

Deposited in Archive

MUSEUM OBJECT ENTRY FORM

WASC-2458 WASC-2459

MUSEUM NAME:	Form No: 13A
---------------------	---------------------

Received from: David Mobbs Address: Tel No:	Owner (if different): Address: Tel No:
---	--

DESCRIPTION OF OBJECT/COLLECTION (note obvious damage, & any related information eg. when, where, or how was it found or used; names, dates & details of the people who made or previously owned it, etc. Continue on a new sheet if necessary)

3 Brass keys - 2 tagged "THM" (T.H. Mobbs)
- 1 tagged "Cordite Mags"

Remains of valve from Nitraling Vat which exploded in June 1941.

1 photograph of staff in 1943, with annotation list.

Monials from Royal Gunpowder Factory.

All from T.H. Mobbs who was a chemist here during WW2

Total no. of items: 2

WASC 2458 STORAGE

WASC 2459

REASON FOR ENTRY (tick as applicable, and sign)

Donation - I offer to donate the object(s) listed above to the museum's governing body.

Sale - I offer to sell the object(s) listed above to the museum's governing body (price sought £.....).

Loan - I offer to loan the object(s) listed above for the use of the museum's governing body for a period of months.

Identification - I leave the object(s) listed above for identification & undertake to collect these no later than 4 weeks from today.

I confirm that the information given on this form is correct to the best of my knowledge and belief, & that I accept the terms and conditions described overleaf.

Signed: _____ Date: _____

ADDITIONAL AGREEMENT (DONATIONS/SALES ONLY) (tick as applicable, and sign)

I, the owner, confirm that I have undisputed title to the object(s) listed above, with full power to dispose of the items and transfer such title to the museum's governing body. OR

I, the depositor acting on behalf of the owner(s), confirm that the owner(s) have undisputed title to the object(s) listed above, with full power to dispose of the items and transfer such title to the museum's governing body, & that I am authorised by the owner(s) to act on their behalf to that effect.

The title in the objects listed above, & subject to the conditions overleaf, is hereby transferred to the governing body of the museum.

Signed: _____ Date: 11/8/2024

MUSEUM SIGNATORY

Receipt of the object(s) described above is hereby acknowledged.

Signed: _____ Date: _____
on behalf of the museum's governing body

RETURN OF OBJECT TO OWNER (tick as applicable, and sign)

I, the depositor/owner, acknowledge the return of the object(s) described above in a satisfactory condition following:

identification the end of the period of loan

the museum's governing body declining to accept the donation, loan or purchase of the object(s)

Signed: _____ Countersigned (for museum): _____ Date: _____

T. H. (Thomas Herbert) Mobbs 1914 – 1991

Graduated with BSc. In Chemistry from Queen Mary College, London in 1933.

Worked as a Shift/Works Chemist at the Royal Gunpowder Factory, Waltham Abbey during World War 2.

Married on 7 June 1941 and was on honeymoon when there was an explosion in a cordite nitrating plant at the Factory.

They died, and no one was told why. It was only said: They did not die in vain

WIFE WAITS 7 YEARS FOR SECRET

ONE SURVIVED



—AND HE STILL GOES ON MAKING IT

Scientist husband killed by RDX

Express Staff Reporter

BRASTED, Kent, Sunday.—For seven years Mrs. Barbara Long, of Brasted, has wondered why her husband died. Now she knows. They have told her—and the world—the story of R.D.X.

How he died she knew; that sudden and tremendous explosion that rocked Woolwich one day in 1936 was his achievement, and his epitaph. Commander P. A. M. Long, worked on secret and disastrous things and probed death for death's own sake. He made explosives.

At the inquest on Commander Long and the four men who shared his risk and his end the Home Office said: "Their lives have not been wasted." For seven years Mrs. Long has had that, and nothing more. Her husband, they told her, had been killed on a shell-filling experiment.

Today she knows that her husband pioneered the most terrible explosive Britain possesses. He ended his life in peace-time developing a weapon so secret that not even she must know.

