at Wiley & Russell Plant, has fully recovered from scarlet fever and has returned to work.

Perhaps one of the most liberal givers to his country is Mr. Patrick Baxter, who for 38 years has been employed at the Wiley & Russell Division. Mr. Baxter has three sons in service "Over There." They are in three different branches as follows: Francis T. Baxter, 1st Class Private, Medical Corps; Samuel J. Baxter, 488 Aero Squadron; William P. Baxter, Sergeant Cavalry. A prouder father never lived. His only regret is that his age prevents him from actually going over. However, he is making Green River and Lightning Dies as his bit.

Mr. Joseph Burke, who met with an auto accident about two weeks ago is rapidly recovering and left the hospital April 20th. Dr. Stetson was the attending physician.

The readers of the Helix will regret to learn of the injury received by W. G. Summers, one of the Staff Artists. While stamping dies he caught the first finger of his right hand under the punch press, squeezing it hard enough to need a doctor's attention. Mr. Summers is thankful that his left hand is O. K. as this is his artistic side.

All candidates wishing to try out for Wiley & Russell baseball team are requested to meet at Shattuck Park at 3 p. m., Saturday, May 4th.

There are 106 persons at the Wiley & Russell Division planning to plant one of the corporation gardens this spring. This is ample proof that the plan is meeting with hearty approval on the part of the employees here, regardless of the poor results obtained by many last year owing to the unfavorable weather conditions.

A daughter, Mary Patricia, was born April 12th to Irene and Ralph French. "Ralph says that you don't want to forget to mention that she is some girl, too."

We are in hopes that Mr. Newman, the piece rate setter, will be as generous in his rates as he is with maple sugar.

Miss Tilly Helbig, of W. & R., seems to have many friends going to the front lately. Every little while she is asked to start a subscription for a wrist watch.

"Oak trees from little acorns grow," is the motto of Mr. Karner. At present he is laboring with a young Post Office, a miniature Traffic Department, and several enterprises that bid fair to make Wall Street envious. What Mr. Karner most desires is some conveyance to enable him to approach and descend the platform of the control boards. First aid treatment was necessary after one descent.



Mr. Leon LaMere, formerly employed in the hardening room at the Wiley & Russell plant, died after a short illness. He was taken sick Easter Sunday while attending church. Mr. LaMere was held in highest esteem by his fellow workers, being transferred from the Box Factory to the Wiley & Russell plant last fall. He was about 68 years of age and leaves a family of nine children, who have the sympathy of the G. T. D. employees in their great loss.

L. H. Houghton, one of our most worthy fishermen and story-tellers, (not fish-stories, of course) returned from a fishing trip the other day and to our amazement related that he caught but two fish! And someone remarked, "Those ought to have been returned to the brook for further development."

Mr. Frank Schatz has been transferred from the F. E. Wells & Son Plant to the main office where he will assist Mr. L. H. Taylor, Machine Tool Sales Manager. Mr. Schatz first entered the employ of this company in 1899, working at tool making in the F. E. Wells & Son Plant. Since 1908 he has been connected with the Machine Tool department, tool making, experimenting and inspecting to date. We wish him every success in his new position.

We are glad to see Chas. Snell back at work after an illness of four weeks.

Arthur Black of the Machine Department Tool Room has been on the sick list.

A. Kasputis has been laid up with blood-poisoning in one of his fingers, caused from a slight scratch and poor care.

Mr. Geo. Morrison has taken the position of Inspector of the Machine Department. Good luck to you, George.

Earl Bardwell has been on the sick list.

