



SHELLS (ROCHDALE) Ltd.

— AUG. 1st. 1915. — MARCH 31st. 1918. —



A SOUVENIR

SHELLS (ROCHDALE) LTD.,

Aug. 1st, 1915 — Mar. 31st, 1918.



Coun. JESSE H. LORD,
Chairman of Directors.



Mr. J. N. TOD
(Director).

HISTORY.



IN July of 1915, the Minister of Munitions made an urgent appeal to all who were in possession of any class of machinery adaptable for the production of munitions to place their plants at the disposal of the nation, and help to make up the great shortage of shells.

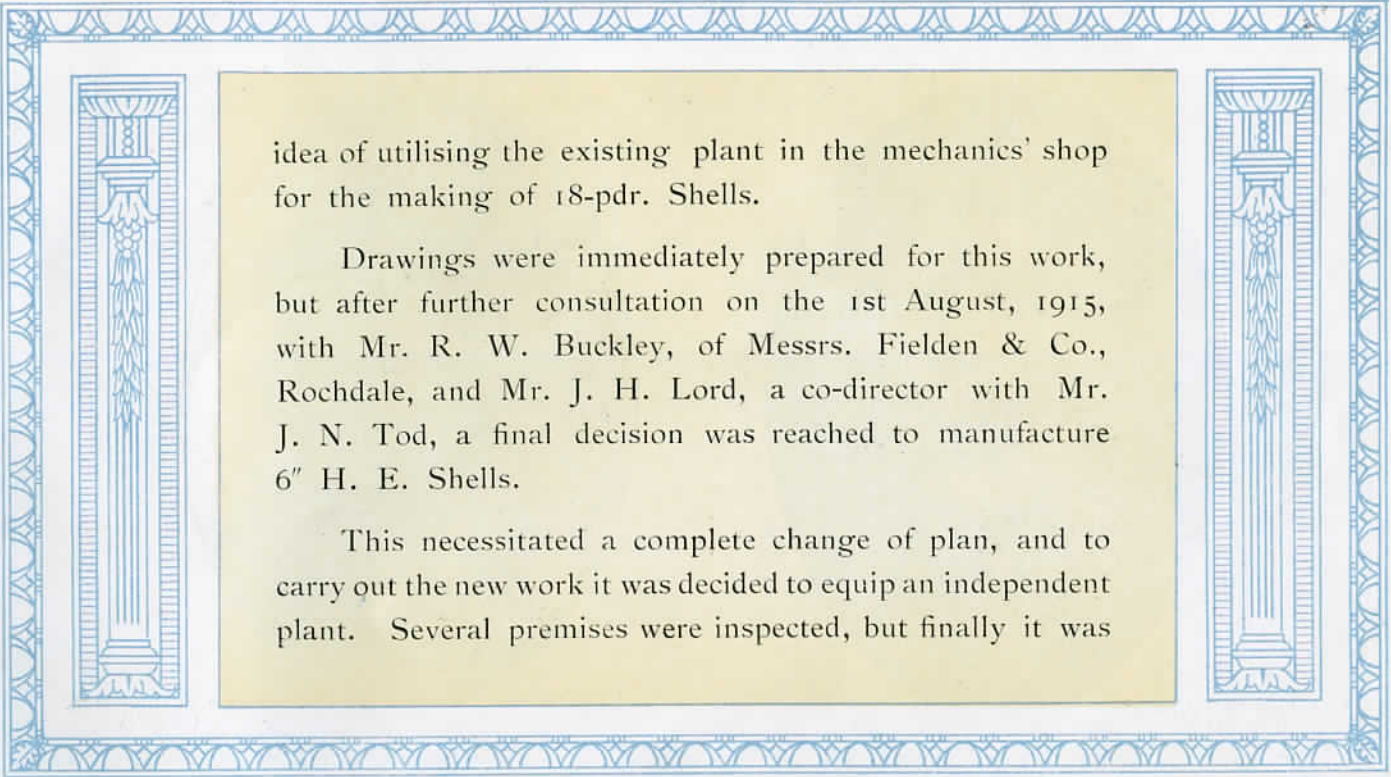
Mr. J. N. Tod, a director of Messrs. Kelsall & Kemp Ltd., The Butts, Rochdale, in consultation with Mr. E. R. Pearce, engineer to the firm, conceived the



Mr. R. SLACK
(Director).



Mr. R. W. BUCKLEY
(Director).



idea of utilising the existing plant in the mechanics' shop for the making of 18-pdr. Shells.

Drawings were immediately prepared for this work, but after further consultation on the 1st August, 1915, with Mr. R. W. Buckley, of Messrs. Fielden & Co., Rochdale, and Mr. J. H. Lord, a co-director with Mr. J. N. Tod, a final decision was reached to manufacture 6" H. E. Shells.

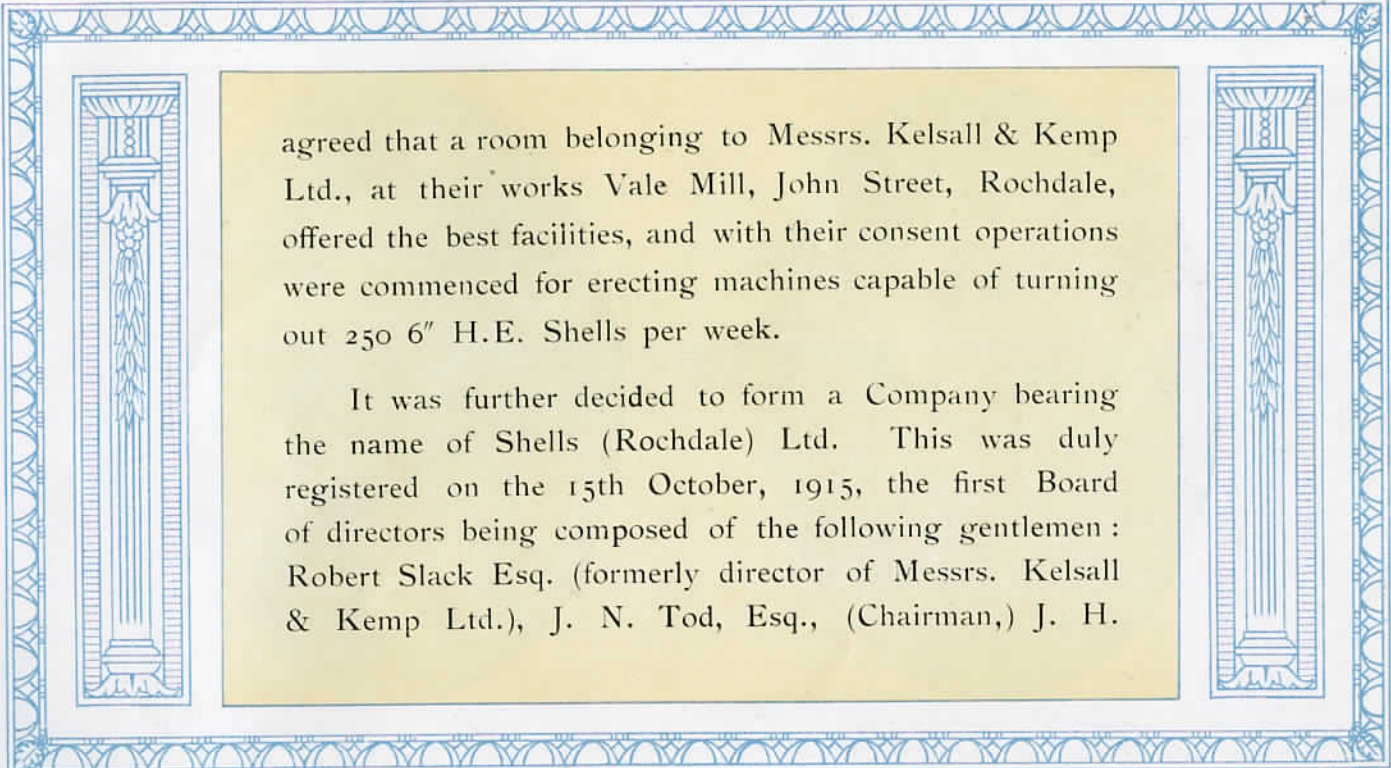
This necessitated a complete change of plan, and to carry out the new work it was decided to equip an independent plant. Several premises were inspected, but finally it was



Lt.-Col. LORD ROCHDALE
(Director).



Capt. R. CLAUDE ROE
(Director).



agreed that a room belonging to Messrs. Kelsall & Kemp Ltd., at their works Vale Mill, John Street, Rochdale, offered the best facilities, and with their consent operations were commenced for erecting machines capable of turning out 250 6" H.E. Shells per week.

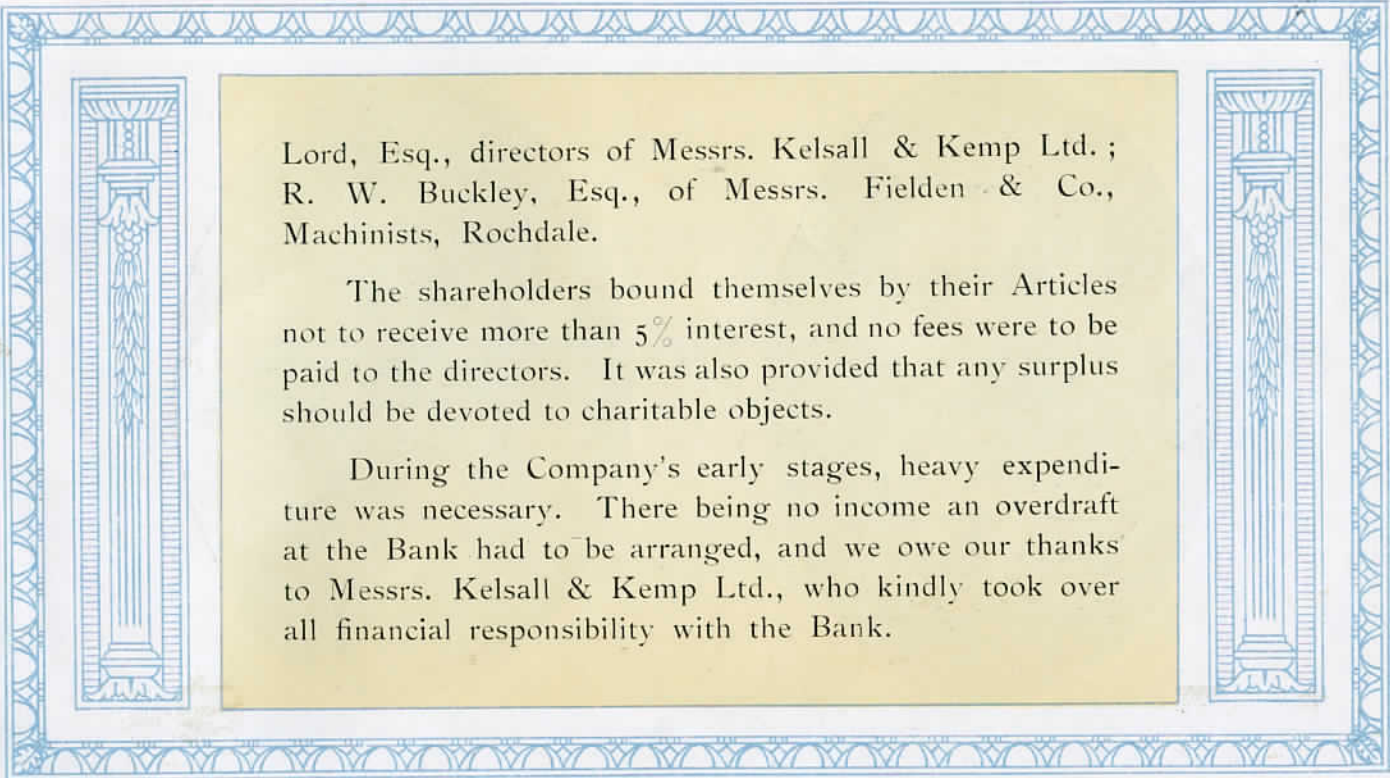
It was further decided to form a Company bearing the name of Shells (Rochdale) Ltd. This was duly registered on the 15th October, 1915, the first Board of directors being composed of the following gentlemen: Robert Slack Esq. (formerly director of Messrs. Kelsall & Kemp Ltd.), J. N. Tod, Esq., (Chairman,) J. H.