He blasted Europe

But now it is explained—R.D.X., more devastating than T.N.T., could not be mentioned until the enemy was no longer searching for a clue to the formula R.D.X.—Research Department Formula X.

R.D.X. laid Hamburg to waste. R.D.X. smashed Berlin by day and by night. R.D.X., its power controlled, has blasted Europe with thunder many thousand times greater than shook Woolwich that day in 1936.

She said last night: "My husband had been doing ordnance research work for 14 years. He was 43 when he was killed. Our two children were still in their teens.

"Now our son Richard is 20 and has his R.A.F. wings. Jane is 23, working at the Foreign Office. I am at home doing some work for the W.V.S."

A pinhead of R.D.X. can blow in a steel plate

Express Staff Reporter

THE secret of R.D.X. lies in its preparation, not in its formula. For years chemists in Germany as well as in England have known its chemical formula; for years they believed it to be too dangerously sensitive ever to be used. And a safe method for production evaded the German scientists.

A pinhead pellet of this harmless-looking white substance will blow a hole through inch-thick steel plates.

The Germans tried desperately to find some means of producing it commercially. To them it would have been invaluable.

This, then, is the story of the birth of R.D.X. and of the death of five men.

With Commander P. A. M. Long, Ordnance Assistant to the Chief Superintendent of Naval Supply, died Francis Charles Lewis, aged 41, chemist; Jack Brignell, aged 26, laboratory assistant; Stanley Herbert Cooper, aged 41, leading factory hand; and William Edward Johnson, aged 48, factory hand. They died at 2.30 on the afternoon of July 8, 1936.

After eight years

Inside the Arsenal at Woolwich the research workers, after eight years of experiment, were nearing success. They had been working, till then, with a quarter of an ounce of the mixture. Now 50lb. of R.D.X. were being put into a shell.

Commander Long had come down from the Admiralty to watch the process. A special blast wall had been built. He and his colleagues were watching from behind this.

Then something went wrong. The men behind the wall had just time to run for safety, out of the building, behind the hummocks built round the danger hut.

They had just time to do it, but they did not do it.

They ran into the danger zone to try to correct the thing that was going wrong.

Outside the Arsenal, all over South London, an explosion thudded into walls, rattled at windows. Plumstead Bridge shook. The people of Woolwich, long used even in peace to the daily blast of guns, rushed to the Arsenal gates.

Inside the Arsenal a few broken timber struts clung to the protective hummocks. The green grass was black, and on it lay shreds of Commander Long's raincoat.

Died quickly

The five men died very quickly. But such was the manner of their death that a roll-call had to be made before they could be identified.

At the inquest, conducted by Dr. W. H. Whitehouse, South-East London Coroner, many questions were asked. People wanted to know why these men died in peace by a weapon of war. They were not told why.

The Research Department of the War Office found the true secret of R.D.X. just before war broke out. For more than two years we have been using it, using more and more of it. It is probably the most powerful explosive in the world.

The R.A.F.'s big bombs are charged with it, have carried the terror of R.D.X. into Germany.

But only now can the five men of Woolwich give their names to the thing they helped to create, which destroyed them.

'Shuttle' gift will benefit H.G.s

MR. ERNEST CLARK, aged 55, a factory hand, who now lives at Brised-road, Eltham, was the only survivor of the explosion. He is still working on R.D.X., has been for 14 years.

He knew before the explosion that R.D.X. was being used.

Last night he said: "I was standing outside the hut with five other men. They were looking at the filling process. I was looking up the road for two scientists who were due to arrive at any moment."

"Suddenly Mr. Brignell said to Commander Long: 'Six minutes, sir, and it's not retreating.' Commander Long and his colleagues rushed into the hut to adjust the filling apparatus."

"There was a terrific explosion. I was thrown into the air, landed some yards away down the road. They had to water the site down to damp the explosive before they made any investigation. It was useless to think of rescue, for there was no one left to save. I was taken to hospital."

