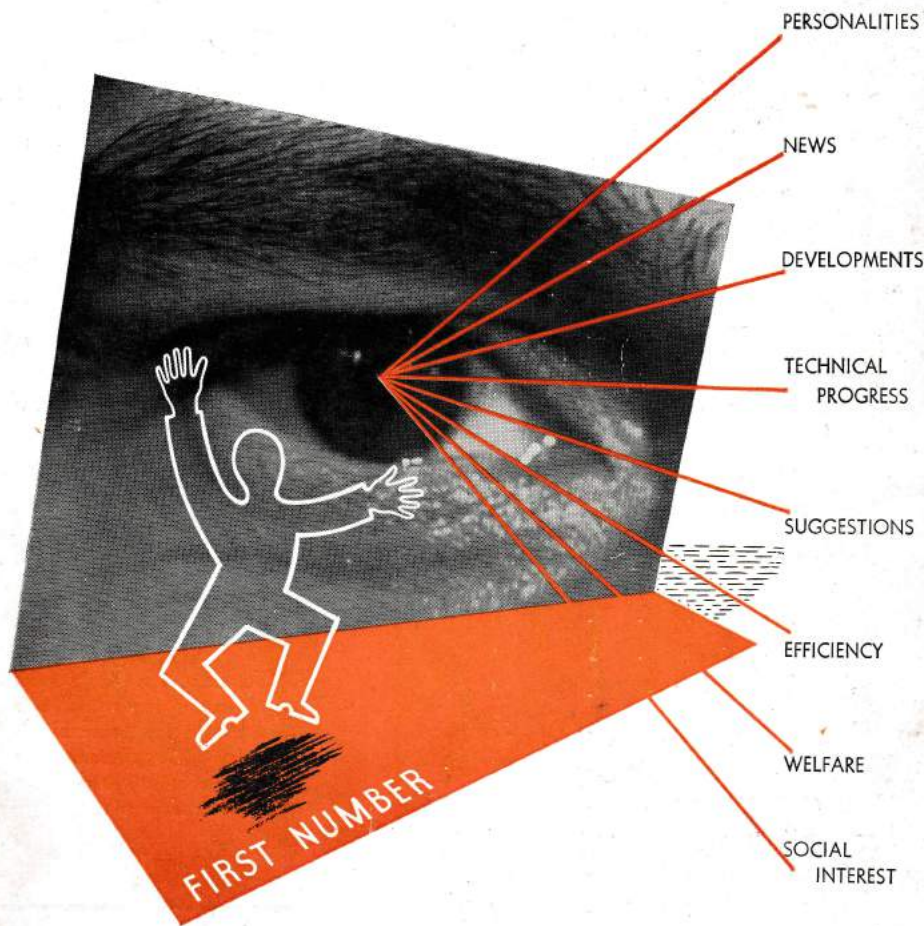


PRECISION

No. 1 Vol. 1 January, 1947

PRICE 6d.



A QUARTERLY MAGAZINE DEVOTED TO THE ACTIVITIES OF THE NEWALL ENGINEERING GROUP

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Cover Design

I said to our artist, "Look, this Newall job has to be good: it's the first number. Newalls' are a brainy lot, they're years ahead of time, they're hypercritical, hard to please, they think in precise terms, and are a closely-knit engineering group full of pep. I think they will welcome "Precision," but it depends on the cover. The inside will deal with Newall news, personalities, welfare, progress, sports, and heaven knows what. For my sake shine on this job or never hold brush again!!"

No brick-bats, please, for he filled the bill. Incidentally, the little man is not a cop . . . he's making joy surrealistically. Suggestions for next number's cover are welcomed.—EDITOR.

Precision

MAGAZINE OF THE NEWALL ENGINEERING GROUP

January 1947

No. ONE Vol. ONE

EDITOR : J. PEERS

Editorial

WITH this, the first issue of "PRECISION," we should attempt to formulate our purpose, scope, and policy, but in the riot of ideas, suggestions, articles, items and MSS which have besieged the Editor in recent weeks, it would perhaps be premature to rigidly impose the rules of our future.

We do nevertheless seek the co-operation of all Newall Group personnel in maintaining the flow of contributions and ideas which have gratifyingly overwhelmed the January number.

The idea of issuing a quarterly Magazine "brimful" of Newall Group news and gossip was born somewhere in the shops at Fletton. Everyone agrees the idea is good, for it is obvious that the interests of the Newall Group of companies should become the interest of everyone. It is surely better that information concerning the Group should be definite and authoritative rather than that it should be circulated with variation by word of mouth based on hearsay only.

The scope of "PRECISION" as envisaged, is almost apparent from the contents of its first number, but its form is not inflexible and may be varied in future in conformity with the ideas we receive. Our success or failure will in large measure be gauged by the contributions received.

The next issue will be published in April 1947; closing date for Press will be March 1st. Communications relating to "PRECISION" should be addressed—

The Editor,
"PRECISION,"

The Newall Engineering Co. Ltd.,
Peterborough.



A MESSAGE FROM

SP

To the Editor.

6th December, 1946.

Dear Sir,

PRECISION

It is with great pleasure that I see the inauguration of a Newall Group Magazine.

I feel certain that this publication will not only prove of valuable aid in widening our very fine circle of friends in the trade, but also will bring a greater understanding and interest to all of us who are associated in the manufacture of the products of the Group.

May I take this opportunity of wishing the Magazine every success, and may it long maintain the standard of "Precision" which has been the criterion of our organisation for so many years.

Yours sincerely, SYDNEY PLAYER,
Chairman, The Newall Group of Companies.

MANAGEMENT & MEN

by the 1946 Shop Committee (NEWALL ENGINEERING)

THE old saying that some good comes out of the greatest evil is amply proved by the improved relations between Managements and Employees as a result of the last war.

The setting up of Joint Committees and similar bodies proved conclusively by their results that real co-operation between employer and employee had beneficial results to both parties. Managements can plan and organise, but in the final analysis the results lie in the hands of the workpeople.

Here, then, is the crux of the whole productive situation. If the two parties can get together, with mutual understanding of each other's difficulties, improved production is assured, with increased profits for employer, and shorter working hours, with improved facilities, for the employee. If this arrangement is to be as near perfect as possible, it throws responsibilities on both sides, which neither can afford to ignore.

Managements must take the worker, through his representatives, more into their confidence—explain their plans, aims, etc. If the worker knows all this, he becomes part of the Team, knowing what he is working for, and why. He is no longer the disinterested workman just working for pay day. The products, and output, will then have some meaning for him.

Managements must also see that promises, once given, are kept, to ensure trust in them from the workpeople. Speedy settlement of grievances is also essential if a sense of co-operation is to be maintained. Organisation and planning must be of the best to maintain a constant flow of work for the workmen. If the planning organisation breaks down, workmen can stand and yet have to work overtime to compensate for the deficiencies of others.

All this in turn gives the workers a responsibility which they must face if they wish to maintain or better their conditions. A fair day's work must be given. Loyalty and interest to the firm must be shown. Abuse of concessions eliminated. Grievances aired and not brooded over. And above all, an interest in increasing production must be maintained.

(Continued on Page 4)

MR. KEN SUMMERS

Career

being a quarterly feature which
reveals the achievements, the
interests, and the sports of
Newall personalities



1914-1919—Apprentice, Newall Engineering Co.; 1919-1928—Taft
Pearce & Co., U.S.A.—Gauge Maker; Warren F. Fraser & Co.,
U.S.A.—Foreman; Bethel Player & Co., U.S.A.—Works Manager;
Norton & Co., U.S.A.—Departmental Superintendent; 1928—Rejoined
Newall Engineering Co. as Works Director; 1935—Appointed General
Manager; 1944—Appointed Managing Director; Hobby—Golf.

(Continued from Page 3)

If both parties were prepared to co-operate on the basis outlined,
it could be said that the major troubles of our joint association in
industry could be eliminated, and bring about a prosperous firm and
prosperous workpeople.

The SHOP COMMITTEE of A.E.U. STEWARDS—

H. KAY—*Machine Shop.*
F. BRITTAIN—*Machine Shop.*
W. F. GROOME—*Machine Shop and Grinding.*
E. G. NEWBURY—*Gauge Department.*
W. TOMLINSON—*Gauge Department.*
J. NOBLE—*Tool Room.*
P. PLUMB—*Fitting Department.*
J. STAFFORD—*Fitting Department.*
E. W. GROOME—*Other Departments.*

HAPPY DAYS AT NEWALL'S

(By KATHIE BRADLEY, *Gauge Shop*)

LIFE behind the front had to continue. The supply had to meet the urgent demand. But who had to take the place of these fighting men? Women? Yes. They could, and they did; and I was one of those women.

Six years ago I left an easy job at Symington's to do my bit at Newall's and help with the war effort. I found it very strange at first, working among men and young boys, wearing boiler suit and cap, which I cannot say I like, and working machines which I never thought I would have the nerve even to touch.

At first there were so few girls with whom to make friends, but as time went on, girls rallied round and came to help with the big job.

We worked long hours, both day and night shifts, including Sundays, starting at 8 o'clock; but we did not mind that so much really, until the beginning of the air raids, which was the most trying time for our nerves. The men were very kind and considerate, and helped us a good deal, especially when we were flying to the shelters. Of course, those moments were not too bad—when we got used to them! We were always able to amuse ourselves by singing, playing mouth organs, a hot cup of tea, and then back to work after the ALL CLEAR.