MR. E. R. PEARCE
(Consulting Engineer).



MR. R. RUSHTON
(Manager).



Lord, Esq., directors of Messrs. Kelsall & Kemp Ltd. ;
R. W. Buckley, Esq., of Messrs. Fielden & Co.,
Machinists, Rochdale.

The shareholders bound themselves by their Articles not to receive more than 5% interest, and no fees were to be paid to the directors. It was also provided that any surplus should be devoted to charitable objects.

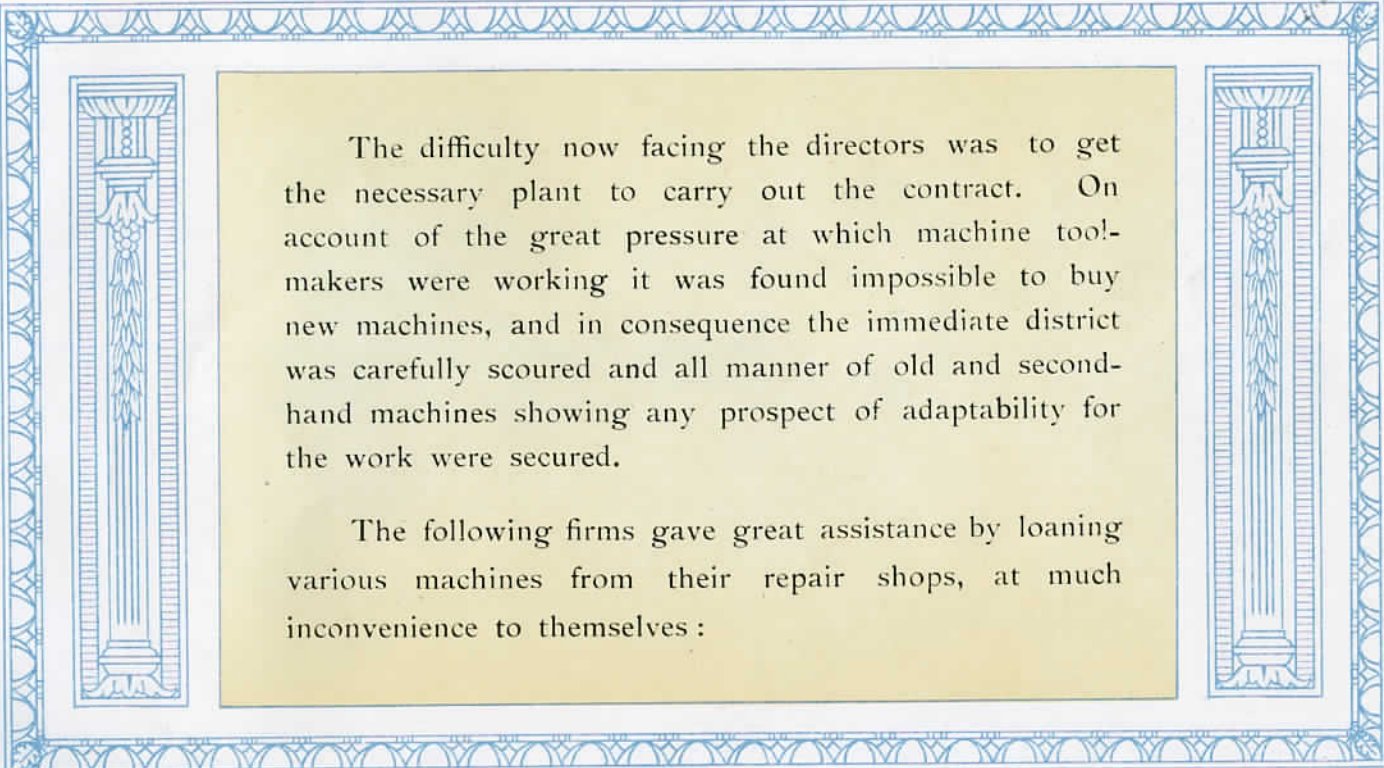
During the Company's early stages, heavy expenditure was necessary. There being no income an overdraft at the Bank had to be arranged, and we owe our thanks to Messrs. Kelsall & Kemp Ltd., who kindly took over all financial responsibility with the Bank.



Mr. H. FIELDING
(Asst. Manager).



Mr. J. SCHOFIELD
(Secretary).

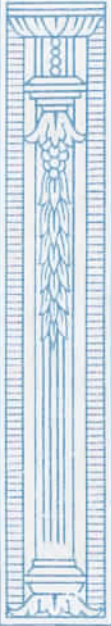
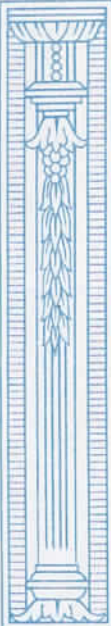
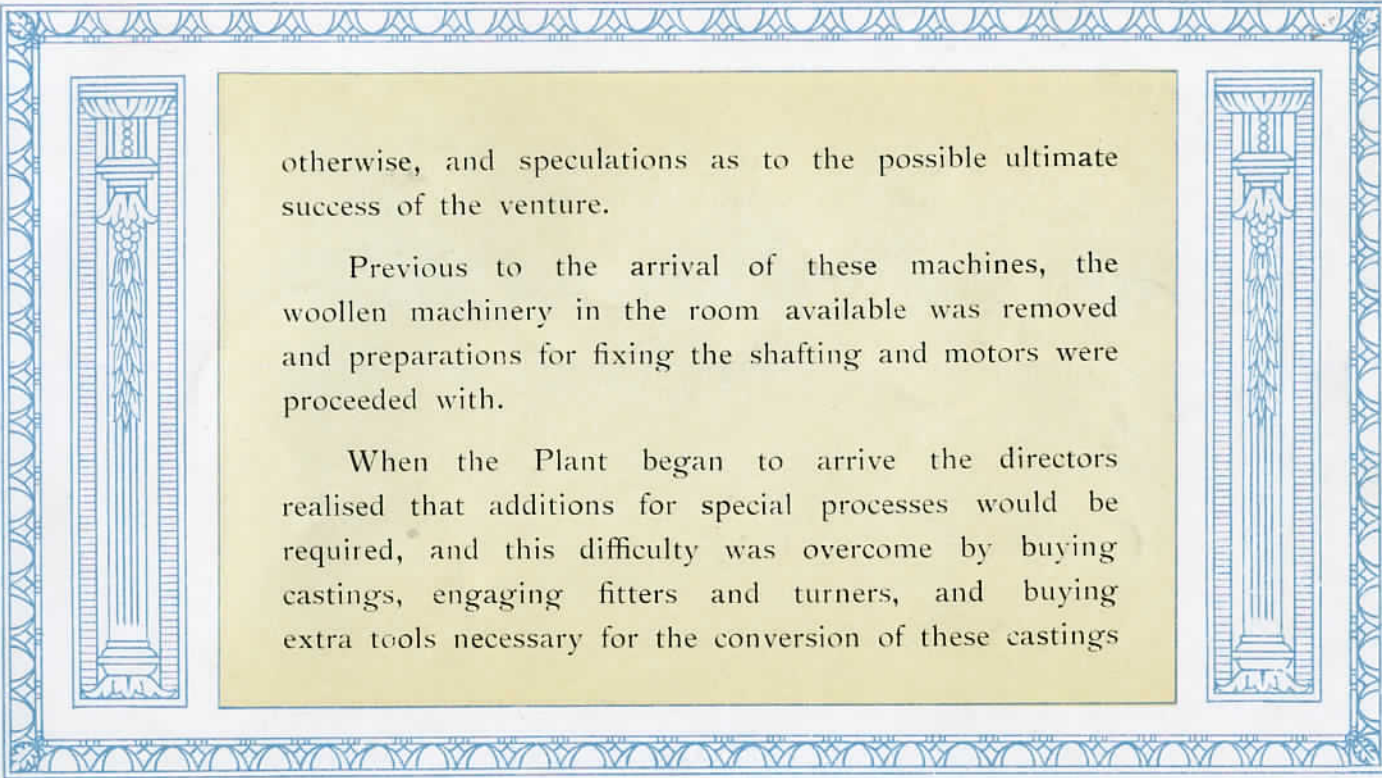


The difficulty now facing the directors was to get the necessary plant to carry out the contract. On account of the great pressure at which machine tool-makers were working it was found impossible to buy new machines, and in consequence the immediate district was carefully scoured and all manner of old and second-hand machines showing any prospect of adaptability for the work were secured.

The following firms gave great assistance by loaning various machines from their repair shops, at much inconvenience to themselves :



Tool Room Staff.