He was nervous when he had to return to the job. But—"I have got used to it again. I've confidence that such an explosion will not happen again."

His wife said: "I live through years of agony when I think of my husband working with R.D.X. But some one has got to do the job."

'THEIR LIVES WERE NOT WASTED'



J. BRIGNELL Laboratory assistant. S. H. COOPER Leading factory hand.



F. C. LEWIS Scientist. W. E. JOHNSON Factory hand.

They could have run backward, to safety. Instead, they ran forward...

Australia's first woman M.P.

She is a grandmother

MELBOURNE, Sunday.—Dame Enid Lyons is returning this week to Canberra, where she held court for many years as the wife of Mr. J. A. Lyons, a former Prime Minister.

Now she goes back as the first woman ever to sit in the Australian House of Representatives. She was one of the few parliamentary grandmothers in the world.

News of her victory was brought to her over her weekly washtub, where she was laundering for five of her 11 children.—Express News Service.

88 German planes lost last week

Germany lost 88 planes in air combats last week. Two were shot down over Britain, 54 over Europe, 29 in the Central Mediterranean and three in the Middle East.

R.A.F. and Allied losses (U.S. figures are not listed) were 88 over Europe, 12 in the Central Mediterranean, five in the Middle East and one in India and Burma.

PONTINGS
Rhodelle Astrachan Fur Fabric Coat
with QUILTED LINING

26/E. 30.—New short style, extremely well cut with adaptable collar and smart shoulders. Ample room for wear over suits or dresses. E.A.C. 1/2 c. 1/2. S.S.W. SW. W. WX.

Post free.
89/3
Second Floor
14, COVENTRY

Grease-Resisting FROCK
19/E. 70—Heavy Rayon material with the appearance of wool. Note attractive Green, Mid Blue, Grey, G-d. Turquoise and Green shades.
Post 7d.
Coupons: Length 41 42 44in. 25/11
Hips 40 42 44in.

PONTINGS The House for Value KENSINGTON W8

PETTITS FOR POST ORDERS NOW ONLY 7 COUPONS

WOOLLEN Material FROCK
Post **32/10**
7d. C.O.D. 6d extra

Orders Over £2 Post Free

NOTE: TWO-WAY COLLAR

ALL-PURPOSE HESSIAN
Waterproof Back, 60 INS WIDE
CE. 82.C. **3/6** PER YD.
12 Yds. for **41/-**

Carriage 1/-
*Strong wrapping for Soldiers' use at home and abroad. *Light weight socks for vegetables. *Fitted or movable black out stains, will not drain. *Shopping bags.

SCORE-BOARD OF THE AIR WAR

Since the war Britain has destroyed 15,632 Axis planes—4,260 over or around Britain, 3,890 on the Continent (including Russia and at sea), and 7,482 in the Middle East and North Africa. The R.A.F.'s losses were 896 over or around Britain, 6,643 on the Continent, and 2,881 in the Middle East and North Africa. Total, 10,420.

The past week's losses, compiled from Air Ministry communiques, were:—

	Axis.	R.A.F.
Saturday		
Britain	—	—
Continent	1	1
Middle East and N. Africa	10	12
Sunday		
Britain	—	—
Continent	4	3
Middle East and N. Africa	2	1
Monday		
Britain	—	—
Continent	—	3
Middle East and N. Africa	2	2
Tuesday		
Britain	2	—
Continent	6	2
Middle East and N. Africa	1	4
Wednesday		
Britain	—	—
Continent	3	2
Middle East and N. Africa	1	2
Thursday		
Britain	—	—
Continent	14	32
Middle East and N. Africa	7	1
Friday		
Britain	—	—
Continent	25	41
Middle East and N. Africa	19	4
Total	97	110

THE STOCK EXCHANGE

EFFECT OF WAR WAGES ON AMUSEMENT INDUSTRY

By Our Financial Editor

Conversion 5 per cent. 1944-64 will be quoted ex the Nov. 1 dividend on Monday. The cumulative dividend price is 104½. From Monday the stock will probably be at par or a little over.