Then there were our gay times, such as the work's dances, which were on Saturday evenings, being our only free evening. Yes, they seemed to help us forget about our machines, gauges, etc.

Christmas times . . . we always enjoyed that part of it. That was, of course, without a foreman's or chargehand's cold, grey eye upon us. But, then, they were very understanding, and would not mind too much. We always had a moment to spare for the purpose of a sprig of mistletoe, or a spot of mother's ruin. Even then,

(Continued on Page 6)



(Continued from Page 5)

foremen and chargehands have their good days and their bad, just like the rest of us.

Well, back to the grindstone!

Then came the end of the war—husbands and sweethearts came home. The friends which I found were honest and good friends, all had to part. No more laughs with all the girls in the cloakroom at 12.20 or 5.20 or 7.20, whichever we were working. The remaining girls went back to the different towns which they had left, the rest got married, so that leaves me still at the same machine, doing the work I like so much.

BIOGRAPHICAL NOTE

Miss K. Bradley—Newall's sweetheart. Operates Herbert Capstan No. 2s. Average run of work to +.001". Joined Newall at time of Dunkirk.

LLOYD FOWLER, Machine Shop Chargehand, some of whose work appears in this issue, has received intimation that he has passed the examination of the National Society of Art Masters.

Lloyd has accomplished this magnificent achievement, which entitles him to teach Art in Primary or Secondary Schools anywhere in England (subject to the usual conditions), after two years of night school work. His Art Master for the whole period was Mr. C. M. Spencer, of Deacon's School, who has been responsible for so much of the success of Peterborough Art.

Congratulations, Lloyd. Two years of night school on top of a 52-hour working week certainly takes some endurance, and more than a little courage.

SEND OFF (Continued from Page 7)

ha'penny, shooting (rabbits, not lines), and boating (when he can borrow a boat).

MR. H. GOUGH

I wish your new Magazine success. I have worked for the Company from the beginning of one war to the end of another, and hope that so long as I am able to work there will be no more. I am not saying it takes a war to make a magazine, but good comes out in the queerest way, and I am sure your magazine will be for the good of us all.

BIOGRAPHICAL NOTE

Aged 69. Joined Company 1914 as gauge fitter. Has held appointments as store-keeper and in maintenance work until placed in charge of Lapping Department. Hobbies: Wireless; fireside.

MR. T. WISBEY

Although I regret the departure of the old days—the days without magazines and many other things—it may be that as the years roll by there is

an added pleasantness in memory. Still, the days change and conditions change, and I wish your magazine every success in trying to make these new and larger conditions compare with the old days, which seem to me from my 30 years of service to be especially pleasant on reflection. Best of luck!

BIOGRAPHICAL NOTE

Grenadier Guards in the first World War. Severely wounded. Joined Company 1917—entered Progress Department until reorganisation, then Store Keeper. Now in charge of Receipt and Despatch. Late for work three times only in 29 years (on account of snow each time). Hobbies: Gardening; darts. Great Moment—1946, when winner of 1d. points pool.

MR. C. HEATH

Your new venture carries with it my good wishes. We have certainly travelled a long way since I first joined the Company in 1919. Since those days we have grown from a small

family to a world-famous organisation, an organisation which holds the respect of the manufacturing world—and I mean the world—not England alone. There were no magazines, canteens, or "Music While You Work" in the old days, but I don't see that we were any the worse for that. Youth must be served, and the boys working for me now are just as good as ever they were, while the men remain just as loyal—as they have always been. I wish the Magazine the very best and may we go on as a brilliant company in the years to come—with good masters to work for and good men to work with.

BIOGRAPHICAL NOTE

After four years' fighting in the first World War, started with the Company in 1919 as Engraver. At present Gauge Shop Superintendent. Known as "Charlie" to thousands. Hobbies: Theatre-going and good company. Smokes moderately—prefers Players. Brought from the war a fine vocabulary, which he still has.

Send off . . .

WE HAVE RECEIVED GOODWILL MESSAGES AND BEST WISHES FROM

MR. E. A. VALDES

One cannot but feel proud that the Organisation with which one has been associated for so many years has at last reached the stage that warrants the issue of its own *House Magazine*. Let us give it our blessing and support and do our best to ensure that it will—for very many years—record the activities of a Group of Companies whose employees are happy and contented and whose products prove to the Engineering World that Britain can not only make it, but make it well!

MR. BUTTERWORTH

Much interest and enthusiasm has been aroused amongst employees at the decision to publish the new *Magazine Precision*, which I feel will be most helpful and instructive to the reader. Interesting data, news items, etc., suitably arranged, can provide much enjoyment and useful information whereby the relationship between management and employee can be considerably strengthened. May I wish you success in your efforts to make the opening number and future publications interesting, attractive and enjoyable.

MR. C. E. ALLEN

Editor "*Machinery*."

The *House* or factory *Magazine* has now become a fashion and may be taken to indicate an established status. Many are well edited, produced and illustrated, and succeed when their main purpose is that of encouraging social goodwill throughout the organization which they represent. They may be a very valuable aid to production. I hope that the forthcoming Newall *Magazine* will fulfil its purpose and reach the high level of quality belonging to all Newall

machines and products. Every good wish for the new venture.

MR. J. NORMAN

In my 30 years' experience with the Company I have seen many changes, but one of the most progressive is your new venture, which can only make for goodwill and co-operation between the various Companies and departments of our organisation. Your *Magazine* carries with it my best wishes for continued success.

MR. K. E. SUMMERS

Heartiest best wishes for the future success of our *House Magazine Precision*.

MR. A. E. BARNES

Wishing you all success, *Precision* should help in furthering goodwill and understanding between staff and employers. I hope you will have a "Past, Present and Future Column," so that the old timers can supply items of interest to your readers. Having been with Newall's well over 30 years, I have quite a stock of them.

MR. N. R. CANADINE

It is with very great pleasure that I welcome this new magazine, which will give everyone in the Newall Group of Companies the opportunity to get together. I am delighted to see that you are giving such prominence to the work and affairs of our apprentices, and hope you will be able to continue to do so. I hope also that you will give what space you can to accident prevention. If by your publicity you prevent even one small accident—if you can sell the idea that it isn't clever to be tough with mechanical forces—that the ambulance room is there to be used for the

smallest injury—then I say you will more than justify your work. I wish you all success.

BIOGRAPHICAL NOTE

Nicholas R. Canadine. Joined the Company in 1938. Strictly non-technical. Worked for Mr. Summers. Became Chief Clerk and then Labour and Welfare Manager. Hobbies: Snooker; bringing up children.

MR. W. K. TEMPLE

With the trepidation natural to a new-comer to a very old organisation, I would like to offer you my sincerest wishes for the success of this journal, and congratulations in advance on what I am sure will be an excellent first number. That my small voice should be included among the sonorous tones of the illustrious oldest inhabitants is a very great honour indeed. I do hope you will do all in your power to encourage the writing of articles by other members of the Newall Group in order to foster that spirit of co-operation between us which is so essential to our mutual advancement; in addition, this would perhaps give Peterborough an insight into the reasons for their great efficiency, of which our Chairman often reminds us! In conclusion, I should like to take this opportunity of expressing through you my appreciation of the generous assistance and co-operation extended to me by all during my first weeks at Newall.

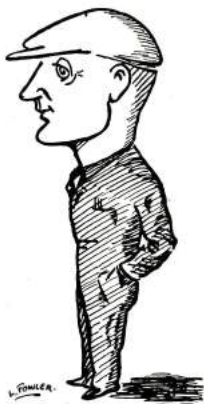
BIOGRAPHICAL NOTE

A.M.I. Mech.E. Intended for architecture. Found it too arty. Served General Engineering Apprenticeship to R. Sizer, Ltd., of Hull, Engineers and Gear Specialists. War service in the Tanks. Married, one son. Hobbies: Shove-

(Continued foot of Page 6)

A CONVENOR'S DAY

by E. W. Groome



LEAVING home at a few minutes to eight, Convenor takes a good sniff at the fresh morning air, cocks an eye at the sky, decides it is going to be a nice day and, he hopes, a quiet one.

Riding briskly along, mentally reflecting that life is good, Convenor falls in with fellow worker who brings him sharply to earth with the blunt question, "What about the five day week?" Convenor, making a great effort to collect his wits, scattered by this abrupt intrusion into his enjoyment of the morning, parries this leading question with what he hopes to be a placating answer, but only succeeds in eliciting a doubtful look from his questioner, along with a disbelieving grunt.

Arriving at the cycle racks, Convenor decides the morning somehow seems colder and not quite so bright, this view



"Decides it's going to be a nice day."

being confirmed after a grumpy day-worker, slightly winded by his cycle ride, asks him between puffs, "What about our bonus?"

Clocking on, Convenor decides his optimistic hope for a quiet day was a shade too optimistic, so with a rather pessimistic outlook he unlocks his box and prepares for whatever the fates have in store. He does not have to wait long . . . irate worker storms up claiming: "Clock's all wrong." He has clocked on 8.05 a.m., yet he left his home at his usual time which should have got him here at 8.04 a.m. Convenor listens patiently, suggests tactfully that maybe his clock was wrong and is promptly blasted by the reply that: "My clock is never wrong, I go by the wireless." Reeling under this outburst of righteous indignation, Convenor feebly promises to go into the matter and is left alone with one last indignant snort from his departing fellow worker.