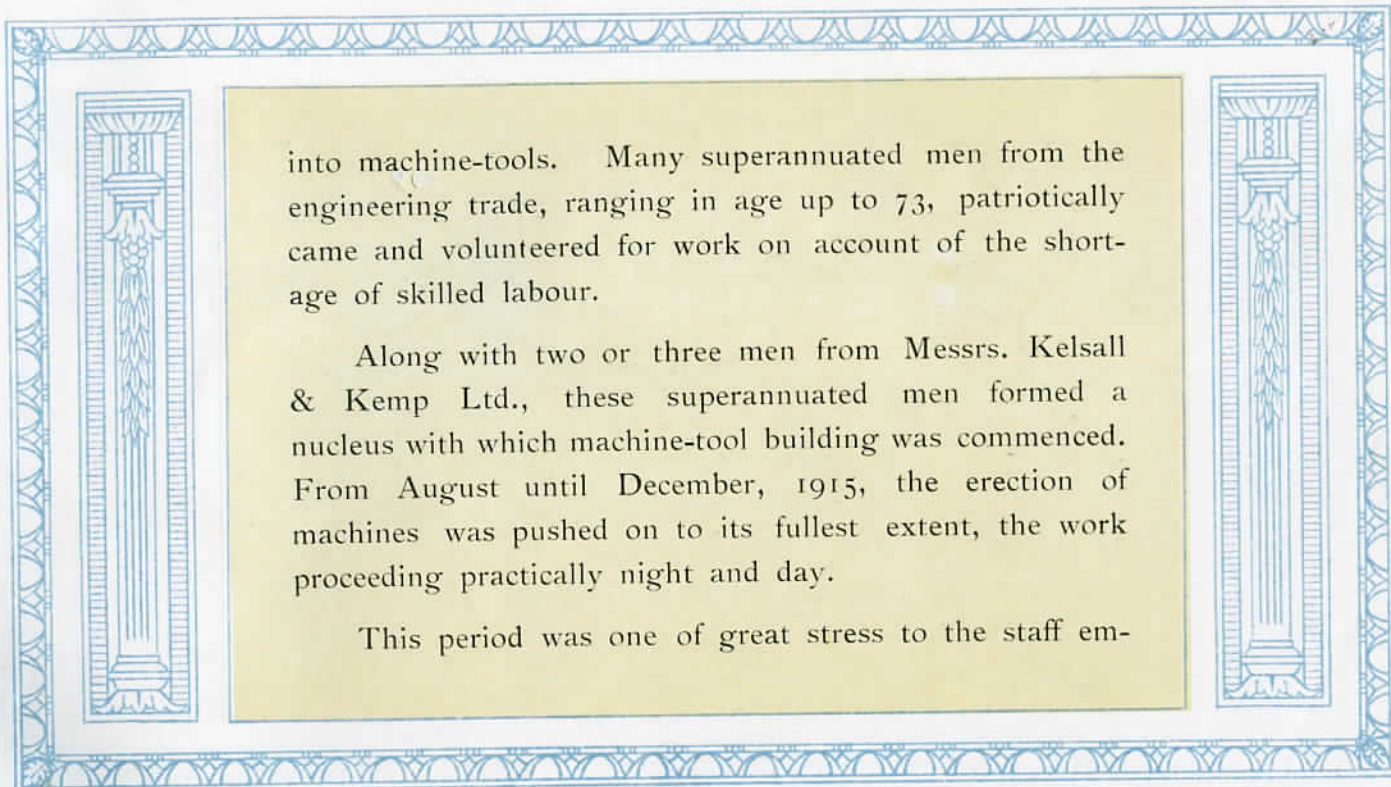
otherwise, and speculations as to the possible ultimate success of the venture.

Previous to the arrival of these machines, the woollen machinery in the room available was removed and preparations for fixing the shafting and motors were proceeded with.

When the Plant began to arrive the directors realised that additions for special processes would be required, and this difficulty was overcome by buying castings, engaging fitters and turners, and buying extra tools necessary for the conversion of these castings



Repair Staff.



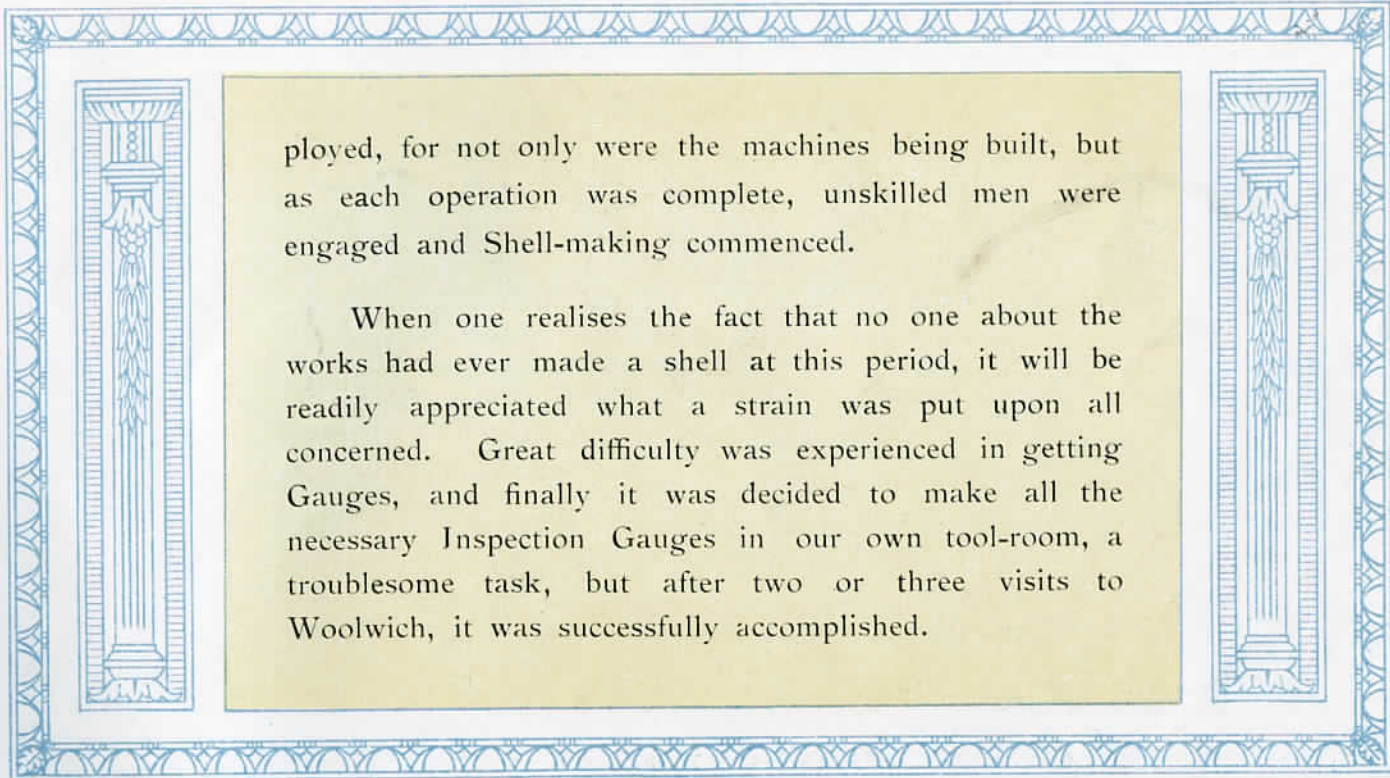
into machine-tools. Many superannuated men from the engineering trade, ranging in age up to 73, patriotically came and volunteered for work on account of the shortage of skilled labour.

Along with two or three men from Messrs. Kelsall & Kemp Ltd., these superannuated men formed a nucleus with which machine-tool building was commenced. From August until December, 1915, the erection of machines was pushed on to its fullest extent, the work proceeding practically night and day.

This period was one of great stress to the staff em-



Inspection Staff.

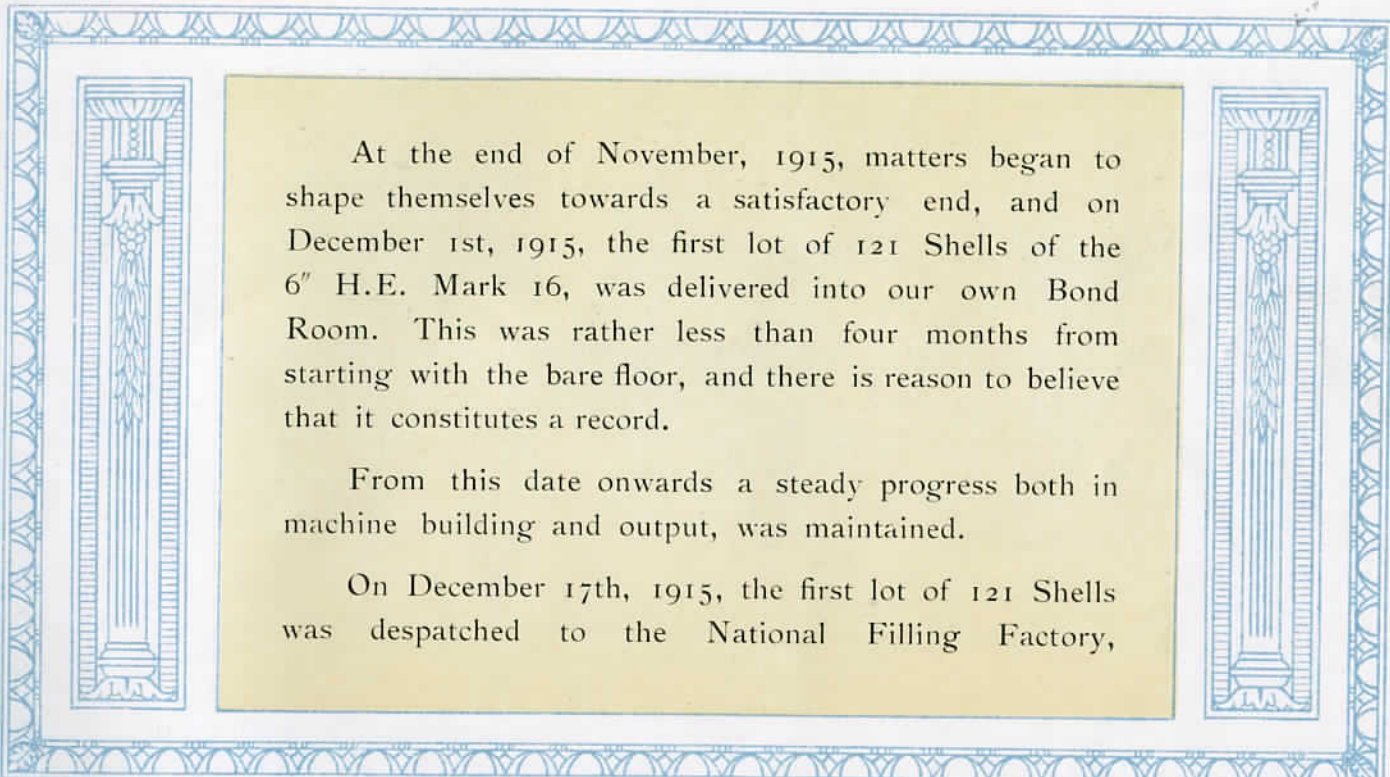


ployed, for not only were the machines being built, but as each operation was complete, unskilled men were engaged and Shell-making commenced.