It is highly probable the Treasury will exercise its rights to repay or convert this loan of £318,733,361 on May 1 next by giving three months' notice.

It is perfectly clear where a portion of the good wages now being earned is going. Theatres, music-halls, and cinemas enjoy full houses, and the companies concerned are more prosperous than for years.

Hackney and Shepherd's Bush Empires are paying 13 years' dividend arrears on £45,000 of 6 per cent. preference capital. Leicester Palace Theatre is paying its first dividend since 1936. The shares of both concerns are mainly held by Stoll Theatres Corporation.

Stoll Theatres has paid no dividend for years but the £1 shares now stand at 14s. 3d., against a low level of 2s. 3d. last year.

Radio and television concerns are also doing well. The chairman of Philco Radio states that a debit balance of £123,494 has been extinguished and forecasts resumption of Ordinary dividends before long. The 2s. shares are 14s., but may go still higher.

A dividend statement is due from Electric and Musical Industries in the next few weeks. The company is believed to be prospering, but few expect an increase in dividend beyond the 6 per cent. paid for the last two years. The 10s. shares are well supported at 27s. 9d. on post-war prospects.

FOUND SHOT IN BASEMENT

An inquest will be held this week on Thomas Scott, 53, of Capel-gardens, Ilford, a Civil Servant, who was found shot in the basement of H.M. Stationery Office buildings in Oxford-street. A revolver was found nearby.

THEY HARNESSSED A GREAT EXPLOSIVE

SCIENTISTS WERE KILLED, BUT SECRET WAS SAVED

A POWERFUL explosive, for many years too dangerous to handle, is now being used by Britain, but at the cost of the lives of men who, for 16 years, had sought to harness it for the country's defence.

It was disclosed last night that the explosive, R D X (Research Department Formula X), is now being used by the Allies, and all the United Nations will share in the benefits of a discovery so great that the lives of the experimenters were not wasted.

The explosive is not new—it was known in the early part of the century—but the difficulty was to handle or make it on anything like a useful scale. Chemists and scientists of many nations tried to solve the problem, but none succeeded.

The War Office, just over 20 years ago, ordered experiments to be made by the Research Department—now known as the Armament Research Department, and incorporated in the Ministry of Supply.

The power of the explosive—greater than T.N.T.—was known, but this did not deter the experimenters, although they realised they held their lives in their hands. They faced the perils of the battlefield with none of the passions which war engenders, but took the risk calmly in order that Britain, threatened by a war-clouded Europe, should be better equipped to defend herself.

THE FINAL TEST

After 16 years success was almost within their grasp, and a Naval commander went to Woolwich to watch the final test—that of filling a 15in. shell with about 50lb. of the explosive. To achieve their object they had to find the safest conditions for shell-filling with

the explosive in ordinary factory conditions.

There were five men in the specially protected building. They were:—

Commander P. A. M. Long, an Admiralty Ordnance Assistant, of Sevenoaks, Kent;

F. C. Lewis, a scientist, of Abbey Wood;

J. Brignall, a laboratory assistant, of Welling;

S. H. Cooper, a leading factory hand, of Plumstead; and

W. E. Johnston, a factory hand, of Plumstead.

Each of them recognised the significance and danger of the experiment, and they watched the shell-filling process through mirrors and shielded by a blast wall.

Suddenly something went wrong, and, defying death, they raced into the danger zone to stop the process. Even as they moved there was a tremendous explosion.

A Home Office chief inspector paid the intrepid experimenters this tribute at the inquest: "These lives have by no means been wasted."

RECORDS SAVED

Step by step, as they had progressed with their formula, they had kept records in a safe place, and with no loss of time their work was carried on from where they left off. The result is that we are now able to produce, in ever-growing quantities, the deadly explosive which they conquered.

RDX is also being manufactured in Canada and the United States, where great strides in production have been taken which enable the explosive to be made more simply and more cheaply than anywhere else.