Getting out his tools, Convenor is interrupted by small apprentice bringing his clock card for his school attendance. Convenor notices card not signed up for night school and resultant enquiry elicits such a flood of excuses that Convenor says "O.K." as the easy way out, and as apprentice departs his whole bearing says: "He's easy; what a dope."

Turning once more to his tools, Convenor starts work, but not for long. Shop Steward arrives with bonus matter, which necessitates negotiation with Works Manager. Convenor acquaints himself with the facts, sees workman concerned, sees foreman, who regards his intrusion into the affair as a burden to be tolerated as further evidence of the tribulations of a foreman's life, sees rate-fixer, who regards this questioning of the accuracy of his times as proof of the imbecility of Shop Stewards in general, and of Convenors in particular. Dismissing these obvious attitudes with what he hopes is a cheery smile, Convenor



"As apprentice departs . . ."



"Various pieces of paper."

contacts Works Manager for an interview. A shadow seems to fall on the Works Manager's face as Convenor approaches with his request, and with a sigh Works Manager says: "In my office in ten minutes." Walking back to his bench, Convenor sadly reflects that his approach to the Staff seems to be in the nature of a blight descending upon the seedlings of their good intentions and goodwill towards men.

Convenor consults with fellow Stewards, and fortified by their good sense and advice, approaches the sanctum of the Works Manager, feeling a little less like a leper who should herald his approach with cries of "Unclean, unclean."

The Works Manager receives the deputation with an air of cordiality superimposed upon his impatience at being interrupted in his planning of what he hopes will be his monthly output. The discussion starts, and as is usual in these

things, every possible aspect of the case is fully explored. These explorations occasionally lead to odd results. It is possible to find mutual agreement in the fact that Father Christmas does not come down the chimney to bring our presents, and that it is Daddy all the time. The deputation having preened themselves at this evidence of their ability to reach agreement, eventually return to the first arguments and settle on that basis. Feeling rather exhausted after this terrific mental struggle, Convenor attempts to return to his bench, but is constantly assailed by fellow workers' complaints that the shop is stifling, the shop is cold, the doors should be open, the doors should be closed. Convenor promises to see to these things and passes on his way, wondering how to reconcile two diametrically opposed requests.

Dinner time arrives, but provides no relief to the inevitable "What about our bonus?" or "What about the five day week?" Fortified by his meagre ration of Spam, Convenor decides to visit the Labour and Welfare Manager upon the issue of open or closed doors, stifling or cold shop, apprentices' cards, etc.

Convenor gives preliminary warning of his subject as this enables the Labour & Welfare Manager to adjust himself mentally and in manner to the appropriate of his many roles.

On this occasion the Welfare manner is called for, so parrying as best he can the benevolent and almost embarrassing interest in his welfare, the Convenor puts forward his complaints. The Welfare Manager, with the merest flicker of compassion for the muddled views of his fellows, reduces the whole thing to its barest essentials, and in no time at all a memo is sent to Works Manager suggesting doors should be shut, and another memo to the Plant Engineer saying they should be open. Feeling he has passed his burden on to shoulders better able to bear it, Convenor, on his return, runs into the Ratefixer, who, fixing Convenor with an eagle eye, suggests it is barely possible that in a moment of mental aberration, or a frivolous moment, he set too high a time on a job and will we agree to right this reflection on his honour

as a ratefixer. Still suffering from the effects of the exuded benevolence of the Welfare Manager, Convenor manages to pass some of it to the men, who agree that this cause of the ratefixer's sleepless nights shall be removed.

Returning to his bench, Convenor finds his tea cold and various pieces of paper saying see So-and-So, and So-and-So. Contact with these people sends Convenor dashing to Wages Office, Bonus Office, Canteen, and Foreman's Office, with various complaints and requests ranging from a day off to bury Grandad for the sixth time, to doubting the Wages Office's accuracy to one-tenth of a penny.

Finally dragging himself to the place whose walls can reflect biting comments on his abilities, species and origin, Convenor is relieved to find that the moving finger hasn't yet written. So once more returning to his bench, Convenor is buttonholed by Gauge Shop Superintendent whose parade-ground voice almost brings the Convenor's wilting figure to some semblance of attention, a brief talk on some matter and Convenor is finally dismissed with a hoarse bark which almost makes him snap to attention and salute as he turns away.

Then, blessed relief, the buzzer! Con-

venor grabs coat, clocks off, drapes himself on his bike and away, trying to adjust his mind to thoughts of his own affairs. He is almost succeeding, when out of the darkness come the hoarse queries: "What about our bonus?" "What about the five-day week?"

E. W. GROOME.

BIOGRAPHICAL NOTE

E. W. Groome. Toolroom fitter and turner. Convenor of Amalgamated Engineering Union Shop Stewards. Joined Firm 1939. Joined Union 1923. Newall Shop Steward since 1940. Appointed Convenor 1946. Able negotiator. Couples inflexible determination with knowledge of when to give way. Married. One child. Hobby: Wireless.



"... out of the darkness ..."





RANDOM REMINISCENCES

by Ernest A. Valdes

WHEN asked if I would write an article under the heading of "Random Reminiscences," I consented readily, because I felt that all that had to be done was to take up pencil and paper, think back, and start scribbling. When I actually started on the job I was not quite so sure that it would be as easy as I had anticipated. It was simple enough to take up pencil and paper, but thinking back was much more difficult. The first "think back" pulled me up with a jerk. Surely that cannot have been right . . . that happened 32 years ago! That makes me feel too ancient,—let's think of something a bit more recent.

Anyway, here goes! Sit back in the old armchair, pull on the slippers, turn down the radio to just a whisper—ever noticed how music helps the memory, particularly if it is just loud enough to hear without being able to make out what the tune is—and see if we can turn the clock back a bit.

Newall in 1913—what was it all like 33 years ago? Very different from what it is to-day, I can assure you. The total number of employees was some 30, and the whole outfit was housed in half a bay in the works of Messrs. Peter Hooker Ltd. at Walthamstow, London, who had purchased the Newall business some five years previously. As a start, let us line up the employees from this old photograph and take a glance at them. Look a bit funny now, don't they?—in their bowler hats and caps. Anyone amongst the bunch that you recognise? Let me see—no, I don't think so. Wait a bit, though . . . isn't that Mr. Sydney Player? Why, sure it is, complete in a straw boater. Changed a little, perhaps, but so have we all; thirty-three years is a heck of a long time. Assistant Works Manager he was in those days. Oh yes, even in those far-off days his middle name was "Output." The Works Manager at that time was Old Man Bunting. Somehow he was always known



JIMMY NORMAN

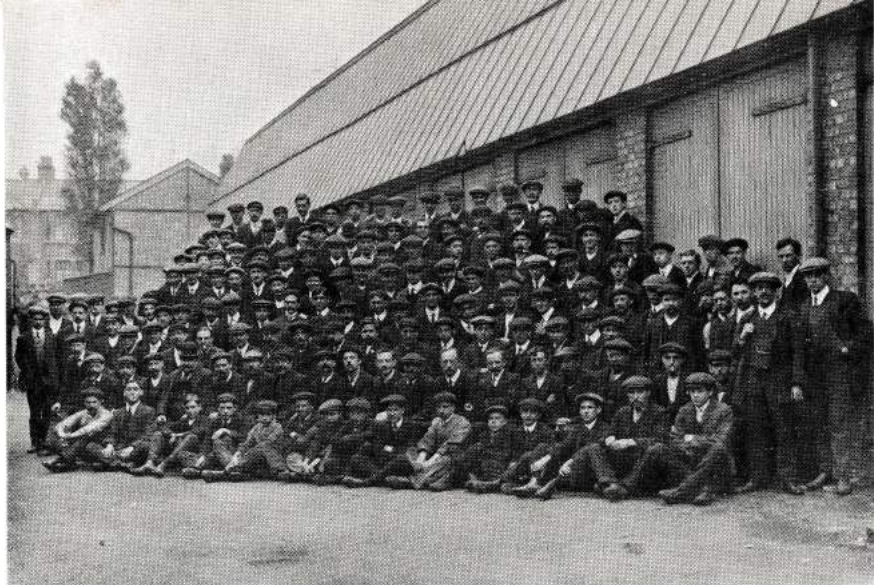
as Old Man Bunting. Surely you remember him when he used to visit us from time to time at Peterborough as one of our directors! He had retired from active participation in the business for some years, but maintained a very close contact with the Firm until he passed away a couple of years ago. Fine type was Old Man Bunting—straight and honest and, my word, what a worker. The world could do with a few more of his kind today.

Just take a last look at that photograph. I rather fancy there is someone else there whom you know. Why, bless my soul, I know that chubby-faced youngster with the mop of fair, curly hair! I'll eat my hat if that isn't Jimmy Norman! Well, you needn't eat your hat—you are perfectly correct—it is Jimmy Norman, and his head of hair is as good now as it was then. Why not tell us how you do it Jimmy? I reckon you would have made a fortune if you had gone into the hair tonic business. Still, it may be you prefer to earn your living demonstrating Newall Jig Boring Machines, eh! Well, I don't blame you, it is a very satisfactory machine to demonstrate.