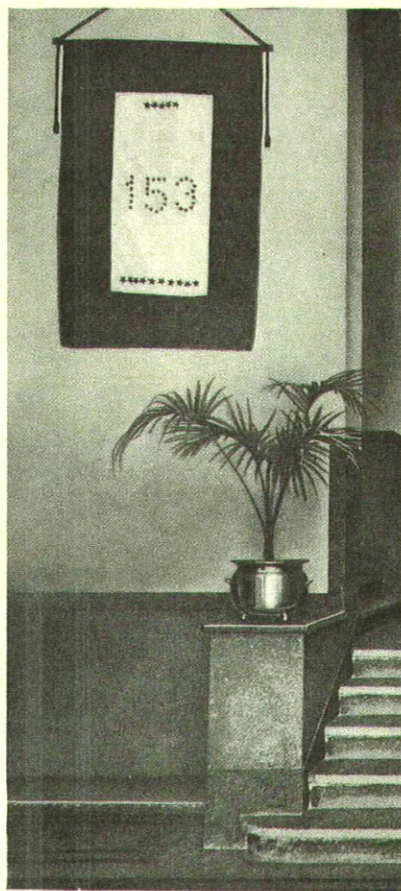


## WAR SAVINGS SONGS

Sing a song of Thrift Stamps,  
Sixteen in a row.  
Take them to an agent,  
Add fourteen cents or so;  
Change them for a War Stamp,  
And for your loyalty  
You'll get a crisp \$5 bill in 1923.



## THE SERVICE FLAG



These stars mean men who serve in life's full morn,  
Who fight for us upon a foreign loam.  
And e'er to us their message is upborne,  
That we may also serve who loyal work at home.

EDITH MAUDE LOCKETT.  
(G. T. D. Office).

## A MESSAGE FROM ENGLAND

Mr. Pearson, District Dilution Officer of the British Munitions Board, in a recent lecture to some of our members, gave us a vivid picture of the heroic part men and women of England take in the manufacture of war supplies for our Allies.

The speaker specially emphasized the fact that in England pre-eminently the women workers are doing their "bit" with a spirit of zest and accomplishment, toiling all day with life-and-death thoroughness and taking the whole thing as a privilege, not a duty. These men and women have suffered by the loss of their fathers, husbands and brothers and they are standing behind the one who stands behind the gun. There is the same opportunity for us here to inspire our work with this loyal spirit, whether we work in the factory, the office or at home. Let us take our example from these English cousins, doing work that will make it unnecessary for us to suffer many bitter losses to spur us to the task. Let us EARN the right to share the victory with our boys in the trenches.

When Congressman Treadway mentioned that what the United States had raised in money for the war would be equal to nearly \$21.00 for every minute since the birth of Christ, it makes one feel that Uncle Sam is playing more than a minor part in helping out the cause of world-wide democracy.

## PATRIOTISM-THRIFT

By Leon M. Lamb, Treasurer.

To fight we must save. To win the fight we must save some more. This war is one of endurance. The nation which can longest continue to pour into the maelstrom of war men, money and munitions must win. To the "stay at homes" it becomes the prime duty to furnish money and munitions.

The greatest sacrifice one can make is to lay down his life for another. Supreme patriotism appears in one laying down his life for his country. Millions of our young men, our companions and comrades, perhaps, are presenting themselves as an offering for the upholding of the right in this direst disaster that has ever befallen mankind. They face the most savage, most cruel foe the Devil ever conceived, employing methods of destruction Satan himself would be ashamed to own as his instrumentalities for war. Years ago someone said, "The Prussian was born a brute, civilization will make him ferocious." Events are proving the truth of the statement.

We try to picture, perhaps, some of the horrors the fellows will face as we bid them goodbye with hearts sad and heavy, but do we consider how far we may carry into our own lives the spirit of self-sacrifice in order that their lot may be made as easy as possible and the victory they are to win so complete as to smother the ambitions of any other man or coterie of men to rule the world?

I said to win we must save. As a nation we have great lessons to learn in saving. We are not nearly as thrifty as some of our allies. Speaking comparatively, money comes easy—goes easy. We don't enjoy saving; we enjoy spending, buying unnecessary things which gratify some whim or caprice.

lion dollars the Government desires to borrow in this manner during 1918 means the equivalent of twenty dollars for every man, woman and child in America.

During this month (May) the War Savings Stamps are \$4.16 and may be secured by exchanging therefor a card bearing sixteen Thrift Stamps and the payment of sixteen cents.