At the supreme cost, the experimenters had succeeded where the rest of the world had failed, and the cause of the United Nations has benefited by their sacrifice.

TOOK UNION FUNDS

FIREMAN "ROBBED PETER TO PAY PAUL"

From Our Own Correspondent
Southampton, Saturday. — Said to have deserted from the N.F.S. at Southampton and volunteered for the R.A.F., Frederick Price Thomas, 36, of Exeter-street, Salisbury, pleaded guilty here to-day to absenting himself and to mis-applying money belonging to the Fire Brigade Union.

Mr. H. P. Roe, prosecuting, said Thomas went away on

COLLEGE THEFTS

MAYOR OF CAMBRIDGE AMONG VICTIMS

From Our Own Correspondent

Cambridge, Saturday.—A man convicted of stealing from three colleges, and who asked for 16 other thefts to be taken into consideration, was sentenced here to-day to a year's imprisonment.

He is Albert Victor Cross, 22, labourer, of Millers-row, Cambridge, who pleaded guilty to a charge of stealing from Trinity College property belonging to Prof. C. D. Broad; not guilty to stealing articles worth £10 10s. from St. Catharine's College, and guilty to taking £10 in notes and other valuables belonging to Prof. F. C. L. Brendel, of King's College.

Giving details of the 16 other thefts which Cross asked to be taken into consideration, the police said the total value of the property involved was nearly £80, and that among the victims was Sir Montagu Butler, Master of Pembroke, and Mayor of Cambridge.

Sentencing Cross, the chairman commented: "You are a clever thief to have got away with all these serious thefts without being caught before."

PAM
SHOWS
THE
WAY

Seven Years Arsenal Secret Is Out

FIVE DIED TO GIVE US NEW EXPLOSIVE

FIVE men who died at Woolwich Arsenal in 1936 are today killing Germans with a new explosive, the secret of which was revealed last night. More powerful than T.N.T., the explosive is named R.D.X. (Research Dept. formula X), and it is now being produced in large quantities both in the United States and Canada.

1939-43 Star For Lifeboat Heroes

EXTENSION of the award of the 1939-43 Star to lifeboat crews is suggested in a Parliamentary question by Rear-Admiral Beamish (C., Lewes).

He will ask Mr. Churchill: "If he will have inquiries made into special services rendered by the Royal National Lifeboat Institution lifeboats and crews during the war, which have been no less arduous and perilous than those of the Air Sea Rescue Service.

"And, if convinced of this, extend the award of the 1939-43 Star to the lifeboat crews concerned and consider the issue of chevrons to them and some part of the personnel of the lifeboat service."



Pam Barton, Britain's No. 1 woman golfer, now an officer in the WAAFS, has started a lunch-time golfing class for RAF personnel at a fighting station. Here she is seen correcting a pupil's stance.

The five men were killed by it during the final tests.

Actually, the explosive had been known since the early part of the century, but scientists of many countries had failed to make it on anything like a useful scale.

Sixteen years of research and experiment had been put into the task by the Research Department of the War Office until the day came in July, 1936, when they were within measurable distance of success.

But experiments were still necessary to find the safest conditions for shell-filling with the explosive under ordinary factory conditions.

WATCHED THROUGH MIRRORS

A specially protected building was erected for the purpose, and through mirrors behind a blast wall the experimenters watched a 15-inch shell being filled with 50 lb. of the explosive.

Suddenly they saw something go wrong and ran into the danger-zone to stop the process. They were too late.

Even as they moved there was a tremendous explosion and five of them were killed.

The five were: Commander P. A. M. Long, an Admiralty Ordnance assistant, of Sevenoaks, Kent;

F. C. Lewis, a scientist, of Abbey Wood;

J. Brignall, a laboratory assistant, of Welling;

S. H. Cooper, a leading factory hand, of Plumstead; and

W. E. Johnston, a factory hand, of Plumstead.

At the inquest, a Home Office chief inspector said: "These lives have by no means been wasted."