Let's put that old photograph down and talk about something else. All right,

make it wages if you like. To get an idea of what we used to pay in those days, just take a look at this old wages book. Oh yes, don't look so puzzled—top rate for a full week actually was 50/-. So you don't think much of that, eh! Well, I must admit, that judged by present-day standards it does look a bit low. But then, you must remember, that in those days you could get a packet of Players for 2½d., and you did not have to pay much over £2 10s. 0d. for a really smart suit of clothes. Talking of prices—ever heard of Lockharts? They were a well-known firm of cheap caterers, where you could get a good dinner for sixpence. I have had one many a time and thoroughly enjoyed it. A steak pudding, known to the patrons as a "buster," could be bought for 2d. and it contained what they said it did—"nothing but beef." Meals in the Newall canteen today are not what one would call dear, but I think even Mrs. Sargent would find it extremely difficult to serve "busters" at 2d. each. How much were the office staff paid? Well, to tell you the truth, we had not much office staff in those days, but there was no shortage of office boys at 10/- per week and if you advertised in the *Walthamstow Guardian* for a fully experienced clerk, salary £2 per week, the postman would have had a job poking the replies through your letter box. True we used to type our letters in those days, but all our invoices were hand-written, and what a time we used to have trying to get decent copies in the old copying press. Either the cloths used in it were too dry and you could not read the copies, or else they were too wet and smudged and you still could not read them. If we could have had a peep into our wages department of today and seen the "Powers Samas" punched card outfit, we should have been flabbergasted!

What did we turn out in those days? Well, gauges as we do now, but, of course, no machine tools. It may interest you to know, however, that in 1906 the Newall Company embarked on the manufacture of grinding machines. It was proposed to produce plain and universal grinders in two sizes, 40" x 12" and 20" x 8", and the price of the larger universal machine was to be about £130. A reference in an old Minute Book states



in regard to the Newall grinding machine that "we have had one running for some months and have a batch in hand—now about half finished—all of which are sold. The machine has been very favourably commented upon by several persons whose knowledge and experience render them capable of criticising." Articles dealing with the machine also appeared in *The Engineer* and *The American Machinist* in September 1907. I am unable to say what happened to the machines finally, but the whole business seems to have fizzled out. It would be very interesting to have a look at an illustration of the machine and see what Newall were offering for £130! It is strange that after so many years the Company should again take up the manufacture of grinding machines. I am afraid the present day product would not deign to notice its older brother. And then, of course, there were gauges. Were the types the same as we make today? To a certain extent they were, but you must bear in mind that in those days we had no thread grinding, no mechanical lapping and no roller caliper gauge. We were making screw gauges, but these were supplied in the soft state "unless ordered hardened." Hardening screw

gauges used to be a ticklish job. You want to know how accurate we turned them out? All I can say is, that, as always, Newall accuracy was pretty close and we did not get many complaints. I might add that very few of our customers had any efficient means of checking our gauges, and if Newall said it was right, well—in all probability it was so. Mind you, I do not say that Bert Rule would have passed all our output as O.K. and I would not like to say that occasionally a gauge that was minus a tenth did not slip through. But then, you see, our inspector was probably either doing a bit of drawing—he was part inspection department, part drawing office—or doing a bit of fitting on a job that was wanted to make up our month's output of £350! Small, we may have been, I grant you, but we were nevertheless of some importance. You see, we were practically the only firm manufacturing gauges; furthermore, were we not the originators of the Newall Standard Tables of Limits and these were thought a lot of at that time.

Any other questions you would like to ask? No, we had no canteen: no trolley came round twice a day; and if you wanted to eat between meals you had to bring your food with you. Most of the

chaps used to bring their dinner with them. Of course, it was very easy then for the wife to pack up Bill's dinner. No rations, no points, no B.U's and plenty of grub in the shops. And if you did not want the trouble of bringing your dinner, the fish shop just around the corner would be very pleased to give you a very good "blow out" at a cost of 3d. You could always get a drop of hot water for your tea can from the hardening shop. Did I say hardening shop? Sorry, but that is what we used to call it, even though it was only a corrugated iron lean-to some 12ft. x 10ft. total area. Talking about that for some reason reminds me that very little of our plant was driven by electric motor. Our main source of power was an old gas engine. What a devil of a job it was to start this old thing up on a really cold morning!

Had we much in the social line then?

Practically nothing. You see money was short in those days and no one had the pluck to ask the Directors for a grant to start anything in the social or sports line. Somehow, the chaps did not seem to want to stay on the premises after the working hours. The fact that the pubs were open until after midnight in those days and beer was always plentiful and cheap, may have had something to do with it. Yes, bearing in mind some of the old gang, it may have had quite a lot to do with it.

Well, that's some idea—a very sketchy one maybe—of what the old firm was like in 1913. I think those of us who knew it then look back on it with affection. We have all probably got a deal more than we had then, but I should very much doubt if we are really any happier.

(To be continued)

The Listener Hears . . .

That there are two ways for an engineer to get that heavenly feeling.

* * *

That one of them is to win a penny points pool.

* * *

That the other is to operate a machine without a guard.

* * *

That in these days of Government forms a Thread Grinder has quite an imposing title.

* * *

That he must be described as Machinist, Metal, Setting Up Own Work, Thread Grinder (Precision).

* * *

That certain personnel are wondering what can be done to make the Test House pass something occasionally.

* * *

That Kathie Bradley has the most smiling face at Newall's.

* * *

That she can even smile on the 305 'bus at half-past five.

That some of us are wondering how long a single-decker 'bus can carry 80 or 90 people on a journey without breaking down.

* * *

That if it doesn't, a few preconceived ideas about safety margins ought to go by the board.

* * *

That Gordon Mason ought to look into this and see if he can cut out a few tenth limits.

* * *

That E. G. Newbury is threepence half-penny down on a prodigious gamble on this route.

* * *

That he is hoping to make a coup in the near future.

* * *

That people who take Bill Whitehead's own particular seat do so at their peril.

* * *

That whoever calls Ginger McCoombe "Little Boy Blue" is up against a mighty tough proposition.

(Continued foot of Page 15)

Ode to Would-be Office Aspirants

by Mrs. Irene Harris

(Newall Electricity Department)

PITY the wretch who toils unseen
Behind the office type machine;
She, also, helped to win the war
By keeping to her daily chore;
But she must work unpraised, unsung,—
And on her all the work is flung.

Her desk is piled from morn till night
With papers drawn from every site;
"It can't go out without a note—
A pink one." "What's the invoice float?"
"The serial number, it's been changed";
"Equipment has been disarranged."

"This letter, now, who sent it out?
They must be mad, without a doubt."
"This must be typed by half-past-three"
(We cannot even stop for tea).
The 'phone bell rings, its strident clamour
Jars on the ear-drums like a hammer.

And some folks think it must be grand
To write with speed such neat shorthand,
They wish some day that they might be
An office wallah, just like me!
But pity the wretch who toils unseen—
Behind an office type machine.

BIOGRAPHICAL NOTE

Mrs. Irene Harris—joined Newall March 1942—General Office. Later, assistant to Electrical Engineer. Keeps house going single-handed; petite, brunette. One child, Clifford, aged 7. Hobby—Needlework, when time allows.

(Continued from Page 14)

That Ginger still hasn't found his shoe.
That the sock he lost at the Town Hall
has since turned up.

* * *

That we should hate to tell you what the
reward for the return of the shoe will be.

* * *

That Sheila Groom, Drawing Office

The First V.C. of World War One

*by A. E. Barnes

THE first V.C. of the first World War was won by Cpl. Davis of the Royal Engineers.

Cpl. Davis was a general labourer in the Newall Company factory in Blackhorse Lane, Walthamstow. In the Royal Engineers Reserve at the outbreak of War, he was called up in August 1914. He went straight to France. In the retreat from Mons he stayed behind with a detachment of engineers with orders to blow up a bridge. In full view of the enemy and under shell fire, Cpl. Davis rowed out in a punt to the middle of the river under the bridge, laid the fuses and the bridge was blown up.

For outstanding conspicuous gallantry in the face of the enemy, Cpl. Davis was awarded the first Victoria Cross of the War.

From monies contributed, the Newall boys packed up for him a parcel of Gold Flake every week and as other men were called up the general scheme for supplying cigarettes for Newall lads was born. This scheme operated continuously until the end of the War.

* In an interview.

blonde, is hoping that the camera work will bring film producers to Fletton.

* * *

That Sheila is confident she is England's answer to Jane Russell.

* * *

That any persons having a few minutes to spare are asked to take them to Bill Whitehead in the rate-fixing department.



NEWS

THE recent floods in the North brought home to Keighley Grinders, very forcibly, that although the Aire Valley may be pleasant, there is something to be said for Mount Ararat as a home for a factory as well as the Ark. After a period of incessant rain our

works became, so to speak, the centre of attraction for the overflow of the Leeds-Liverpool canal, and the rivers Aire and Worth.

On the morning in question, early comers got into the works all right, but later members of the staff had, in some cases, to make a detour of about five miles over the mountains, to find the shallow end, aquatically speaking. Having got in, nobody could get out.