When one realises the fact that no one about the works had ever made a shell at this period, it will be readily appreciated what a strain was put upon all concerned. Great difficulty was experienced in getting Gauges, and finally it was decided to make all the necessary Inspection Gauges in our own tool-room, a troublesome task, but after two or three visits to Woolwich, it was successfully accomplished.



Rough and Second Turning Section.



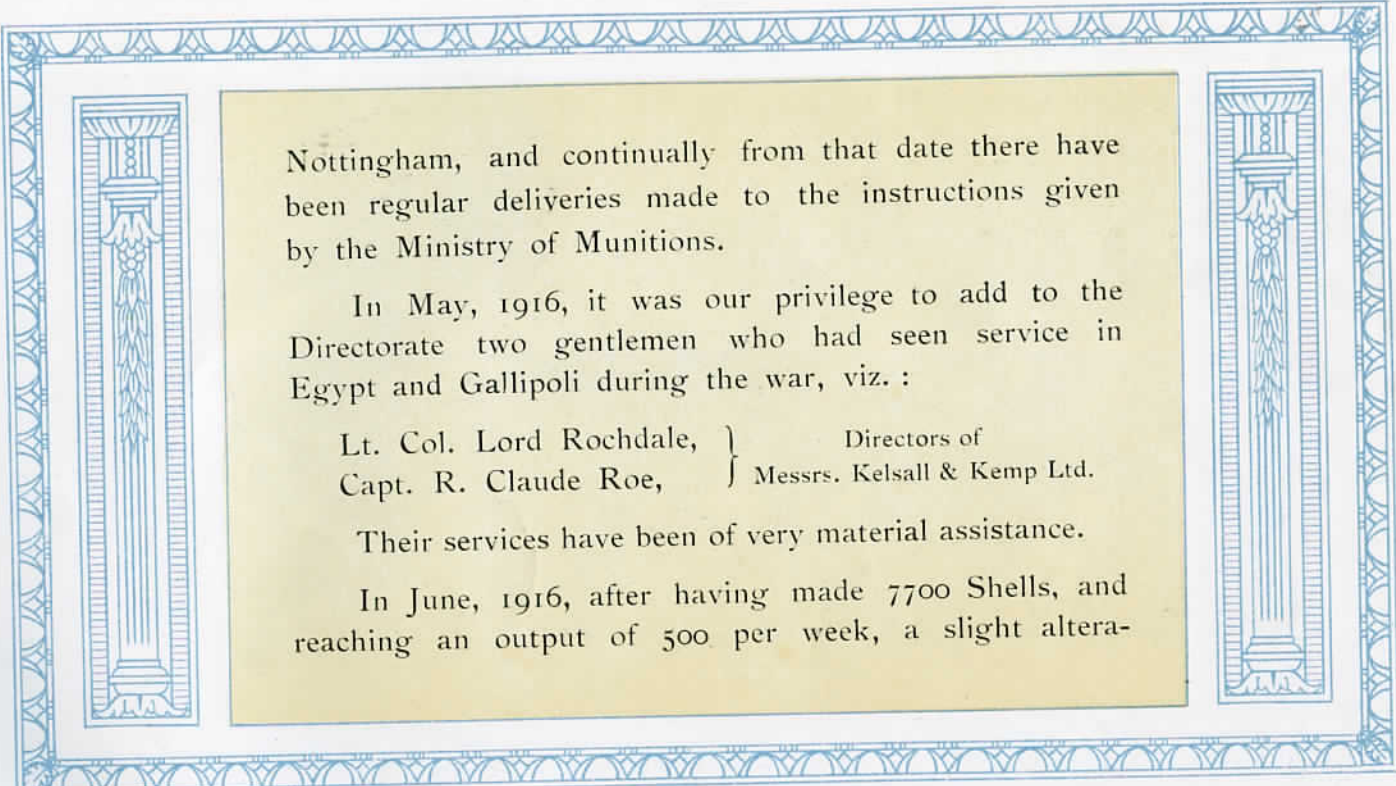
At the end of November, 1915, matters began to shape themselves towards a satisfactory end, and on December 1st, 1915, the first lot of 121 Shells of the 6" H.E. Mark 16, was delivered into our own Bond Room. This was rather less than four months from starting with the bare floor, and there is reason to believe that it constitutes a record.

From this date onwards a steady progress both in machine building and output, was maintained.

On December 17th, 1915, the first lot of 121 Shells was despatched to the National Filling Factory,



Rough and Second Turning Section.



Nottingham, and continually from that date there have been regular deliveries made to the instructions given by the Ministry of Munitions.

In May, 1916, it was our privilege to add to the Directorate two gentlemen who had seen service in Egypt and Gallipoli during the war, viz. :

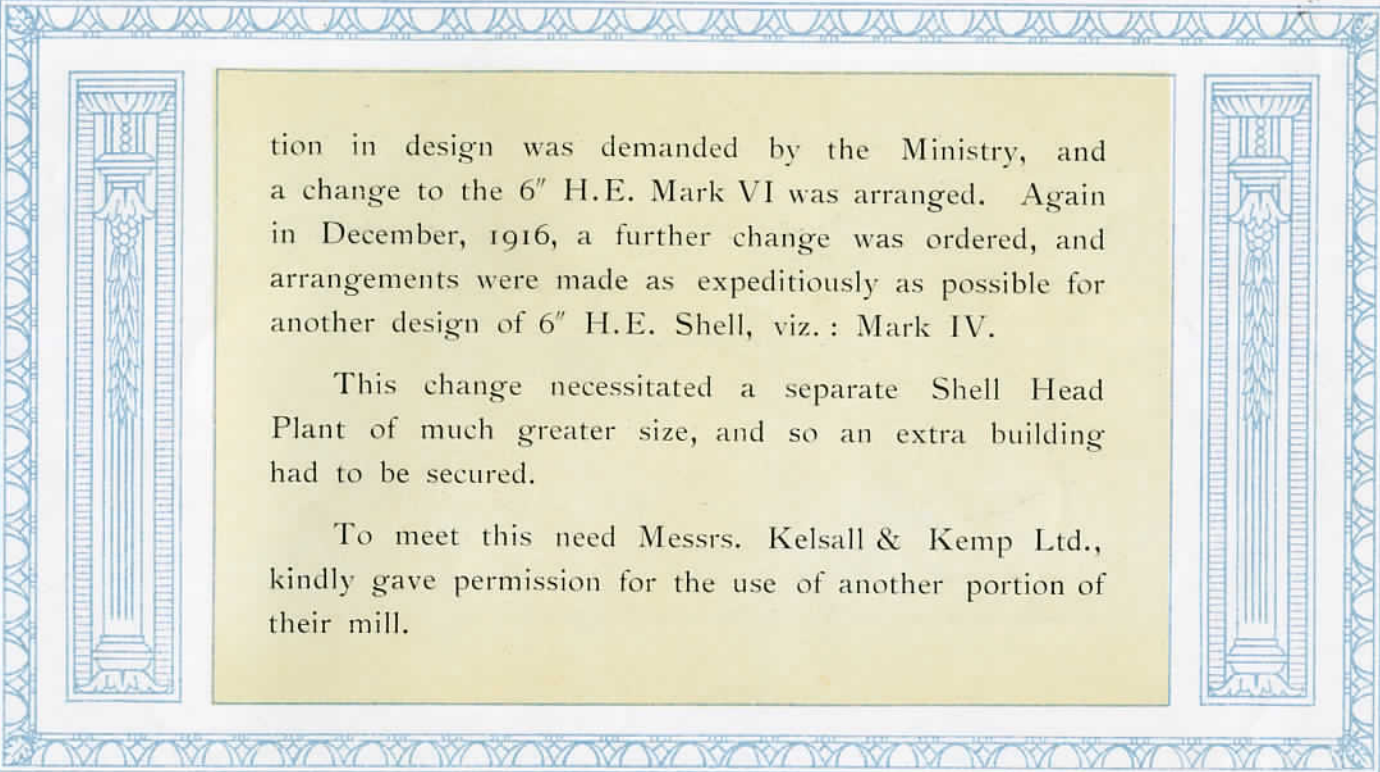
Lt. Col. Lord Rochdale,	} Directors of
Capt. R. Claude Roe,	

Their services have been of very material assistance.

In June, 1916, after having made 7700 Shells, and reaching an output of 500 per week, a slight altera-



Boring Section.





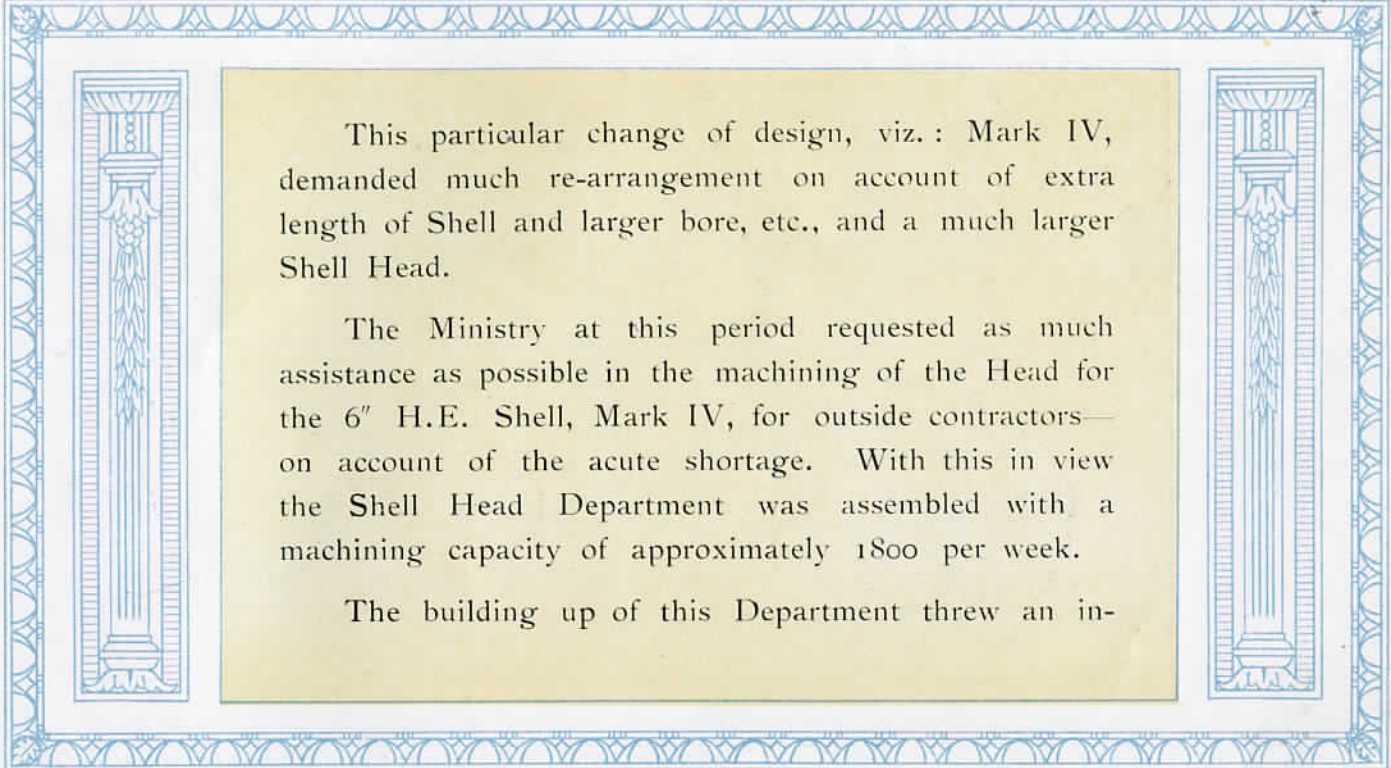
tion in design was demanded by the Ministry, and a change to the 6" H.E. Mark VI was arranged. Again in December, 1916, a further change was ordered, and arrangements were made as expeditiously as possible for another design of 6" H.E. Shell, viz. : Mark IV.