'Mickey Mouse' Mask Warning

"**M**ICKEY MOUSE" gas-masks are not suitable for use by children over 4½ years old. When the child reaches that age the "Mickey Mouse" mask should be exchanged for a small adult one.

REASON: A child who has grown too big for a "Mickey Mouse" mask is not protected against gas, because the mask cannot be made to give a gas-tight fit.

When a new mask is issued, the old one should be returned to be reconditioned, as the masks are needed for younger children, says the Ministry of Home Security.

THIS IS DR. ROTTER, WHO MADE OUR MOST

The quiet farmer of Ple

FATHER OF R.D.X. PREFERS OLD PEWTER NOW

Express Staff Reporter

ST. DOGMAELS, Cardigan, Wednesday.

FARMER GODFREY ROTTER, 64-year-old owner of Pantirion Farm, has only two years' experience of agriculture, but the work he and two of his sons have done here has made them highly respected by farmers for miles around.



DR. GODFREY ROTTER
"R.D.X. was tested on an old battleship with quite superior results."

REMOVE THE POLICE

Say the dockers

Express Staff Reporter

DOCKERS at north-east ports have issued an ultimatum that they will not have military police supervising their work to stop pilfering.

Captain Mark Hewitson, national industrial officer of the General and Municipal Workers' Union, left Newcastle-on-Tyne

Few could understand it when they learned that Farmer Rotter was Dr. Godfrey Rotter, formerly Woolwich explosive research chief, who produced R.D.X., the super-explosive, secret until this week, with which R.A.F. blockbusters and many other British weapons are now filled.

They could not imagine that such a quiet, unobtrusive man had spent 40 years devising the most terrible explosive used in the present war.

Now they know. The secret of R.D.X. has been officially revealed, and with it the inner story of the death of Commander Long and three fellow experts, who were killed at Woolwich in 1936 by the only serious accidental explosion of R.D.X.

Pantirion—"Pleasant Valley" is the English for it—is as remote from wars and explosives as one could imagine, high above Cardigan Bay.

In dungarees

While his sons, David and Charles, red-faced from the wind, were feeding the cows, Farmer Rotter came home in blue dungarees. He had just spent the day at two auctions of farm stock and implements.

"I bought nothing," he said, as he struggled out of the clinging sleeves. "Prices are absurd just now."

He looked smallish, a quiet type of business man in his grey herringbone tweed suit; a bank manager, perhaps.

His small moustache is greying, but his hair is still brown. He gazed out of the sunny window over a thick patch of briar and scrub to the square miles of Cardiganshire.

"Pity there isn't the labour to clear all the land," he said. "Still, I suppose 100 acres ploughed, besides 100 head of cattle—30 of them cows in milk—with pigs and sheep in the winter isn't too bad."

He patted the head of Fly, his black-and-white sheepdog, and settled into an easy chair by the fire. "My dog," he said, "but I never know how many cats I have. They are all over the farm. Their families are always

now
decided street
ing can possible
ns—are
ret
okes
been e, but
further
weekly
co or
ross if
gnised
ht the
ve dis-
es and
spitals.

AME
MA
H
t
C
E
A M
n
Riley,
gon,
build
arrive
He
how P
built e
sudden
Americ
second
building
In J
came
Riley,
Portla
salties
have
The
man, s
The
Port
pay
thar
to a
ing

unch
Foreign
a lunch
on, for
resident
E
A M
n
Riley,
gon,
build
arrive
He
how P
built e
sudden
Americ
second
building
In J
came
Riley,
Portla
salties
have
The
man, s
The
Port
pay
thar
to a
ing