The flood rose so rapidly that the ground floor of the works was six inches under water before the dam, depicted in our picture, could be constructed. This dam was made of anthracite loaded into sand-



bags. At the peak period the water rose two feet up the dam, which, being built with the usual Newall precision, held up to its task and saved the faces of the many "Canutes" anxiously watching.

Peterborough friends will note the presence of some old "stagers" in Don Brown, supervising in gum boots, Ted Hardisty, with bald head, and Bill Brett, showing posterior (not literally, of course).

Such were the efforts of all concerned, that with the assistance of our fire pump, and many bags of sawdust, the night shift got to work at its usual hour.

By tea time the dove was in a position to bring in the olive branch, and everybody got home by devious routes. Mr. Consterdine, who was visiting us at the time, decided to stay in England in future.

A. L.

M.T.E. NEWS

THIS Company, under the Chairmanship of Mr. Sydney Player, was formed in May 1946, for the purpose of taking over and developing the electrical business previously carried on by The Newall Engineering Co. Ltd., at Whittlesey, and although it is not a subsidiary, it is very definitely a part of the Newall Group.

Before moving to our new factory at Leigh-on-Sea, a farewell party was held for all personnel of the firm. We are pleased to say that it was only necessary to say goodbye to a few of the Company's original members, notably Miss Sheila Strangward and Miss June Gollings. To

these young ladies and the other few who were unable to come with us, we wished every success in their new sphere.

Our staff now includes Mr. W. Consterdine, Chief Electrical Engineer; Mrs. G. Butcher, in charge of the women's assembly shop; and Messrs. P. R. Middleton, J. Sargent, F. A. Smith and H. W. Butcher. In the Drawing Office we have Mr. R. H. Jackson, Chief Designer, and Mr. A. J. Parker.

Our first job has been to settle down in our new surroundings, install plant, and get production going. An incredible amount of red-tape, specially designed for the purpose of hindering young companies, has been encountered, but we are glad to say that in spite of this, progress has been made, and equipment is once again being turned out in reasonable quantities.

Up to the moment it has not been possible to organise a sports or social club within the Company, but some of the members have been finding their own weekend recreation in sailing, bathing, dancing and excursions to the gaily lit amusement parks. There is also a strong rumour that a few of the lucky ones have been fortunate enough to find a source of supply of the weak, but ancient beverage. This information is officially classified "Top Secret," and will on no account be divulged to any would-be purchaser from the North. Let this, however, be no deterrent to any of our friends who wish to visit us, as we have ample supplies of good fresh sea air and sunshine.

Finally, may we take this opportunity of wishing you all Health, Happiness and continued Prosperity in 1947.



NEWS

To the Editor

Dear Sir,—

It is with great pleasure we learn that a Newall Group Magazine—*Precision*—is to be produced, and that as a member of this Group of Companies we shall be able to make a contribution towards its development and success.

We have long felt that the Works and Staff personnel at each of the Works of the Newall Group know far too little of the products of the other members, and even less of their counterparts in the production, selling and administrative fields. Such a journal as *Precision*, covering the activities of all the four companies in the Group, and contributed to by all employees, should remedy this situation and enable each and every one of us to become better acquainted with each other. We all read the newspapers and periodicals to broaden our minds and get to know something about subjects and individuals with whom, however, we have actually very little opportunity of coming into personal contact. Here is an opportunity for all of us to produce news amongst our own little circle of the Newall Group and to become better acquainted with the individuals with whom we are in intimate contact in our work-a-day life.

Optical Measuring Tools, as the second of the Group to get started, was formed in 1940 for the purpose of manufacturing optical measuring instruments similar to those formerly made by the well-known Zeiss Company in Germany, whose products were no longer available. During the War, due to the efforts of all concerned, this Company, with the aid of others in similar fields, satisfied the demand for these instruments both in this country and abroad, and the result

is that today these instruments are equal and in some cases very much improved over their former German counterparts. Through the medium of *Precision* we shall be able to inform you all about these instruments and various developments which take place, which we hope will be found interesting.

On behalf of Optical Measuring Tools we wish *Precision* every success, and assure you we shall do our utmost to give it our very earnest support.

Yours truly,

For and on behalf of
Optical Measuring Tools Ltd.,
H. J. ROWE,
Managing Director.

QUEER

DURING the fire at O.M.T. Paint Shop in January this year the wood-work where all the paint in use is kept was burned away, even to the extent of the wooden lids of the solvent cleaning drums. These were burned completely, and the charred remains fell into the solvent, white spirit and methylated drums, but the solvents, which are highly inflammable, were not touched, neither was the paint. The damage it received was from the fire extinguishers.

Prompt action by a couple of employees who were present at the time, saved what might have been a very nasty fire.

R. CARR.

BIOGRAPHICAL NOTE

Mr. R. Carr joined O.M.T. in January 1946 as Charge Hand Paint Shop.

O.M.T.

THEY'RE such funny-sounding letters,
Just a simple O.M.T.,
They don't mean much to you, I guess,
But quite a lot to me.
For to me they mean a living—
One that's not so bad;
And something more important,
The grandest job I've had!

It never seems to bore me,
For it's such a funny game,
Because with an omtimeter—
Well, it's never twice the same.
Use precisely the same optic
In the way you did before;
You will find a dozen changes,
And you've colour schemes galore.

But still we all keep trying
On the different jobs we've got,
Though I'll bet Toolmakers' tables
Will just beat the blinking lot.
They are just a great big headache,
As poor Ronnie will agree;
I'll bet a dozen times a day
He curses O.M.T.

But it's really very funny,
Though we're grouching all the while;
A million things will crop up
That are bound to make us smile.
So the Big Four and the charge hands
And the workers all agree,
That we'll never find a better firm
Than good old O.M.T.

PAT EVANS (MRS.)

BIOGRAPHICAL NOTE

Mrs. Evans joined O.M.T. in June 1946 as a Fitter in the Optical Instrument Assembly Section.

The Chronicles of Jacobus the Scribe

AND it came to pass in the days when
Pharaoh ruled over the tetrarchy of
Omtopia. (This was a colony of the
Empire of Know-alls.)

Even at that time an edict went forth
seeking the existence of humorous matter
for a new scroll to be known as
"Precision."

Thus it was that in the dim past certain
disciples of the Know-all cult had
travelled many days' journey from
Stonehenge.

And lo, a certain W. Olley said unto
his brethren:

"Let us travel south for sunshine," and
behold after many weary yarns they
lighted on a certain Slough of Despond.
And behold, it was very bad!

And these disciples said: "Let us now
teach these barbarians the arts of our
forefather, even Tubal Cain."

And thus it was, that as the disciples
were weary with their journey, that they
agreed.

And it was good.

And the leader Olley did speak much
concerning his youthful escapades even
in his own village.

Whereupon, certain of the other disciples
and proselytes did say one to another—
"Lo! he must be even as old as the sun
considering his many escapades and
occupations."

And it came to pass, that as the full
moon did show itself that certain of the
populace did say one to another:

"Yea, it is the occasion of rejoicing, for
we should receive our bonus."

And behold, on certain days they did
receive extra shekels, whereupon they did
rejoice exceedingly.

And they did also patronise certain
animals—to wit "Lions" and did travel
by fast chariot many days' journey to
witness these lions.

And certain said: "Let us throw our
leader, even Olley, to the lions!"

There was much discussion among the
disciples and proselytes concerning this
saying, and many harsh words were
spoken, but the most were spoken by
the leader.

And the cult of precision waxed exceed-
ingly and the fame thereof spread south-
ward.

Yea, even across the mighty Solent did
the good news spread.

And lo, many came from an island beyond
South Sea—to wit Vectis.

And they besought the elders to include them among the "Splitters of the Thou."

After that they had proved themselves they were initiated into the order of Omtopia, and did talk glibly of tenths.

And it was Good !!

But there were certain of the citizens of Omtopia who did cause their fellows to quake exceedingly, and among these was the leader.

They did take much delight in the cult of string and garter elastic.

And did submit the labours of the brethren to many hair-splitting devices and spake very glumly.

Saying, in a mournful voice:

"It is O.K."

And it was good !!

But the chief of these citizens did travel many days' journey, even across the Straits of Dover, and landed in the fair country of France;

And did even visit the Capital thereof.

Abiding many suns there, he sought to impress the natives with the wonderful products of Omtopia.

Whereupon the natives said:

"Il est magnifique; mais ce n'est pas mécanique."

And it was not so good !!

And it came to pass on his return to Omtopia that he caused his underlings to tighten on their duties.

And the scrap heap waxed.

And the leader and his satellites rejoiced exceedingly, and said:

"Lo! we will show them!"

But, behold, many of the citizens who laboured on cutting machines did not undertake full responsibility, and said:

"Leave some for the grinders!!"

And these latter were much wroth and did even institute a scheme whereby the labours of the cutters were checked by Jimmy, even one of themselves.

And he delivered a saying, thus:

"Leave fifteen on hardened and ten on soft!!"

Which did much intrigue the cutters.

A. J. HARDING

(No. 9 Inspection)

BIOGRAPHICAL NOTE

Mr. A. J. Harding—joined O.M.T. on the 5th November, 1945, in their Inspection Department.