This change necessitated a separate Shell Head Plant of much greater size, and so an extra building had to be secured.

To meet this need Messrs. Kelsall & Kemp Ltd., kindly gave permission for the use of another portion of their mill.



Boring Section.



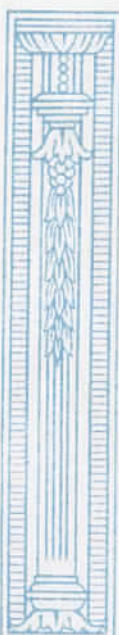

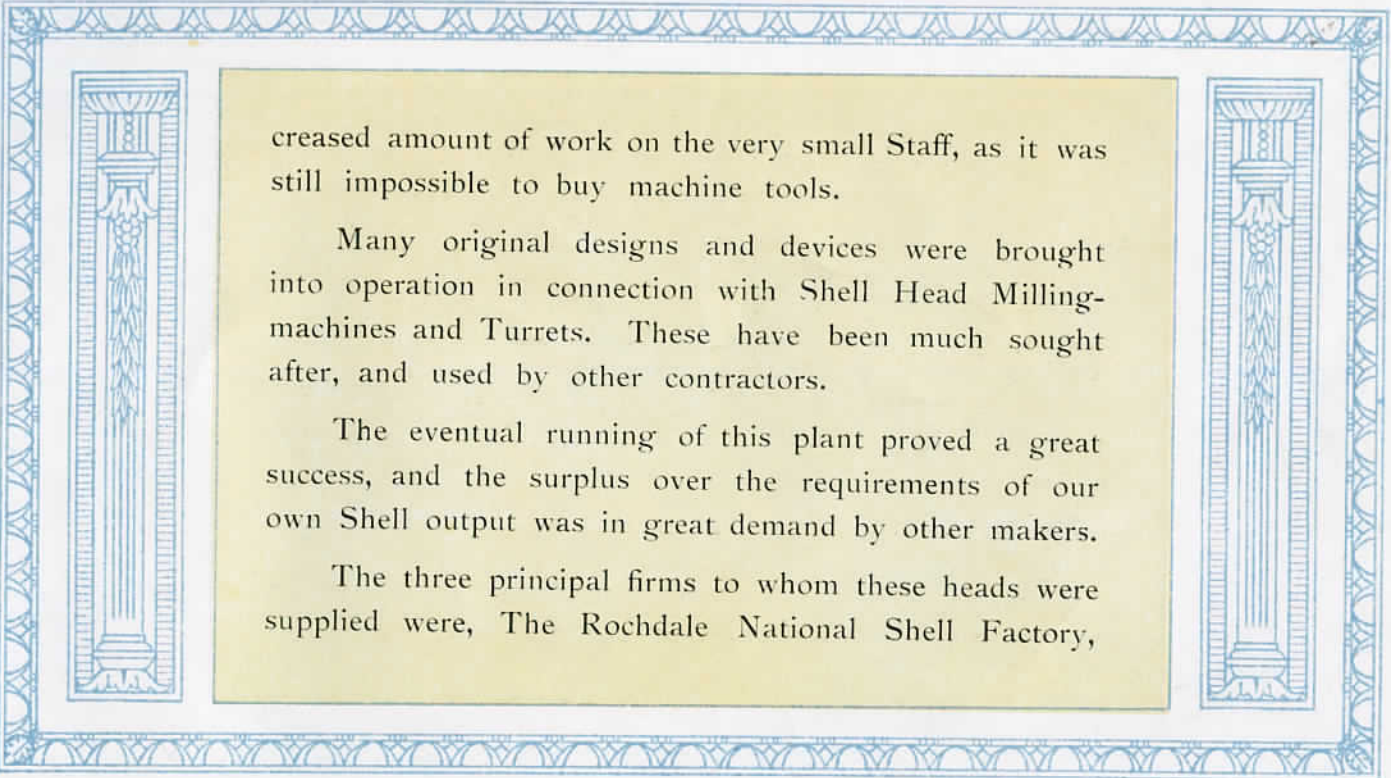
This particular change of design, viz. : Mark IV, demanded much re-arrangement on account of extra length of Shell and larger bore, etc., and a much larger Shell Head.

The Ministry at this period requested as much assistance as possible in the machining of the Head for the 6" H.E. Shell, Mark IV, for outside contractors—on account of the acute shortage. With this in view the Shell Head Department was assembled with a machining capacity of approximately 1800 per week.

The building up of this Department threw an in-



Recess Base, Finish Turn, Counter-Bore, and
Turn-Band Section.



creased amount of work on the very small Staff, as it was still impossible to buy machine tools.

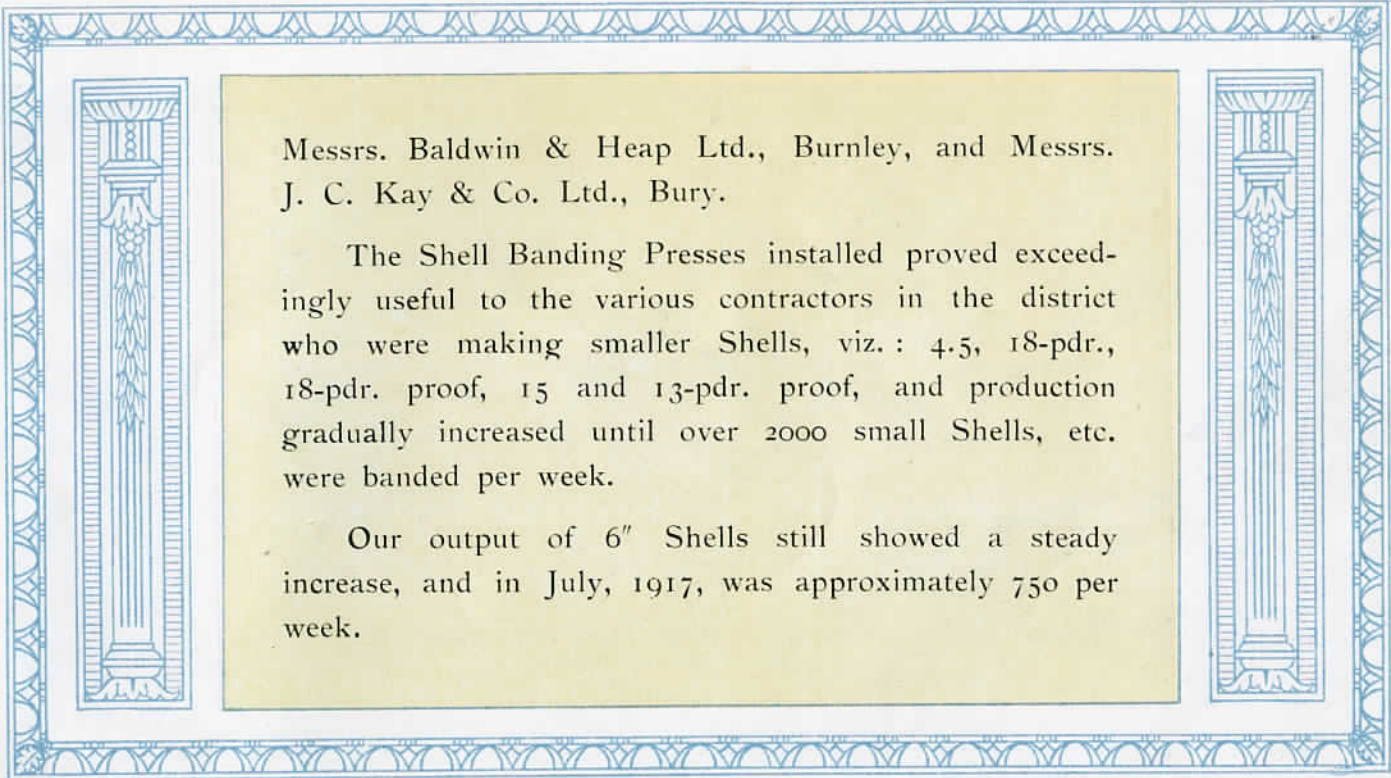
Many original designs and devices were brought into operation in connection with Shell Head Milling-machines and Turrets. These have been much sought after, and used by other contractors.

The eventual running of this plant proved a great success, and the surplus over the requirements of our own Shell output was in great demand by other makers.

The three principal firms to whom these heads were supplied were, The Rochdale National Shell Factory,



Recess Base, Finish-Turn, Counter-Bore, and
Turn Band Section.