The stamps for which you now pay \$4.16 will be worth five dollars January 1, 1923. Incidentally the five dollars you receive at that time will in all probability buy much more of food, clothing and shelter than the same amount will at the present, so really one will gain in returns much more than the 4% compound interest the Government pays for the use of the money.

To permit a man to kill two birds with one stone,—fire a shaft at the Kaiser and at the same time provide for a rainy day, there is nothing superior.

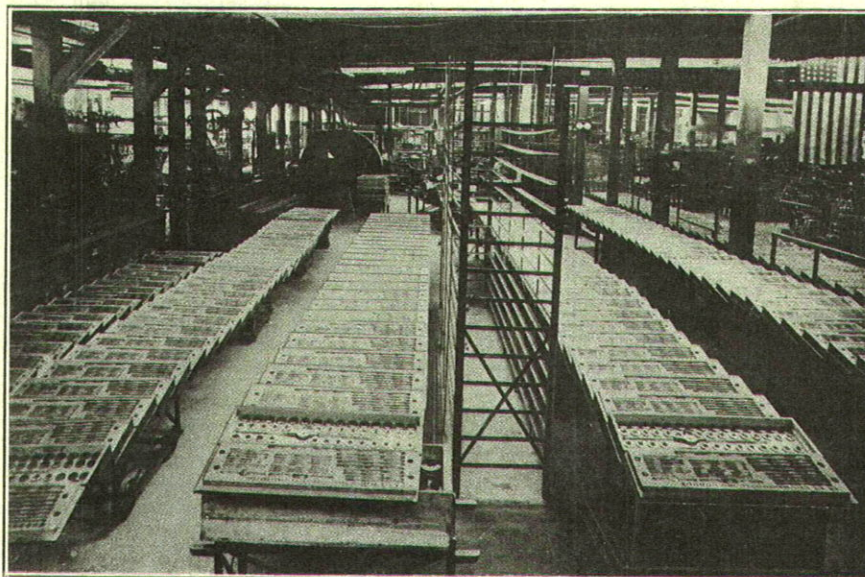
## FOR OUR GOVERNMENT

The picture shown on this page, snapped by our photographer, Mr. Howard, is convincing evidence of the part G. T. D. plays in providing "Uncle Sam" with the "sinews of war." Just one of the many assemblies that keep Ray and Tom hustling these days and must thrill every one of our employees with pride and a real sense of accomplishment in "Doing Their Bit," for the front line equipment.

In this order for the United States Army there are assembled ready for inspection, 250 screw plates containing 37,000 of our tools.

In addition to the thread cutting tools needed at the repair stations of the American Army training camps, the requirements for the ever-increasing over-seas contingents will reach tremendous proportions.

Already our American boys in France



## GOVERNMENT SCREW PLATES

To tempt us away from this habit the Government presents as an attraction for the spare quarters and small bills, the Thrift and War Savings Stamps and fortunate the country will be if the people shall acquire the habit of saving as the result of regularly investing in this form of security.

As a short term investment proposition nothing can be more attractive, more secure, more convenient. Registration may be as sure and complete for a five-dollar stamp as the rich man gets in connection with his five-thousand-dollar bond.

They may be purchased almost anywhere anytime during 1918. The two bil-

have welcomed the G. T. D. and other trademarks in the encampments at the front. Sergt. W. S. Ellingwood, E Co., 104th U. S. Inf., in a letter from "Somewhere in France," writes:

"Many small articles found in the trenches of Von Hinderburg's famous line bear the stamp of American manufacturers. We cease to wonder at the meeting of friends from our home town, but the finding of things like this cause one to think how small the world is and no matter where one goes he will find these reminders of home. New Home sewing machines, Millers Falls bit and braces and Greenfield taps and dies have all been welcome sights to us."



## APPRENTICE DEPARTMENT

By Sydney C. Barnes.

The Apprentice Department started July 23rd, 1917, with seven boys. The first work was plain turning, that is, turning arbors so that the boys could familiarize themselves with the lathes and as soon as they got so they could do plain turning other work was placed in the department, such as milling and fluting cutters of twenty-five different styles, including nearly 100 different diameters and thicknesses, also many kinds of form tools for automatic machines, all kinds of teazles, countersinks, end mills, reamers,—in all probability 200 different kinds of small tools used in the different divisions of the Greenfield Tap and Die Corporation.