WHEN Winston Churchill signalized the victory of the R.A.F. in the Battle of Britain with the tribute "Never in the field of human conflict was so much owed by so many to so few," he was referring to the few hundred young fighter pilots and their some 3,000 machines who beat back the Luftwaffe, and gave Britain the chance to fight again another day.

The world will long remember what those young men did in 1940, but it little noted the two men who made that victory for civilization possible.

In years to come men will talk of Sydney Camm and the late Reginald Joseph Mitchell: they designed the Hurricane and the Spitfire; without those planes Britain would now be a province of German Europe.

Camm, who designed in the Typhoon and the Tempest worthy successors of his Hurricane, has had the supreme satisfaction of seeing his creations win mastery in the air, but Mitchell who died at the tragically early age of 42, did not live to witness the role of his Spitfire in the Second World War, nor to receive from a grateful Britain the honours that were his due.

When designing the Spitfire, Mitchell was fighting against death. He knew his time was limited, but he drove himself to an early end by furious work to get his Spitfire in the air.

So in this, our first Works Magazine, we pay tribute to two great Engineers.

NORMAN KERSHAW

(Old Shop, Newall Eng.).

SPORTS CLUB NEWS

from Les Beels

I feel sure when I say we want a sports ground and club house, that I am speaking for all members and all intending members of the Sports Club. It is necessary for a Sports Club that wishes to continue as a successful body that it should own a sports ground and club house. There is, in my opinion, only one way to achieve this. Firstly, we must have a considerably increased membership. Secondly, that all sections work for the benefit of the Sports Club and its members generally. Thirdly, and this is most important, new sections are required. Why shouldn't we have a cricket team, a rifle club, an athletic section, a musical society, a dramatic society, a photographic section, and many more? We have boys and girls in these works, I know, who can form sections such as these and make them a success. Let us make 1947 a bumper year and let us have a Sports Club *second to none*.

TENNIS

As usual, a grass court was booked for the use of members on the West Town Recreation Ground. Quite a number of players paid regular visits to the court during the summer and many enjoyable games were had. During August an American Doubles Tournament was held on the hard courts in the Park. There were 14 entries in a very pleasant afternoon's sport. The highlight of the season was the Ladies' and Gents' Knock-out Singles Tournament. After many exciting games the semi-final and finals were played on the Park hard courts on the 6th October, 1946. Marjorie Rawlings beat Joan Younghusband for the women's title. In the men's tournament L. B. Oldfield beat Jimmy Polhill 6-2, 6-1 in the first semi-final and Les Beels beat Arthur Dunkley 6-0, 6-4 in the second. Polhill shewed obvious lack of practice, but played exceptionally well against a more polished opponent. Arthur Dunkley did not show his usual form in losing to Les Beels. In the final, which proved to be a most excellent game, Oldfield played a most consistent and steady game, being particularly strong on the backhand, and won 6-4, 8-6.

ANGLING

The Angling Section enjoyed a good season, though not quite so active as usual. Four matches were held in Eastwoods Knott-hole, the Club waters, two of which were won by the popular chairman, Jack Brandham. Harold Hobbs took the honours in the second Open match and landed a fine Perch of 1 lb. 4 ozs. The match for the Championship Cup, fished earlier in the season, was won by Les Beels, with a weight of 1 lb. 4 ozs. Roland Wright and Vic Emery were second and third with weights of 15½ ozs. and 9¼ ozs. respectively. Conditions were rather bad, causing sport to be much below the average. A team, consisting of Les Beels, Harold Hobbs, Vic Emery and Roland Wright, travelled to Huntingdon on October 13th and had fine sport. In the team competition they were placed seventh with a total weight of 6 lbs. 8½ ozs. Les Beels, with 3 lbs. 12½ ozs., was placed sixth in the individual sweepstake.

BIOGRAPHICAL NOTE

L. A. Beels — draughtsman — single — joined the Company in May 1940 — all-round sportsman. Plays almost everything but soccer (a leg injury prevents that). Is a keen amateur photographer. Marriage views—income tax rebate not sufficient compensation. Political views unprintable.





FAVOURITES IN FELT

Felt—and more felt—everywhere, and all without a coupon! In lovely shades of red, green, wine, yellow, there is no end to the accessories you can make from it.

What about a pretty belt to match your frock? Embroidered with coloured sequins, or alternately gilt studs, a very effective belt can be made.

On the other hand, if you are the outdoor type, cut out some cute felt figures

*mainly
for the
ladies*

and glue on to your belt. You can have great fun snipping wee men, animals and houses out of your odd scraps, and applying them in gay Tyrolean fashion.

CLEAR AS CRYSTAL

Rain water is excellent for washing clothes, but after being kept for some time in a barrel, it often becomes brown and dirty looking. A heaped dessert-spoonful of powdered alum will do the trick—put it into your tub of rain water and the next day the water will be clear and the alum will help to make the garments non-inflammable.

COBWEB HINT

Always remove cobwebs with an upward sweep of the brush. If you sweep downwards, a dirty mark will be left on the wall.

INSOMNIA

Disturbed sleep can be due to digestive causes, although you may not be conscious of indigestion. Waking up two or three hours after falling asleep is often caused by acid trickling from the stomach into the duodenum. You can neutralise this by drinking a cup of milk, or nibbling a biscuit.

My Favourite Recipe

MRS. EASEY (Overalls Attendant)

GREEN TOMATO CHUTNEY

Take—2lbs. green tomatoes, 1lb. apples, 1lb. onions, 1 teaspoonful salt, $\frac{1}{2}$ lb. sugar, 2ozs. sultanas, 1 pint vinegar, 1 tablespoonful mixed spice.

Method—Cut the tomatoes, apples and onions into small pieces, and put the spice into a small bag. Put all the ingredients into a saucepan and boil for about one hour, or until it thickens. Then take out the spice. Put into jars and seal.

BIOGRAPHICAL NOTE

Mrs. Easey—joined the Company Jan. 1942 as overalls attendant, which job she carries out with the same smile she has always had. Hobby: Chiropody.

"To some Mothers life is just one darn sock after another."

—LORD DEWAR.

THE EDITOR finds it extremely difficult to find suitable matter for inclusion in this page, and any hints and tips submitted by wives, friends or relations of Newall employees will be gratefully received.

One of the fellows from Newall's had been looking for a good Church to attend and he visited a small one in which the congregation were reading with the Minister just as he entered. They were saying: "We have left undone those things which we ought to have done, and we have done those things which we ought not to have done."

The man dropped into a seat and sighed with relief, as he said to himself: "Thank goodness, I've found my crowd at last."

HUMOUR

*By-Products of the
Newall Group*

In a recent angling match Joe Cross won first prize. He was fishing next to Jack Brandham. We hear that all the fish he caught were taken in Jack Brandham's spot. At least that's what Jack swears. And does he swear?

* * *

Do you know the difference between Alf Trowell and Bert Harlock? There's no difference—they've both got long hair except Bert Harlock.

* * *

Who was the Scottish gentleman seen at the Newall Town Hall dance eating the last of two dozen ice creams?

* * *

The Government tell us we're short of bricks. There's a million of them a stone's throw from the Drawing Office window.

* * *

OVERHEARD AT THE WHIST DRIVE IN THE WORKS CANTEEN
First Lady: "I wonder what makes these table tops so shaky?"

Second Lady: "I should say it's with cutting tough meat on them!"

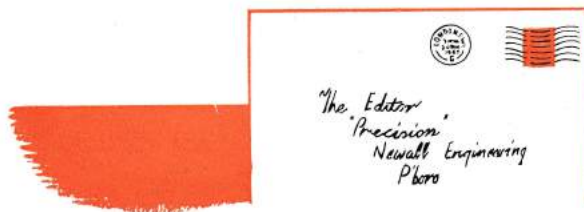
NORMAN KERSHAW (Old Shop)

* * *

DINAH, OUR DUMB BLONDE
When sent to the Stores for a "mic," asked if someone was going to sing.

* * *

DEFINITION.—An Inspector's micro-meter is one which guesses to a closer approximation than one used by a Machinist.



CORRESPONDENCE

To the Editor

Sir,—

I welcome the introduction of this Magazine—if only as a medium for the closer interchange of ideas and constructive criticism between us all.

I am most confident from the programme for this year and 1947/8 as laid down by our Directors, that we have cause for optimism and enthusiasm. In fact, orders on hand are such as will require all our efforts to fulfil.

Two major obstacles are still with us—delivery of electrical equipment and cast-iron castings. It is felt that this position will improve in the near future. The last and most important difficulty is lack of productive efficiency. By no means have we yet obtained the efficiency which will enable us to produce what we require for the month's programme without excessive overtime, and a considerable amount of spade-work has still to be done on everyone's part before we can pride ourselves on the fact that we have an efficient works organisation. I am sure that we will, in the near future, with the assistance and co-operation of us all here, attain a much higher pitch of productive efficiency.

The effort I mentioned above must obviously be that of planned economical use of both machine and fitting hours, and I think that the target as laid down by our Directors for the monthly production can be fulfilled without the excessive

overtime to which we are unavoidably subjected at the present time.

Yours, etc.,

L. B. OLDFIELD,
General Works Manager.

BIOGRAPHICAL NOTE

Leslie B. Oldfield, M.I.P.E. Apprenticed Alfred Herbert, Limited, Coventry. Joined Newall 1936 as Planning Engineer. Became Production Manager, and is now General Works Manager. Has two young children. Hobbies: Tennis, swimming; pleasant company.