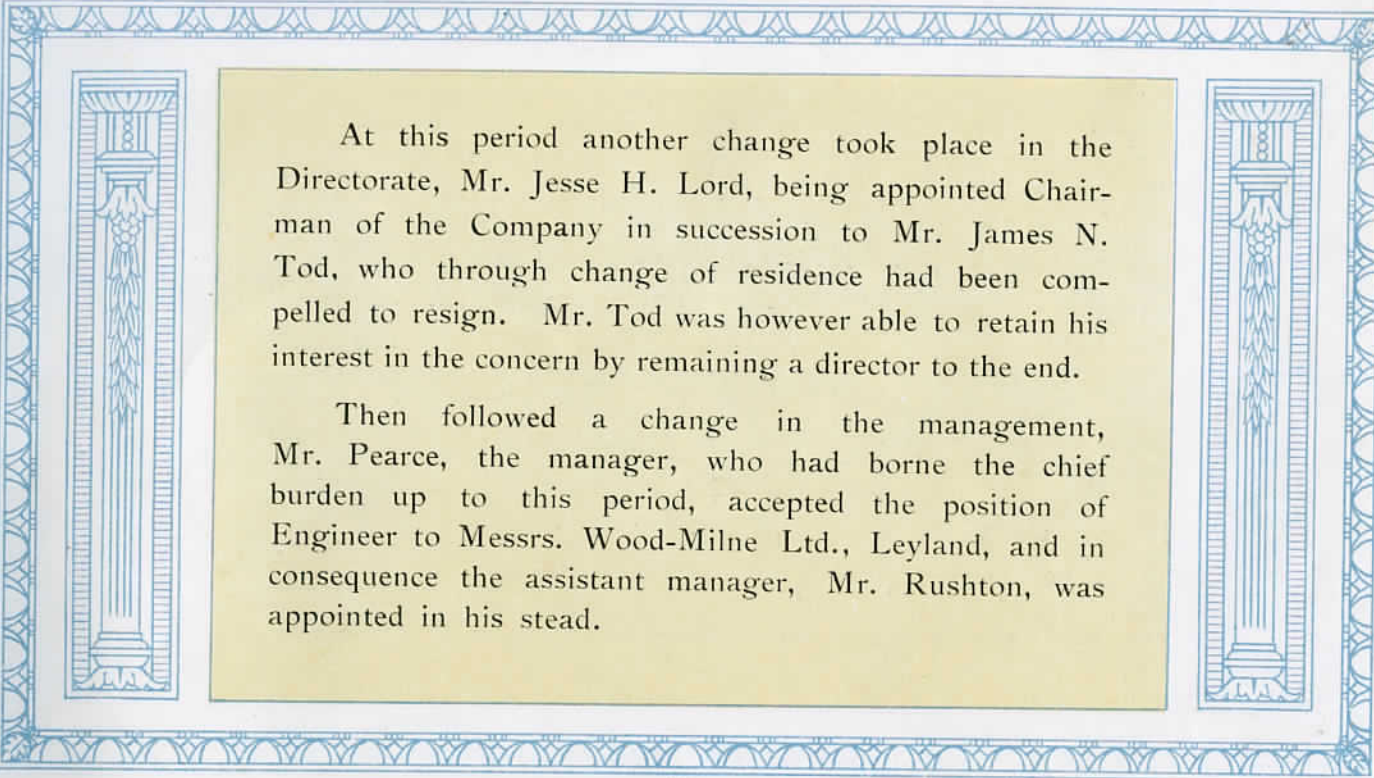
Messrs. Baldwin & Heap Ltd., Burnley, and Messrs.
J. C. Kay & Co. Ltd., Bury.

The Shell Banding Presses installed proved exceedingly useful to the various contractors in the district who were making smaller Shells, viz. : 4.5, 18-pdr., 18-pdr. proof, 15 and 13-pdr. proof, and production gradually increased until over 2000 small Shells, etc. were banded per week.

Our output of 6" Shells still showed a steady increase, and in July, 1917, was approximately 750 per week.



Thread Milling, Outside Blend, and Cut-off Base
Section.

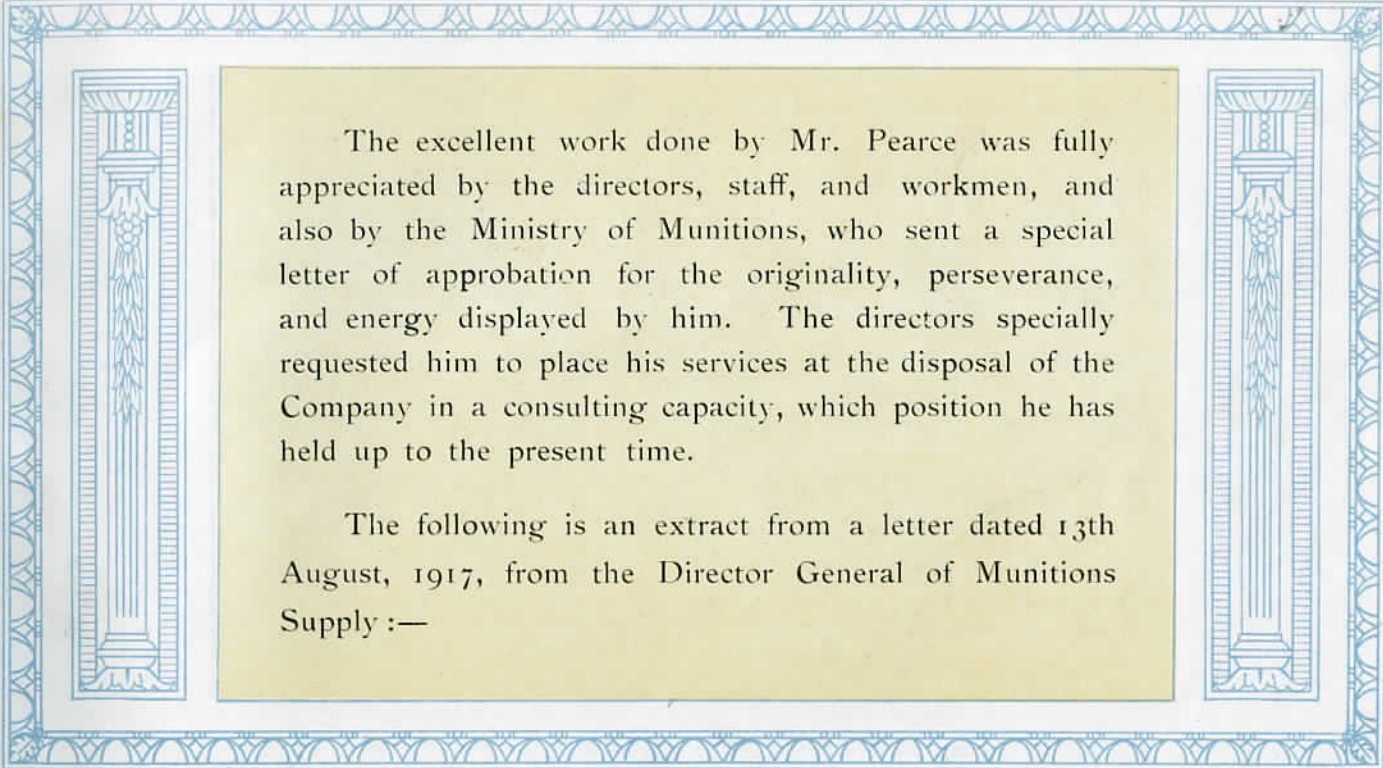


At this period another change took place in the Directorate, Mr. Jesse H. Lord, being appointed Chairman of the Company in succession to Mr. James N. Tod, who through change of residence had been compelled to resign. Mr. Tod was however able to retain his interest in the concern by remaining a director to the end.

Then followed a change in the management, Mr. Pearce, the manager, who had borne the chief burden up to this period, accepted the position of Engineer to Messrs. Wood-Milne Ltd., Leyland, and in consequence the assistant manager, Mr. Rushton, was appointed in his stead.



Thread Milling, Outside Blend, and Cut-off Base
Section.

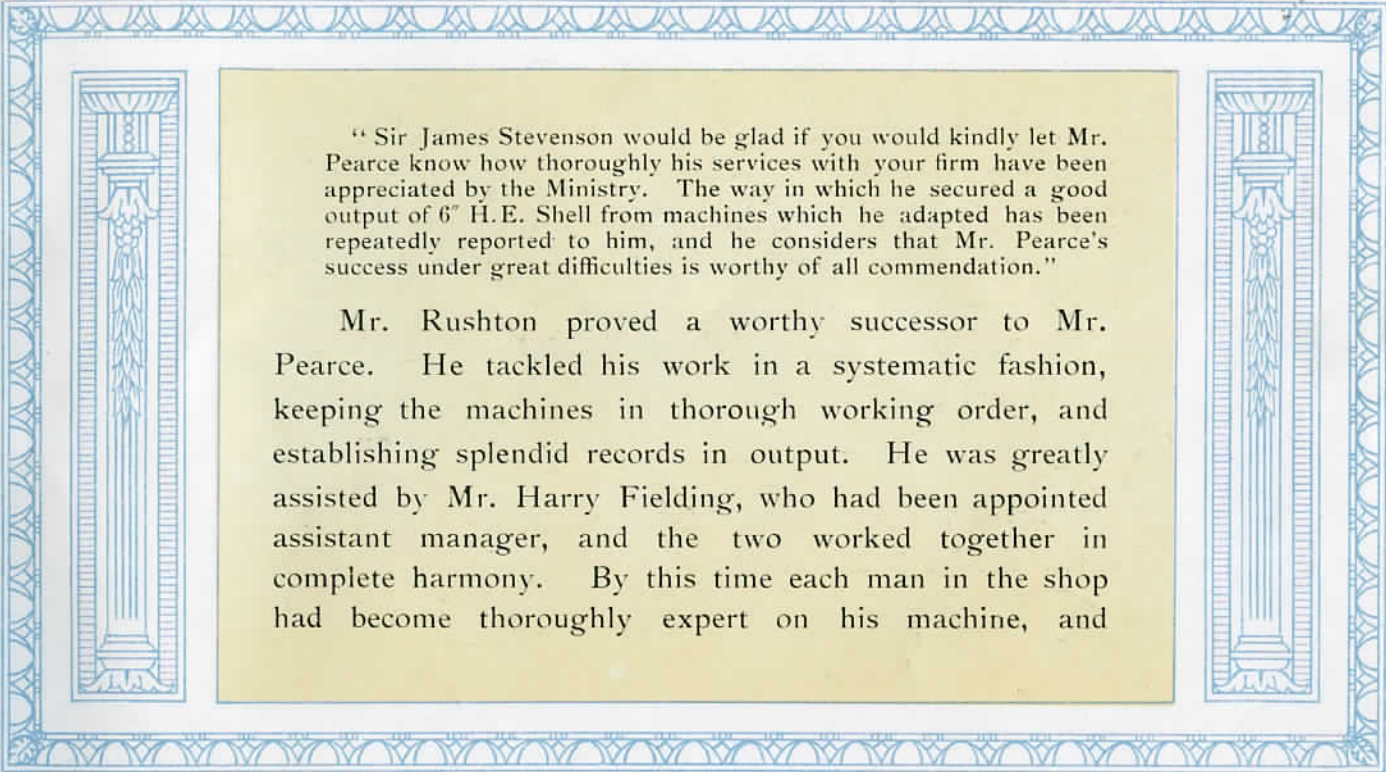


The excellent work done by Mr. Pearce was fully appreciated by the directors, staff, and workmen, and also by the Ministry of Munitions, who sent a special letter of approbation for the originality, perseverance, and energy displayed by him. The directors specially requested him to place his services at the disposal of the Company in a consulting capacity, which position he has held up to the present time.

The following is an extract from a letter dated 13th August, 1917, from the Director General of Munitions Supply :—



Banding and Base Plug, etc. Section.