All the chasers used in the various kinds of tap threading machines are formed in this department. The apprentices are taught how to make the tools from the start to the finish, that is, from centering the stock to the final grinding, centering, turning, milling, stamping, hardening and grinding. On the cutters they are taught to chuck the hole, face to thickness, turn to diameter, chamfer, spline keyway, form, gash, form mill, harden, grind holes.

At the present time we have in this department seven engine lathes, three bench lathes, one shaper, seven milling machines, one hand miller, two drill presses, one hole grinder, one surface grinder, one cylindrical grinder, one cutter grinder, one small tool grinder, one hand screw machine, one checking machine, one centering machine, one hacksaw, one dry tool grinder and one wet tool grinder, one gas furnace, making a total of thirty machines, also a tool crib that is well stocked with micrometers, gages, drills, taps, arbors, lathe dogs and all tools used in the manufacture of the tools made in this department.

At the present time we have the following boys serving their apprenticeship: Wm. Bohmer, Hubert Grogan, John Warren, Earl Hill, Alverton Elliot, Alfred Travis, Ralph Jacques, Martin Schlagenhauf, Geo. Petit, Clarence Cook, Adam Skibinski.

In addition to being instructed in tool making, the apprentices spend every Thursday afternoon in the class room where they are taught mechanical drawing and shop mathematics. Each boy has his own locker and wash bowl. The room is kept clean as each boy takes his turn every week at cleaning up the room. The room is also well lighted and well ventilated.

There never has been any practice work done in the department. They all began on actual work and on the average there has not been over 2% spoiled by poor workmanship since the school started.

In the near future we will take on at least three more boys so that there will be fourteen boys in the apprentice school. The boys are paid a good living wage while learning and at the end of their apprenticeship they are given \$100 in cash and \$50 worth of tools and a \$10 tool chest for their faithful service during their apprenticeship.

"Elliot Drury seems to be walking on air lately," said Mr. Robbins, manager of the Advertising Department. "I should say so," replied Mr. Smith. "It's a boy, nine and a half pounds, and they say he looks like him—maybe he'll outgrow it though." Congratulations Elliot!

### NO CHANCE

Judge—The police say that you and your wife had some words.

Prisoner—I had some, Judge, but I didn't get a chance to use them.—Puck.

## THE HELIX

### FLIERS' RIGID EXAMINATION

"If one wants to know his physical condition from A to Izzard, let him take the examinations given to candidates applying for commissions in Uncle Sam's service as aviators," so says E. C. Bourbeau, our office assistant at the Box Factory Division.

He took these examinations in Boston on the 16th of January and claims that they are about as stiff exams as anyone can go through and come out alive.

He reported at the Eye and Ear Infirmary on Charles street at 8 o'clock a. m. and from that time until 3.30 p. m. he was being examined by six army and two hospital doctors. There were twenty-five being examined that day so the candidates alternated in taking the different exams.

The eye tests come first. The candidate must have at least 20—20 eyesight and a higher mark is given for 20—10 or better. Then the stereoscope test proves to the examiners how well the candidate can judge the distance of objects seen in space. Mr. Bourbeau says: "There are ten objects at varying distances from the eyes, which are numbered. The idea of the test is to jot down the order in which the numbers appear. You may get four and maybe five at the start then things begin to blur. You wipe your teary eyes and promptly forget how the objects seemed. So a new start is made and maybe a third and a fourth until finally, with a sigh like a freight train passing the Box Factory, you announce that you have got it right. After this you must read fine print held an inch and a half away from your eyes. This is easy. If you don't believe it, try it!"