'Home-made'
"After the last war we wanted to use home-produced material for our explosive, and R.D.X. is entirely home made. We began work on it seriously in 1922, but the Navy thought then that it would make their shells ineffective, by blowing them into bits too small to cause damage.
"But we showed them there was something new in R.D.X., especially in blast effect. In the end it was tested on an old battleship, with quite superior results. The smaller bits of shell had such high velocities that they were very damaging, and the blast was terrific."
Dr. Rotter glanced at the mantelpiece. "Nice old pewter," he said, indicating three large mugs. "I always like pottering around in antique shops. Then"—he went on, with a switch of thought—"we had to devise methods of making R.D.X. in larger quantities safely and cheaply.
"The War Office, who wanted something better than wet gun-cotton for Royal Engineers' demolition, asked for a plant to make a few tons a week. We had some exciting occasions.
"But in the end we had only that one serious accident which killed Commander Long—a very charming fellow, used to write for Punch you know.
"I was in conference in my office at the time of Commander Long's accident, and I don't know why they all went in and got killed. Usually if something goes wrong with an explosive in process only one person approaches it to save unnecessary loss of lives.

On grand scale

"Now R.D.X. is being made in America by our methods on a grand scale."
Dr. Rotter, who became an explosives expert after he graduated from North Wales University, went to Woolwich in 1903 and stayed until he retired two years ago. He is now an adviser to the Ministry of Supply.

"I think old men should retire," he said. "One gets to think oneself infallible, but others can see the mistakes old men make so I retired and others are developing R.D.X. now."
"I always loved gardening and the countryside. Two of my sons have gone in for agriculture and knew this part of the country so we came to Pantirion.

"Another son, John, is a major in the Sappers in India, my fourth Kenneth, a nose, throat and ear specialist, is a captain in the R.A.M.C. in Lahore. My daughter Gwendoline is head-mistress of a girls' school.
"But I still think those auction prices are fantastic. I saw frameless mirrors costing 2s. 6d. pre-war going for 18s." said the man who had forgotten R.D.X.

grap
"I
The
work
mini
my"
J
laun
more
we v
clear
dust
then
who
wi
de
"
used
wha
dell
10.5
N
the
Ed
an
Ma
He
Sa
an
ce
on
sh
he
th
ge
of
wi
sh
an
Ma
bla
luc
ye
wa
for
sy
ex
M
ma
ou
Af
up
ov
tre
in
sta
wh
18
vat
t
e
l
c
l
T
age
ari
mc
Or
div
s
ves
at
Ar

men and women workers, a large number of whom have never previously been in this sort of work, is a feat of which any nation can be proud."

Mr. RALPH ASSHETON (Parliamentary Secretary to the Ministry of Supply) said: "The test is this—Have the goods been delivered? The answer is—Yes.

"The achievement is that we have over 40 great Royal Ordnance Factories built and equipped, and provided with labour and management. Two or three years ago most of these sites were green fields.

"There was only a tiny nucleus of skilled management on which to draw, and by far the greater majority of the workers have had to be trained, from the very beginning.

"In spite of this, the job has been done, the guns have been made, and the shells have been filled.

"These Royal Ordnance Factories are a great national enterprise. The superintendents and all who work in them are immensely proud of their service, and of the great tradition behind it.

"These factories form a great national insurance in time of peace and a great national asset in time of war.

"I have seen the great work done in the factories. A great deal of it is done by women unaccustomed to factory life. They accept very cheerfully the hard life and the risks which they run from explosion and air attack.

"This great achievement has not been accomplished without blood and tears, toil and sweat. There are many stories of heroism in this war which cannot yet be told. The stories of the Royal Ordnance Factories are among them.

"Let us therefore praise the management and workers for what they have accomplished, and let us seek to encourage them to greater efforts in the future."

**—THIS IS HIGH TRIBUTE.
LET US DETERMINE
THAT EACH ONE OF US
DESERVES IT FULLY.**



Director General, Ordnance Factories.