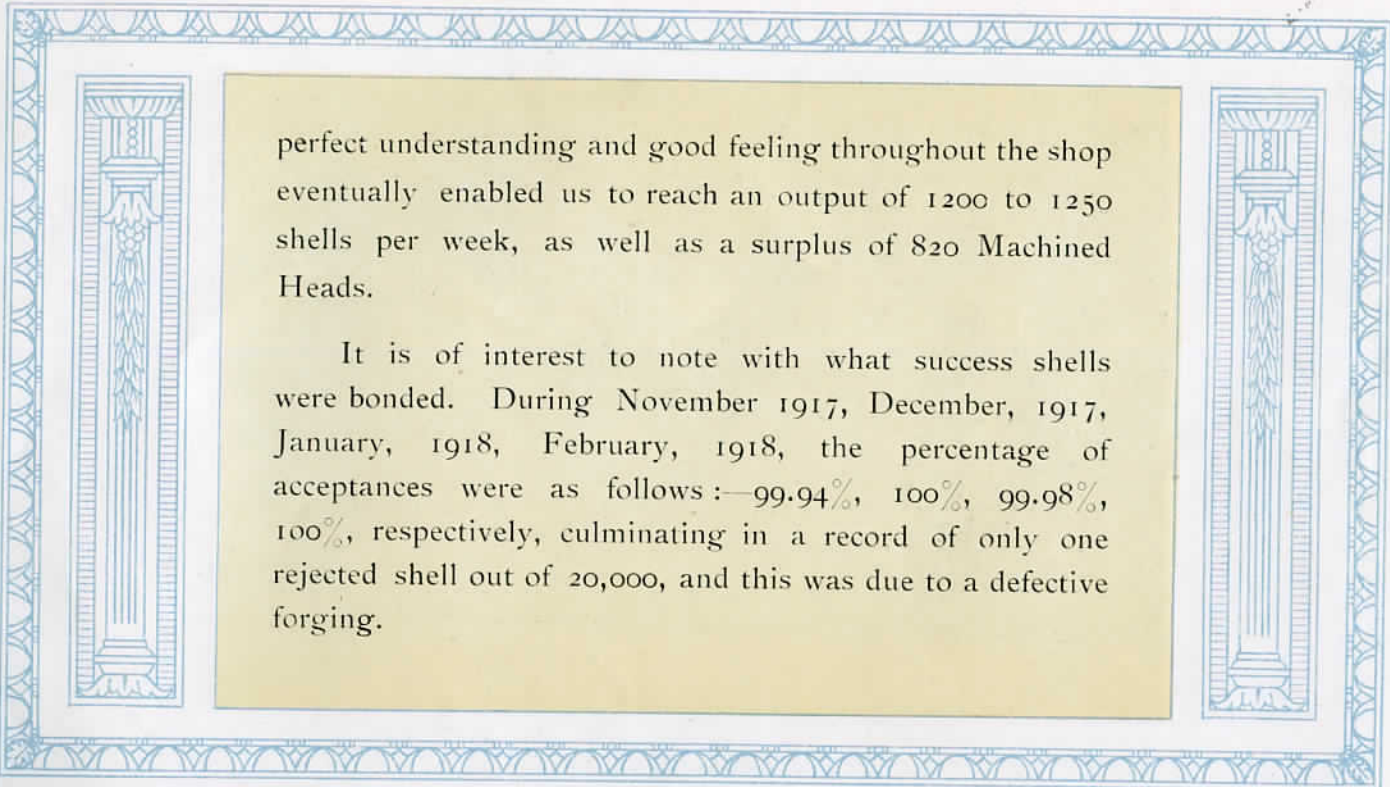


“ Sir James Stevenson would be glad if you would kindly let Mr. Pearce know how thoroughly his services with your firm have been appreciated by the Ministry. The way in which he secured a good output of 6" H.E. Shell from machines which he adapted has been repeatedly reported to him, and he considers that Mr. Pearce's success under great difficulties is worthy of all commendation.”

Mr. Rushton proved a worthy successor to Mr. Pearce. He tackled his work in a systematic fashion, keeping the machines in thorough working order, and establishing splendid records in output. He was greatly assisted by Mr. Harry Fielding, who had been appointed assistant manager, and the two worked together in complete harmony. By this time each man in the shop had become thoroughly expert on his machine, and



Banding and Base Plug, etc. Section.

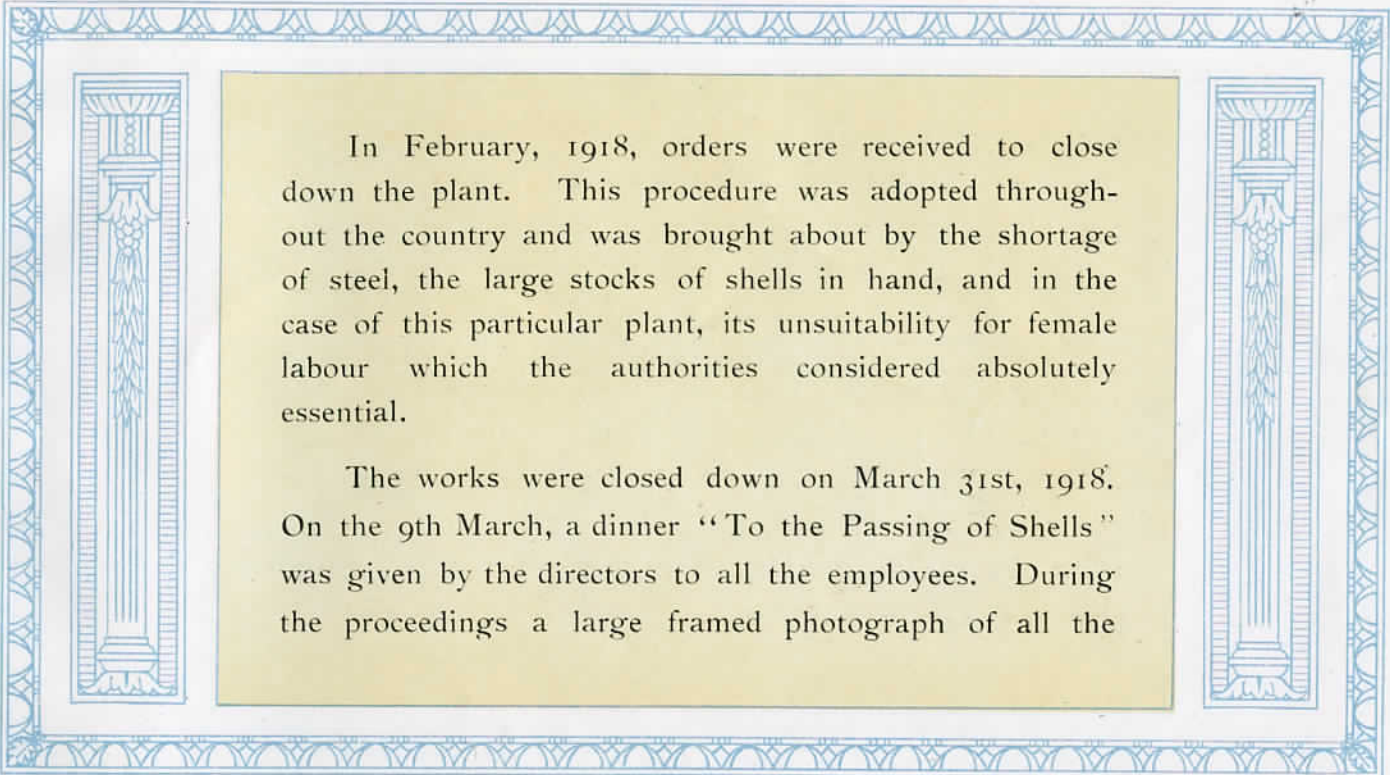


perfect understanding and good feeling throughout the shop eventually enabled us to reach an output of 1200 to 1250 shells per week, as well as a surplus of 820 Machined Heads.

It is of interest to note with what success shells were bonded. During November 1917, December, 1917, January, 1918, February, 1918, the percentage of acceptances were as follows:—99.94%, 100%, 99.98%, 100%, respectively, culminating in a record of only one rejected shell out of 20,000, and this was due to a defective forging.



Shell-Head Section.

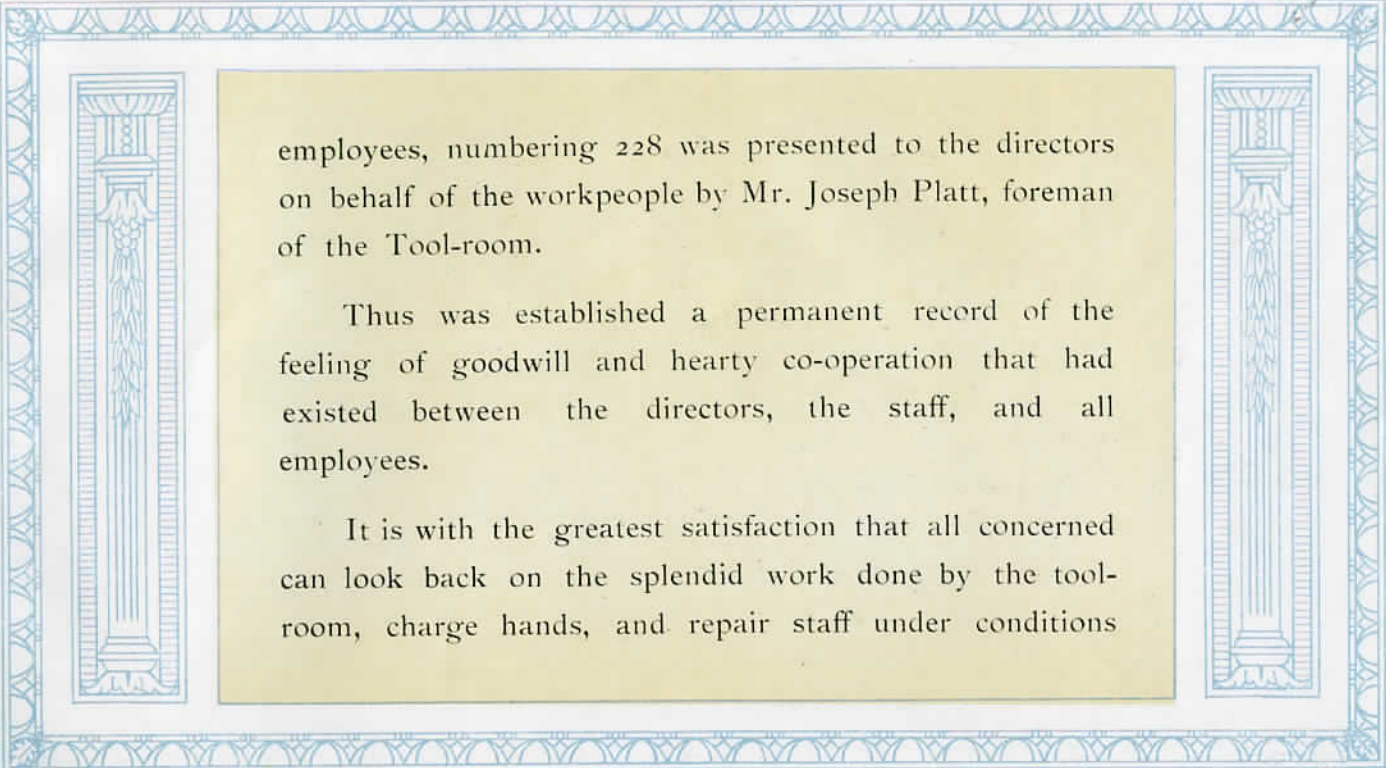


In February, 1918, orders were received to close down the plant. This procedure was adopted throughout the country and was brought about by the shortage of steel, the large stocks of shells in hand, and in the case of this particular plant, its unsuitability for female labour which the authorities considered absolutely essential.