Next the hospital doctors examine the throat, ear and nose. The throat examination is a very ordinary one but the ear test is much harder. The candidate must hear a whisper at twenty feet and hear a watch tick at four feet. Again we quote Mr. Bourbeau, "In the nose test you receive a funny sensation. They try to blow your brains out with an instrument that looks exactly like the horn on a 1902 Ford, but by this time you don't mind a little thing like that. Anyhow, just now the fun starts for you are to take the nerve test. First you stand on your right foot with your left toes on your right instep, your left heel on your right shin, with your arms stretched out horizontally and stay in this position, with your eyes closed, for 40 seconds without falling over. Then comes the big white monster—the revolving chair.

"You've been watching this chair with its occupants for almost two hours now so it is with a funny, sinking feeling that you hear your name called out. If you've ever been seasick, then you know how it feels to be whirled and twirled around. The doctors revolve the chair for ten seconds then you open your eyes while the examiners note the manner in which your eyes roll in their sockets. Then, after closing the eyes again and being told where a certain object is located, you must raise your hand above your head, bring it down and try to touch the object. This can be done with some concentration but the second time you try it, after being whirled around in the opposite direction, you are not considered normal if you can touch the object. Incidentally you are just sick enough for the assistants to come in with water. Another ten seconds' twirl and you totter to a seat with a mingled sigh of pain and relief, mostly relief.

"A short rest is given to get over the dizziness then the heart is examined. After this the most tiring and unpleasant part of the examination takes place. Drops of a white liquid are put into your eyes to distend the pupils. Then you must look fixedly at an electric light for about 10 minutes while the doctor puts some instrument of torture into the corner of your eyes and examines them. This operation leaves you weak and fagged and somewhat

blind. Then comes the physical examination which is called by the medical authorities, the stiffest exam in the world.

"Every bone, joint and muscle is gone over carefully. The heart is examined thoroughly by five different doctors, blood pressure and pulse taken, and in fact, nothing is left to chance. You have either an O. K., a number 1 physique or else you don't pass. The only exception to this is that they allow 1% flatfoot but that is all."

Of the twenty-five candidates to take the examination at the time Mr. Bourbeau was examined, seven passed the physical tests and three the mental examinations and were sworn into service. Mr. Bourbeau is now rated as Cadet Flier, Aviation Section, Signal Engineers, Officers' Reserve Corps, on inactive service. He expects a call to active duty within the next two months.

### WITH THE COLORS

Mr. Richard Tippet has received a message from M. Campbell, formerly of the Gage Department, announcing his safe arrival overseas. Mr. Campbell's address is Battery A, 55th Artillery, A. E. F.

Somewhere in France,

March 20, 1918.

Dick has also received the following letter from Pvt. Edw. J. Conlin:

Dear Dick:—

Your long-promised letter is about to start on its journey to "God's Country." Well, old boy, are you in the draft army yet or are any of the boys? Believe me, Dick, there are going to be a whole lot of the boys in it before the Germans cry quits. But you have no doubt seen by the paper how the "Yanks" are already hammering at Fritz and he is feeling it, too, and don't you forget it.

It sure will be tough if Skinny V. is drafted, won't it? He will miss his nice clothes. Tell him I don't wish him any hard luck but I expect to meet him over here some day.

I presume H. Blackbird and Tom and all the gang are still on the job. If so, give them my regards and tell them to keep the windows closed; there's an awful draft.

Well, Dick, write and tell me the news.

Ever your friend,

PVT. EDW. J. CONLIN,

102 Aero Squadron,

A. E. F.

Mr. R. S. Bascom has received the following brief but interesting letter from Herbert L. Kuhn, one of our boys from the Smart Plant, who enlisted early in the war:

Somewhere in France,

With American Expeditionary Force.

Dear Sir:—

It is nearly a year since I left your concern where I was working on the "Gun Taps" and little did we think then that the war would bring me way over in France, but such is the case.

I spent a little time in England before coming here, where I have now been nearly two months.

The French people are very good to the Americans, especially those who can talk French. They are very rustic in their clay-made houses and with their wooden shoes. The weather is about the same as in the United States.