To the Editor

Sir,—

Before the war it seemed to me that most people were wandering rather aimlessly through life, with a rather apathetical outlook on life in general. The coming of the War, in many cases, helped to destroy this dangerous apathy, and provided an opportunity to review the past, and many people were determined to make a renewed effort in the future. During the War, I talked, worked and lived with men of extreme natures, and from all walks of life, and frequently discussed with them the greatest of all topics at that time—the future.

My main impression upon demobilisation, returning after four years abroad, direct to civilian life, was an extremely

disappointing one, I regret to say. Ungratefulness, thanklessness and general dissatisfaction were much in evidence. To me there seemed much to be grateful for: the War was over, we were on the winning side, and free again to complain and grumble at the slightest provocation, yet most people seemed to take the utmost advantage of complaining without equally constructive action.

I must say that travelling abroad has really opened my eyes and broadened my outlook, helping me to appreciate, realise, and fully enjoy the meaning of freedom and the standard of living as we enjoy it in this country, and I feel sure that others returning from abroad will agree with me.

The future prosperity and happiness of all people demands the maximum unified effort of every country, every individual, and every industrial organisation like our own.

As a concluding note, I would like to thank all those in the Firm for their consideration in helping me to re-establish and adjust myself once again to civilian life and work, for which I am truly grateful.

Yours, etc.,

HAROLD W. AUGER.

Extracts from letters received from the parents of Newall apprentices.

"... My wife and I were both very pleased to hear from you regarding my son's progress, and also of the success he has had. . . I feel sure that the interest taken by your firm in the apprentices employed by you must give them a good deal of encouragement, and that any success they receive must be shared equally by you . . ."—Mr. & Mrs. A. B.

* * *

"... My wife and myself acknowledge receipt of your letter . . . and desire to say how pleased and proud we both are to hear that our son has made such good progress. . . Trusting that he will continue to be a credit to your Company and the trade he has chosen. . ."—Mr. & Mrs. C. D.

THE G.O. YOUNG LADIES

1. SYLVIA

*The Visitors that call each day,
Are greeted in the U.S. way;
When asked the time by Mr. Jive,
She murmurs: "Gosh—10 after 5."*

2. EDNA

*This young lady does not worry
At remarks like "Edna Hurry";
Her Filing System's up-to-date,
She knows her Boss won't have to wait.*

3. JUNE

*Our June will dance her way through life,
And in due course become a wife;
Her merry chirp we all adore,
When carrying out her daily chore.*

4. PEGGY

*Happy tapping her typewriter,
Shorthand notes she must decipher;
She has the kindest face and so . . .
To Peg we tell our tales of woe.*

5. IRIS

*She travels from Fa'cet every day,
Pedals her cycle all the way;
Placid and calm—grasps in a tick,
Gives you despatch in 1.9.5.6*

6. KATHLEEN

*Telegram, trunk call, number please,
Why all day long they never cease;
Her troubles come, her troubles go,
As 'phone flaps waggle to and fro.*

7. JEAN

*Delivery Notes—a pink or white,
Our Jean will turn it out all right;
From someone she will ascertain,
The course of transport—post or train.*

8. MAVIS

*Go here, go there, go everywhere,
In fact, her life is one long tear;
In spite of all we get a smile,
Which goes to make our lives worth while.*

The



APPRENTICESHIP SCHEME

by *Nicholas R. Canadine*

LABOUR AND WELFARE MANAGER

AS the motor car and radio sprang from the technical advances of the first world war, so there has sprung from the second world war such a wealth of mechanical devices for the betterment of our standard of living that the possibility of the slumps of the nineteen-twenties recurring in the engineering industry has vanished for ever.

In recent years we have been shown, more than ever before, that apprenticeship to a skilled trade is one of our national guarantees and individually a primary guarantee against any boy turning into a dead-end kid.

Skill in a trade must be acquired the hard way, and Newall have consulted with the best authorities to devise a scheme whereby a youngster who really wants to do so, can acquire the highest possible training and skill as an engineer.

Each boy, from his 15th birthday, spends nine months in actual practical work in the four main phases of engineering practice—fitting, turning, milling and grinding. Certain selected boys, on merit, after four years of apprenticeship, will obtain drawing office experience—but this number must be strictly limited.

The manufacture of machine tools and gauges ranks ace high in the engineering world, and a Newall Apprenticeship gives a craftsman the assurance that his apprenticeship is as good as can be obtained.

There are no indentures attached to the scheme—Newall apprentices are not "bound." This means that a boy who comes to us and subsequently finds he would be better in another trade can

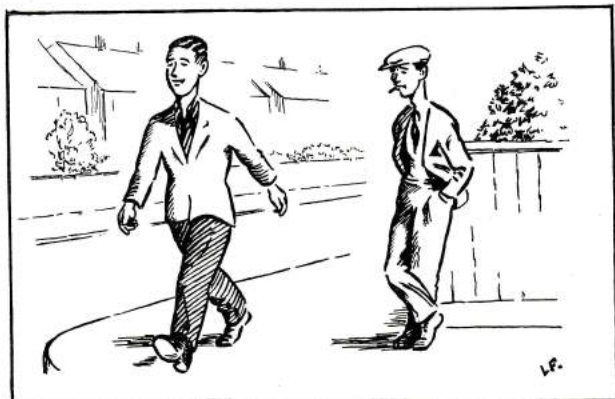
leave without obligation on either side. But if such a boy were bound by a legal agreement he would waste the formative years of his life.

Employees of this Company who have come up from the ranks of the apprenticeship scheme have travelled the Continent of Europe, where their skill and standing has been respected by Continental engineers of high repute.

Newall apprentices are paid in conformity with the standard amongst good employers, and various concessions over that standard are designed to ensure that fullest advantage of the period of employment during apprenticeship shall be taken. In an article of this nature I do not want to schedule rates of pay, but if any parents of boys who are interested in learning a good trade would care to come along and see me, or write to me, I shall be glad to explain the scheme in detail, and answer any questions and doubts that parents rightly have in this bewildering age.

In advance of the new Education Act, Newall are paying apprentices' fees for attendance at Technical School, and paying standard rate of wages for attendance at school on one day in each week.

As a further encouragement we give three annual prizes—one of £10 10s. 0d. cash, second of £6 6s. 0d. cash, and third of £3 3s. 0d. cash—to the three best Technical School students. Last year they were won by W. V. Wheeler, Tool-room; G. Thornburn, Machine Shop; V. Morris, Machine Shop. Since then, the competition has stiffened up quite a bit, and these three young chaps have a



stiff fight ahead of them if they want to win again.

Every quarter we send a full and frank report to parents concerning their lad in the preceding three months, right until they are 18 years old. These reports are based on quality of work, dependability, and the apprentice's attitude towards other people—and this last is as important as the others. We have received many appreciative letters from parents because of these reports, which have enabled them to give praise and encouragement where it is due, and to ensure that the closest co-operation is maintained right from the factory bench to the boy's own home.

At the end of each quarter, every boy's ability in the shop, and the quality of his work, the cleanliness of his bench, and so on, are all properly assessed. Every boy can, if he has the necessary go in him, earn a maximum of 1/- per quarter increase in his basic rate of pay. This means that by the time he is twenty he can be earning as much as £1 4s. 0d. above the rate. It is in such ways as this that we endeavour to encourage and reward industry. It is not necessarily a good thing that a young lad should receive a fat pay packet each week. These fat pay packets in dead-end jobs are apt to end suddenly and throw an unskilled, untrained, untaught youth on the labour market.

By providing free meals and free overalls for our youngest apprentices, whilst charging others a nominal sum up to their 19th birthday, we ensure that the greatest possible value is given to each lad in return for the work he carries out, and that in carrying out such work he acquires the highest possible degree of skill. It is for this reason that we do not pay our boys a production bonus. Production bonus is best earned by doing repetition work, and the more repetition a boy has in his work, the less he learns. Accordingly, it is our constant endeavour to ensure, within the limits of production demand, that as soon as a lad has mastered a type of work within the period set out, he undertakes another type.

At the end of apprenticeship we present to each apprentice an illuminated certificate which shows in detail the nature of his experience with us, and which is a symbol of achievement to be treasured in later years, and is a passport to engineering circles throughout the world.

This, then, is the outline of how our Company trains and cares for the young men who come here with the intention of working hard and growing up to be men who are masters of their trade and assured of a livelihood arising from the skill and training and character instilled into them whilst in the care of the Company.

THE NEWALL SOCIAL SECTION

by Susan Walker

SHYNESS has no place in the affairs of the Newall Social Section. It doesn't matter whether you can dance or not. Someone is there to teach you.

Our little gatherings in the canteen have been successful get-togethers. It has also been noted that the little man with the bow and arrow has been around getting into mischief. Watch the engagements column for further developments. Maybe the Committee will be fortunate in being presented with a piece of wedding cake.

Special praise ought to go to Mrs. Hales. Mrs. Hales is not a member of the section, but, by golly!—she works awfully hard scrubbing the floor after the jollifications are over. We feel indebted to her for this work, which has by no means received the measure of praise it deserves. Scrubbing is jolly hard work, especially after the dancers have tripped the light fantastic—not excluding notable hep-cat June Goodall, Progress Department.