(16908D) Wt 16988/9658 300M 8/42 HJR & L Gp 745/6

ROFs

**—WHAT WAS SAID
ABOUT US IN THE
HOUSE OF COMMONS**

Specially printed for Royal Ordnance
Factory Workers from the Official
Parliamentary Report, August 5th, 1942

SIR ANDREW DUNCAN (Minister of Supply), opening the debate on the Royal Ordnance Factories, said:

"There are 42 Royal Ordnance Factories, of which 24 are engineering, 8 make explosives and 10 are engaged in filling. They employ 300,000 people, 60 per cent. of whom are women, 32½ per cent. semi-skilled or unskilled men, and only 7½ per cent. skilled men.

"The engineering factories engage in a very wide range of high precision work. At the present time they are responsible for 66⅔ per cent. of the total gun output of the country, whereas a year ago they were responsible for only 50 per cent. of the total output.

GUNS

"With improvement in efficiency, with more workers coming into employment, with improvement in design and with the mass production of components in associated factories, the output of guns has gone up very considerably indeed, and today the Royal Ordnance gun factories are producing four and a half times as many guns as they were producing twelve months ago. One factory alone today is producing a number of guns equal to 75 per cent. of the total number per month that were produced throughout the whole country in the last war when production was at its peak.

"Over all, the Royal Ordnance Factories are today producing twice as many guns as they were originally rated to produce.

"They have, therefore, become a very flexible instrument of production and great credit is due to the Director General of Ordnance Factories who has the prime responsibility for the running of these factories.

EXPLOSIVES

"On the explosive factory side we make something like 60 to 70 per cent. of the total explosive output of the country, and it is a long time since the supply of explosive gave us any trouble.

"In no case at the present time is the filling of shells, bombs or cartridges, in any way limited by the supply of the principal explosives.

FILLING

"Whereas the skill of our engineering industry in this country made a very sound foundation for our gun-making, there was really no counterpart on the filling side, and the development of filling factories was behind the development of gun factories at the outbreak of war.

"Individual factories have been recruiting five, six, or seven thousand people over short periods, and the total personnel of most of these factories ranges from 10,000 to

25,000 persons. Not only is the labour new to the technique of filling, but a great proportion is new to factory life altogether.

"At the beginning of 1942 we agreed a programme with the War Office for the requirements of the whole of 1942 and set a target for them.

"The target figure was deemed by many of our factories to be too high, but I am glad to say that by the end of June the rate reached was 98 per cent. of the target.

"We have now two and one third times the production of a year ago, and what is very interesting and important is that the increase in output per individual is 40 per cent. more than it was a year ago.

"As in the gun factories, so in the filling factories we are now in a strong and flexible position to meet all sudden developments.

"The filling factories were and are a special problem. They are quite distinct in their production from the other Royal Ordnance Factories. They have a safety element which compels ultimate responsibility of a very onerous character.

"The Director General of these Filling Factories is a man who has shown rare aptitude for leadership, and has established a morale which is quite priceless in those sections which demand great care against internal accidents and great calmness in air raids.

"I wish I could give some details to the House of examples of fortitude shown in one of these factories in a recent air raid.

"I CLAIM THAT THIS COUNTRY HAS EVERY REASON TO BE PROUD OF ROYAL ORDNANCE FACTORY EFFORT IN PRODUCTIVE STATE ENTERPRISE, AND NO ONE CONNECTED WITH IT HAS ANY OTHER AMBITION THAN THAT IT SHOULD BE MADE STILL MORE EFFECTIVE."

Sir PATRICK HANNON (Moseley, Birmingham) said: "My honourable friend who has just spoken [Mr. Dunn, Rother Valley] has borne testimony from his own personal experience, as I can bear from mine, to the work of the various factories throughout the country, where work-people and managements are putting their best into the contribution they are making to victory. In looking at the heavy task that lay upon the shoulders of those who were called in to organise production, one must be a little tolerant and sympathetic."

Mr. AMMON (Member for North Camberwell) said: "I am sure we shall all agree that the setting up of this great scheme of Royal Ordnance Factories is a real miracle of history. To start from nothing and raise an army of 300,000



RULES
OF THE
ROYAL
GUNPOWDER FACTORY,
WALTHAM ABBEY.

1934.