Wishing you a happy New Year, I beg to remain,

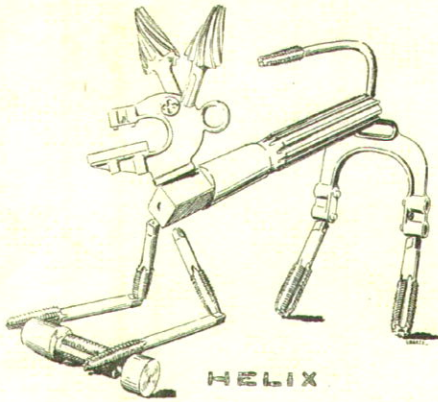
Very sincerely yours.

HERBERT L. KUHN.

Supply Co., 102nd Inf.,

A. E. F.





Helix says that when TAPS are sounded for him he'll DIE in the LEAD; for there's no LIMIT to success if you CENTER your thoughts, FACE your situation from a true ANGLE, GAGE your capacity between the MAXIMUM and MINIMUM of the ROOT of your real self and PITCH in to win on the SQUARE. Otherwise many a life hangs by a THREAD.

According to Helix:

We all want to be as Wells we can  
And never try to have a Payne.  
But sometimes we eat freely of Lamb  
From the Seller or right off the plain.

A fishing we went for some Bass-com  
"Fresh" Graham bread, Fried chicken was  
going some  
Our Baker did a stunt that was big  
We Judge the meal was meant for a pig.

A Sawyer one day while sawing wood  
Found a Robbin's egg in a Hawks' nest  
stood.  
The wood was somewhat Greene they say,  
And the egg was eaten by E. A. Gray.

Who is it that here dares to say  
That a Carpenter needs any more pay.  
That Du Monte's Taylor has gone to sea;  
Forget it, boys, Boost G. T. D.

#### ROLLIN'S AUTO

Rollin sought to auto in his "Lizzie" as he  
aught to,  
But the auto sought to auto as Rollin never  
thot to;  
So Rollin, he got hot; Oh very hot, as he  
aught not to,  
And Rollin said this auto aught to auto and  
it's got to!  
So Rollin fought the auto and the auto it  
fought Rollin,  
Till the auto also got too hot to auto as it  
aught to;  
And then, Great Scott! that auto back-  
fired with a kick,  
And Rollin now spends half his time with  
our Nurse who tends the sick.

LOST—From the dining room, one salt-  
cellar. There are no direct accusations  
made, but it is surmised that possibly Prof.  
Bysshe might have a sent-mindedly stuck  
it in his pocket to use on the tail of the  
elusive 10-1000 of an inch.

Helix says: "The man who never  
does any more than he is paid for, never  
gets pay for any more than he does."

S. R. Carpenter borrowed \$20 from Pat  
Sullivan, of department B. F. On April  
Fools Day he returned the money in  
small change, with a note expressing his  
gratitude. "By Hick," says Pat, "I'll bet  
my next week's pay that Ray's been sell-  
ing his Bonus Thrift Stamps. I'll see F.  
H. about that."

Helix wants to know of Ray Carpenter  
which is worst, "Milking the cows for Pa  
on Saturday evening when one wants to go  
fishing," or listening to that lecture from  
Rollin Bascom when Ray bumped into a  
much-prized old-fashioned couch, trying to  
drive Walter's car into our superintendent's  
garage?

Mr. George C. Kaulbach, our former Em-  
ployment Manager, is now attending a gov-  
ernment school at the University of Roch-  
ester, where he is studying the theory of  
employment managing. This school is con-  
ducted by the Ordnance Department and is  
the first of its kind in the country. There  
are twenty-five students enrolled, among  
them is Reulbach, one of the old National  
League pitchers. He once pitched in a  
game here in town under the name of Shel-  
don. Mr. Kaulbach finds the work highly  
interesting and wishes to be remembered  
to all his friends in the Corporation.



Miss Viola Carney and Miss Minnie  
Kaminsky, of the Smart office force, are  
planning to have a war garden this summer  
and have ordered pantalettes preparatory  
to planting time. They say they will show  
the men some real products provided there  
are no worms or field mice present. Their  
pictures will be printed in a later issue of  
this paper, showing them in their war time  
models, actually at work in their gardens.