At the last Newall Dance at the Town Hall I can safely say that a good time was had by all. It was noted that the balustrade came in for a spot of extra polish. Seems that the age-old habit of balustrade sliding is not yet dead.

At the time of this Magazine going to Press, plans are going ahead to fill to bursting-point 50 odd children at the Newall Christmas Party. Parents please note the Committee are not to be held responsible for any after-effects that may occur.

Volunteers are not required for the tree fairy. We have already engaged a charming blonde for the job. How sweet she will look, attached to the top of a twelve-foot tree. Daddies need not apply for the fairy after the party.

Hidden talent is around, and we need it to use in our Dramatic Section. Surely there are some people who would like to

see their name in blazing lights a foot high over the canteen door! Why should Newall not have a *STAGE DOOR CANTEN*? Names of people interested can be handed to Sue Walker at any time.

BIOGRAPHICAL NOTE

Susan Walker. Joined Company 1938 as Tracer. 1939—1945 served with distinction in W.A.A.F. Returned to Newall October 1945. Hobbies: Social work; theatre.

The Listener Hears . . .

That among certain people in the Works there has lately been a fair amount of good luck.

That this good luck has resulted from the filling in of football coupons.

That many other members of the firm try the same means to "Gain on savings what they invariably lose on the roundabouts."

That the Camera, were it human, would almost blush on "occasions."

That in spite of milling people and many arms far flung to the far corners of the factory, the "Newall Headache" still remains patiently standing on three legs.

That those members who are not so well covered "on top" as others, fairly glisten under the bright lights of the factory.

That the Sparks Department possess a mane of luxurious growth.

That the owner of the miraculous growth has not, to the time of going to Press, been presented with a "stick an' 'orse's 'ead 'andle."

That the Sparks Department are accused of "chasing."

That the victim regularly shouts for "Ma."

That "Whirring G.....s" bring forth shrieks of mirth from certain people.

That a "fufu" valve must be a new invention.

That one department does not want this or that from the Receiving Store, but suggests that another may.

That the other department does not want this or that either.

That the result is: The Purchasing Department is ear deep in enquiries (phone and verbal)—“Who the . . . ordered this . . . or that?”

That the section responsible for the Children's Party have a “headache” on their hands.

That there *will* be a Children's Party in spite of food difficulties and others.

That if any person wants their son to become the recipient of 6d. and a piece of cake, they have only to leave them

at the Main Gate Police Box.

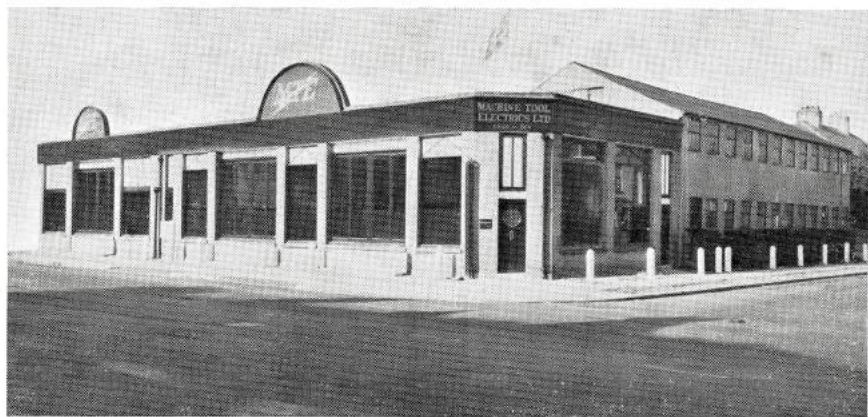
That the new concrete strip in the fitting shop has not let anything human or mechanical fall through it—yet!

That about 2,000 bearings burst out of their box while en route to the stores.

That the person responsible for their safe arrival was disappointed because not *one* of the people he had in mind *immediately* after the mishap, made the slightest attempt to come along in a hurry and tread in the centre of them.

That we would love to see Sheila Groom come to a meeting on her horse.

A photograph taken recently of the new M.T.E. Factory at London Road, Leigh-on-Sea



JIG BORING MACHINES

by A. Holroyd, A.M.P.E.

NOT so many years ago the Jig Boring Machine was looked upon by British engineers as a machine, admittedly built by man, but by man who, if not remote from this world, was at least remote from this country. It was regarded as a machine possessed of phenomenal accuracy, accuracy being apparently attributed to some unspecified connection with the superhuman element,

and the machine must therefore be treated like some graven image of an Eastern God who will only grant his blessings to the faithful. Consequently, a Jig Boring Machine was housed in private quarters, remote in its dignity, and to approach it was done in the manner of one approaching a high altar, with respect and reverence. The engineer, aware of its potentialities,

touched his cap and wiped his feet on the mat before entering the inner sanctum of an engineering works. Such was the awe in which a Jig Borer was held.

In spite of all this, the Newall Engineering Co., Ltd., had the audacity to attempt to design and build a Jig Boring Machine relying solely on its own experience and ability. Moreover, this was attempted at a time when British engineering was generally regarded to be at a low ebb, and no doubt general opinion thought the odds were against us. However, having carefully considered the project in all its aspects, the directors were completely satisfied that the manufacture of a Jig Boring Machine did not present any insuperable difficulties and so, fully conscious of the magnitude of the task, work went ahead.

The original purpose of the Jig Boring Machine was for the boring of accurate and accurately spaced holes, necessary in the manufacture of jigs, and three main features were adopted which have remained basically unchanged since the early days. These were, 3-point suspension for the base, open side column construction, and roller measuring system for positioning of table.

Three-point suspension for a machine base is an absolute necessity if that machine is required to produce work of the accuracy associated with a Jig Borer. This fundamental principle, coupled with correct ribbing, decided upon as a result of prolonged research into stresses and strains developed in machine tools, provides a base for the Jig Boring Machine which we are confident gives the maximum stability possible.

The open-sided column construction, although possessing no novel features, proved to be relatively simple to produce and also enabled operators to obtain the maximum advantage obtainable from the well designed centralised controls.

Although it has been the target of much adverse criticism, especially on the part of those unreasonably biased in favour

of foreign machines, the patented Newall System of Linear Measurement has probably contributed more to the success of the Newall Jig Borer than any other single feature. Early opposition to this system of measurement was largely on the grounds of accuracy, or inaccuracy, of the roller units, and the possibility of interference from dirt and dust on these rollers.

In the case of each of these objections, it has taken time to prove what we claimed — that the objections were groundless. The most complete answer to the latter objection is contained in the statement that no proven case of inaccuracy in the working of this measuring system has ever come to light, even though over 600 Newall Jig Borers are in daily use, in diverse conditions.

The question concerning the accuracy of the measuring rollers was effectively answered by sending, in 1937, a set to the National Physical Laboratory for a measurement check. The report issued covering the measuring of the set of rollers showed that the maximum variation between any two rollers in the 10 submitted was 0.000014". We knew that even this was not the complete answer, as metal gauges, even of the super precision type, have a tendency to grow and shrink. Therefore, the same 10 rollers have been submitted yearly to the N.P.L. for further measurement, and the last report showed a maximum variation in diameter in any one roller as .000017".

We are of the opinion that the accuracy of this measuring system is therefore established beyond reasonable dispute.

Incidentally, using a plus and minus tolerance on the production of these rollers, it is easy to see that, by selection, the practice of using them in batches of 10 with an overall measurement varying from the nominal 10 ins. by no more than .0001" is relatively simple. Bearing this accuracy in mind, it is interesting to note that more than 25,000 rollers have already been manufactured to provide the measuring systems on the Newall Jig Boring Machines now in use. It is not

generally appreciated that the Newall system of measurement for the spacing of holes readily permits of pre-setting for the next operation. This obviously helps materially to cut production times, and it is worth noting that pre-setting is not possible on several other competitive machines.

The basic principles which had proved so satisfactory in the original design were naturally adopted for the models which were to create a range of sizes, hence the similarity apparent in all three sizes.

As might be expected, the No. 1 size machine was too big for the requirements of some of our friends, and so, to meet their specific needs a smaller model, No. 0, was developed and produced.

It was also realised that the range could profitably be extended to include a machine of much heavier construction and increased capacity, and so the No. 2 model made its debut. A point of special interest was the provision of hydraulic traverse on this model, thus providing quick setting features and a smooth slow power output suitable for light milling purposes.

It is fitting to record that Newall

attention to the inclusion of production features into the controls of their range of Jig Borers has done much to oust the old ideas from the minds of those who considered this type of machine to be one fit only for the accurate spacing of holes under the most advantageous conditions. Sustained efforts to show that a precision machine can combine accuracy with speed have resulted in the adoption of Newall Jig Boring Machines on work of a semi-production type, especially on small quantities of components where interchangeability is required and jiggling would be uneconomical.

Early in 1938 we wrote "... and we present the Newall Jig Boring Machine to the trade, entirely on its merits, fully realising that we cannot hope to secure its adoption and use unless it fulfils the whole of the claims we make for it."

We think that the fact that well over 600 Jig Boring Machines are now in use in this country, and many parts of the world, justifies our conclusion that our claims were not groundless, and that the Newall Jig Borer has, in fact, been accepted in the trade as a worthy addition to the list of British engineering triumphs.