Mr. Anton Schwister, of the Smart office  
force, is anticipating the purchase of a  
Yiddish Packard in the near future. We  
all hope he will take us out for a joy ride.

William Dwyer, Anton Schwister and  
Rudolph Blanker, all of the Smart Com-  
pany, seem to be in great demand by the  
young ladies of the G. T. D. office, all re-  
ceiving two or three invitations by 'phone  
or letter to their last dance. The young  
ladies of the Smarts are wondering when  
they will get their innings.

Miss Leonard, the G. T. D. nurse, has  
been kept busy for the past week dressing  
badly skinned knuckles caused by the  
cranking of a Ford coupe. Upon the next  
visit of the owner of the skinned knuckles  
to the Ford plant he might suggest to  
Henry to install self-starters especially on  
coupes.

#### GREAT EXCITEMENT ON HOPE STREET

A few days ago groups of excited pedes-  
trians could be seen in the vicinity of the  
A. J. Smart Plant. They were jostling  
wildly and pointing at the roof of the plant.  
The trouble seemed to be as to which was  
north and which was south.

One of the oldest inhabitants said that  
"Fur nigh onto eighty year No'th has allus  
been up thet way," pointing in the opposite  
direction to the weather vane. Several  
workmen had to lay off, suffering with  
brain fatigue, trying to figure out whether  
the weather vane was vain or not.

It is thought that Mr. Rollin S. Bascom,  
who has been practicing throwing his nice  
new coupe into reverse, has tried the same  
tactics on his weather vane. We will all  
be relieved to know that it is corrected.

#### WELL EARNED COMMENDATION

We have in this factory, one of the most  
patriotic men in the G. T. & D. Corporation  
working for day wages. His name is James  
Pooley; he is 63 years old and of English  
descent. Mr. Pooley has been in this coun-  
try about 40 years, working most of his  
time in the cutlery trade.

He is now working in our hardening  
room, having been there two years and five  
months.

Mr. Pooley has just walked into my of-  
fice with \$50.00 to buy a Liberty Bond.  
This makes the fifth bond that he has laid  
down the money for in the last year. He  
is putting all the money he can get outside  
of his living expenses into the Liberty  
Loan and if all the people in the United  
States were as patriotic in the way of buy-  
ing bonds as he is, the Government would  
certainly be flooded with applications for  
bonds every time a new loan is started, and  
I want suitable mention of this made in the  
Helix when it comes out May 1st.

R. S. BASCOM,  
Works Manager.

#### AN APPRECIATION

A member of the Old Guard of the G.  
T. D. wished us to express his appreciation  
of the privileges extended to him as a mem-  
ber of this organization, his pleasure in  
wearing the badge, the money received at  
Christmas time and the insurance. He also  
adds, "I want the Corporation to know  
that I am very grateful for the war garden,  
which I enjoy and also find a source of  
profit; the money bonuses, with which I am  
enabled to buy Thrift Stamps and Liberty  
Bonds—a help to the Government as well  
as to me; the splendid care we have in  
times of sickness and the friendly feeling  
and cordial interest extended to every one  
of its employees by the Corporation."

(Ed.—The author of the above modest-  
ly requested the Helix not to use his name).

Frank Schatz was recently summoned to  
appear for jury duty in the Federal Dis-  
trict Court at Boston.

#### BOX SHOP---CHIPS & SHAVINGS

Out of 48 employees at the Box Factory,  
33 are now pledged to buy either Stamps  
or Bonds. Two others have bought inde-  
pendently. In addition to this about \$22  
worth of stamps have been sold since  
March 1st.

Business is rushing; since the first of the  
year we have produced an average of 1,305  
boxes. We keep on growing—watch us!

A man has courage to take unto himself  
a wife in these days of the High Cost of  
Living but Andrew is there with the goods.  
On the 17th he took out a marriage license  
and in all probability before this issue is  
printed will have joined the benedicts.

Interest in the gardens is awakening.  
About 12 will be taken up by the Box Shop  
force.

#### WANTED

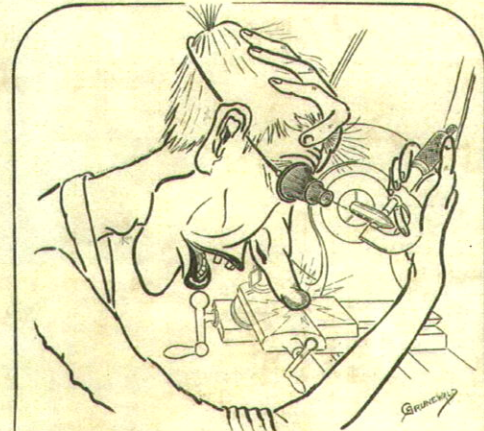
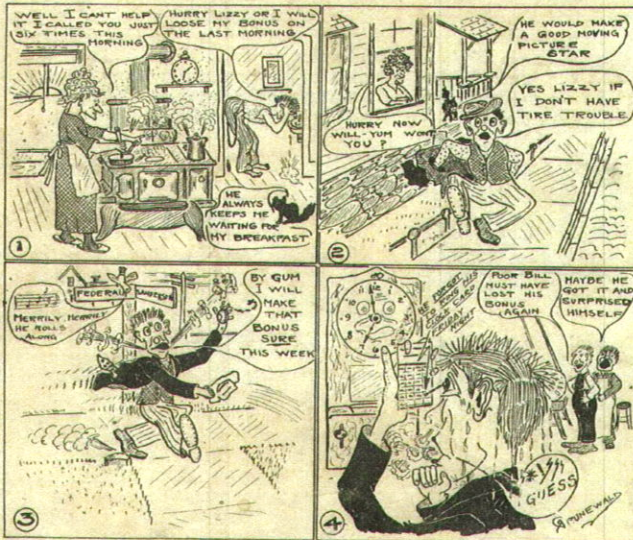
The names and addresses of all  
G. T. D. Boys in Khaki, so that  
the Helix can be sent to them.  
Send same to the Helix Editor.



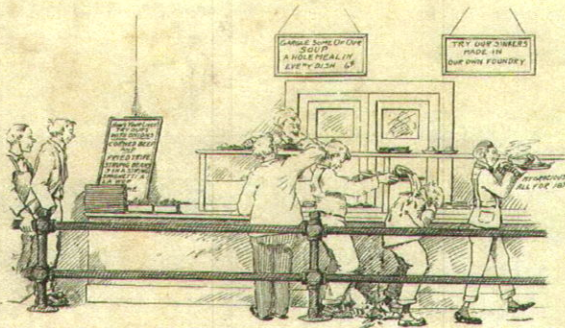
# As OUR ARTISTS SEE US



"SAY MASTER - YOU AINT GOT NUTHIN' ON ME!"



IT IS NOT ALWAYS EASY TO WORK TO AN ACCURACY OF ONE TENTH OF ONE THOUSANDTH OF ONE INCH.

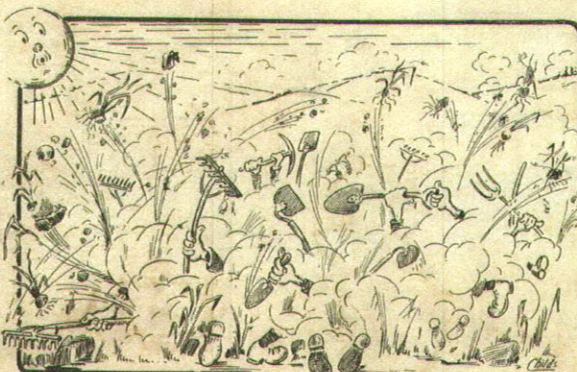


JOIN THE GTD BREAD LINE AND GROW FAT



"LEST YE FORGET"

OVER THERE!



NOT OVER THERE - T RIGHT HERE!

"army of GTD gardeners - getting a party start on their new allotments"



"JACK WHAT MAKES YOU LOOK SO HOME SICK?"

"WHY I'VE JUST PICKED UP A 'GARDEN BEAN' DIE ONE OF THE MECHANICS MUST OR DROPPED."