The works were closed down on March 31st, 1918. On the 9th March, a dinner "To the Passing of Shells" was given by the directors to all the employees. During the proceedings a large framed photograph of all the



Shell-Head Section.



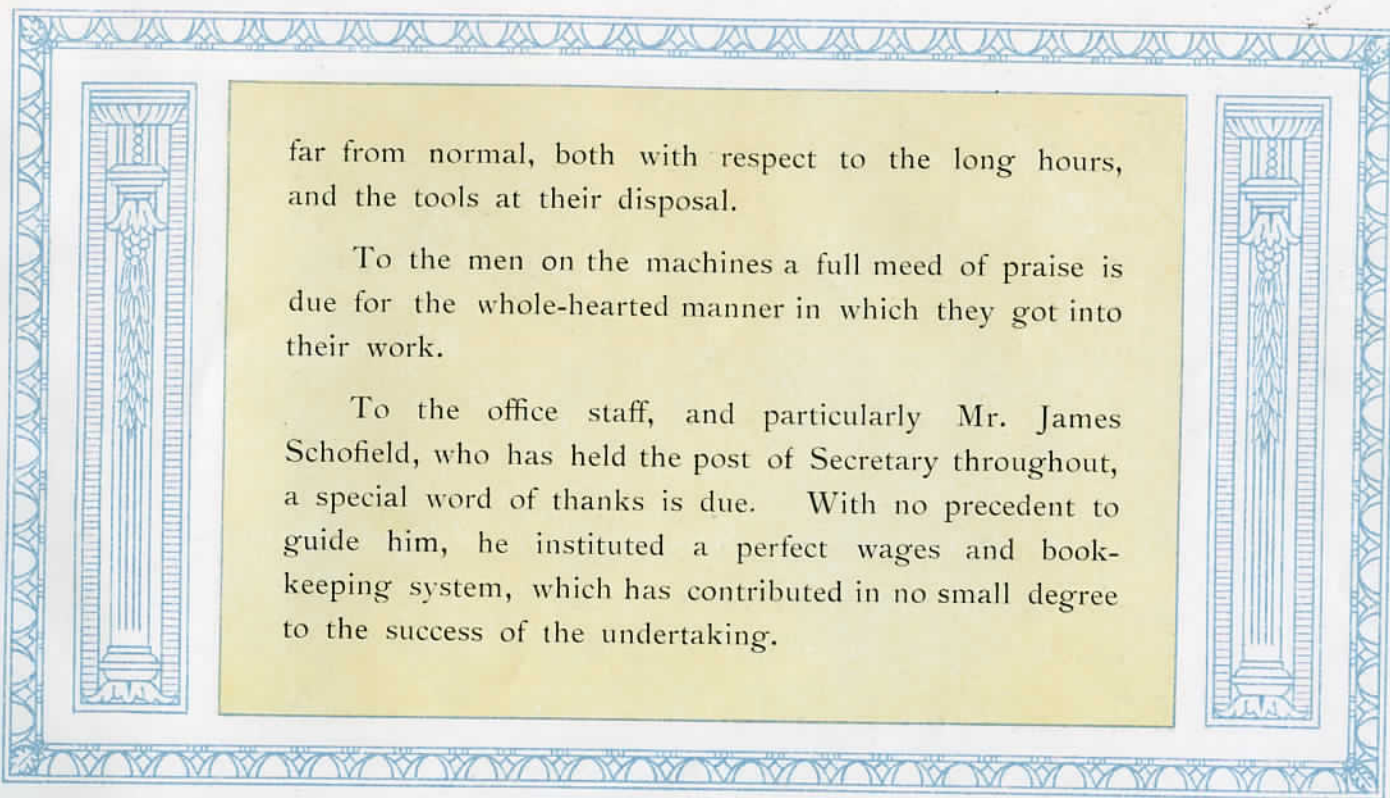
employees, numbering 228 was presented to the directors on behalf of the workpeople by Mr. Joseph Platt, foreman of the Tool-room.

Thus was established a permanent record of the feeling of goodwill and hearty co-operation that had existed between the directors, the staff, and all employees.

It is with the greatest satisfaction that all concerned can look back on the splendid work done by the tool-room, charge hands, and repair staff under conditions



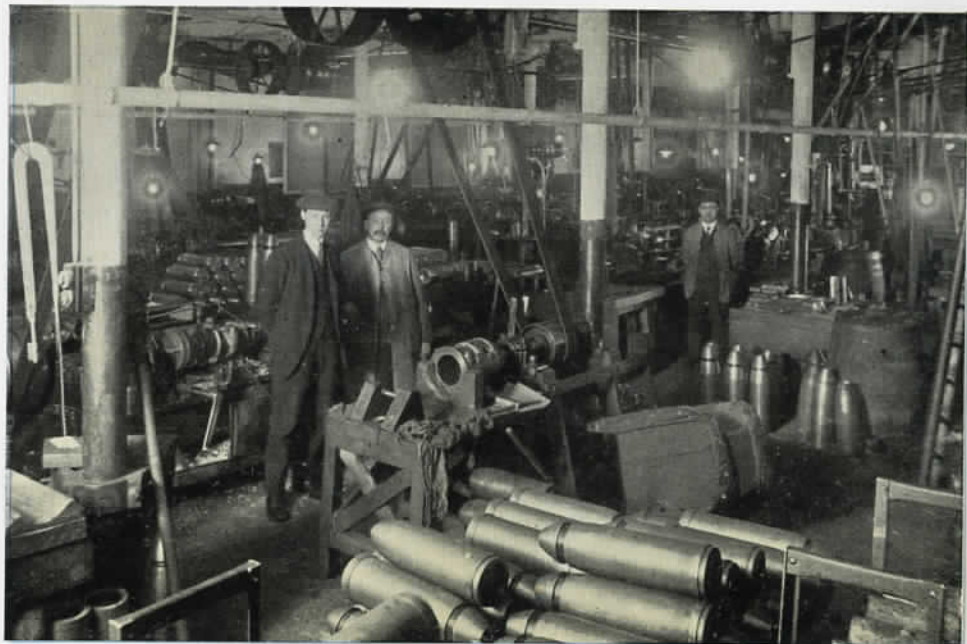
Shop—Shewing Night-shift.



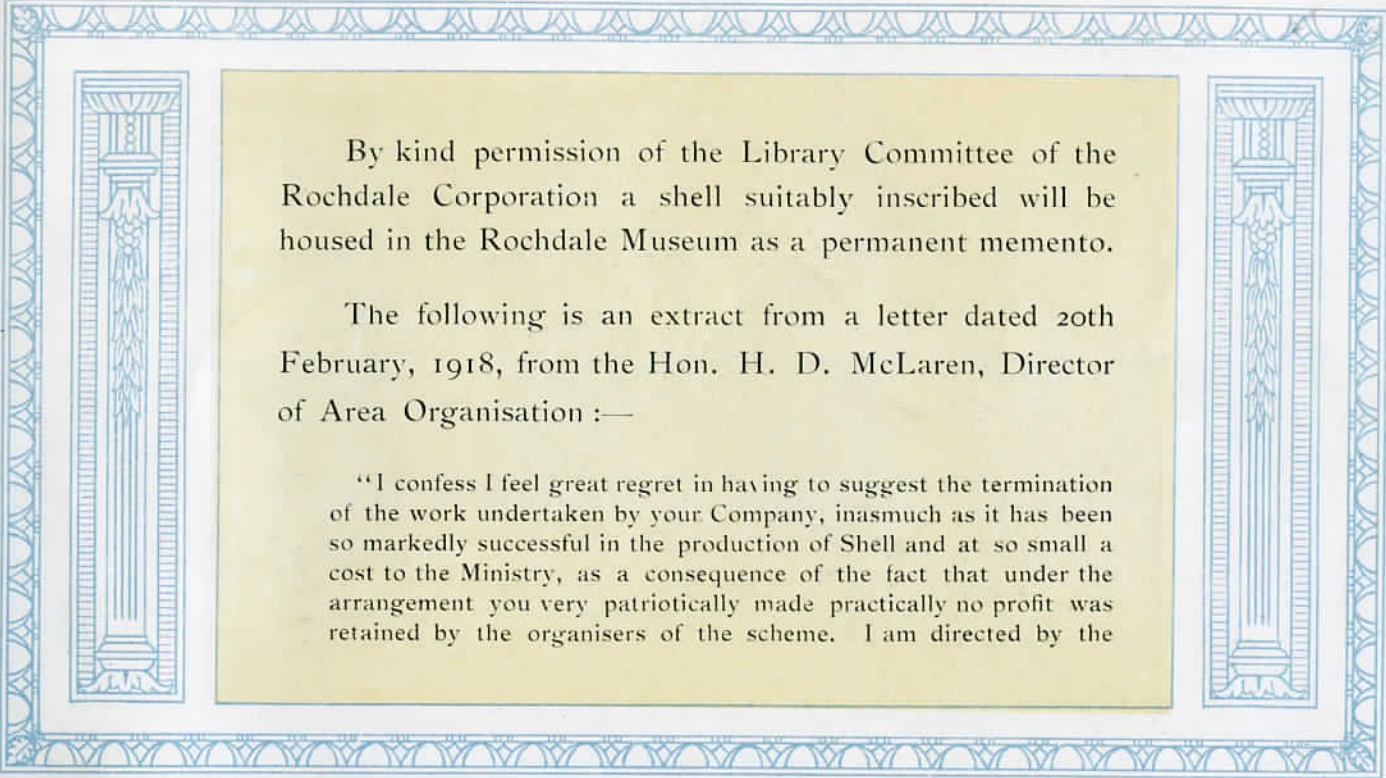
far from normal, both with respect to the long hours, and the tools at their disposal.

To the men on the machines a full meed of praise is due for the whole-hearted manner in which they got into their work.

To the office staff, and particularly Mr. James Schofield, who has held the post of Secretary throughout, a special word of thanks is due. With no precedent to guide him, he instituted a perfect wages and book-keeping system, which has contributed in no small degree to the success of the undertaking.



General View of Shop.



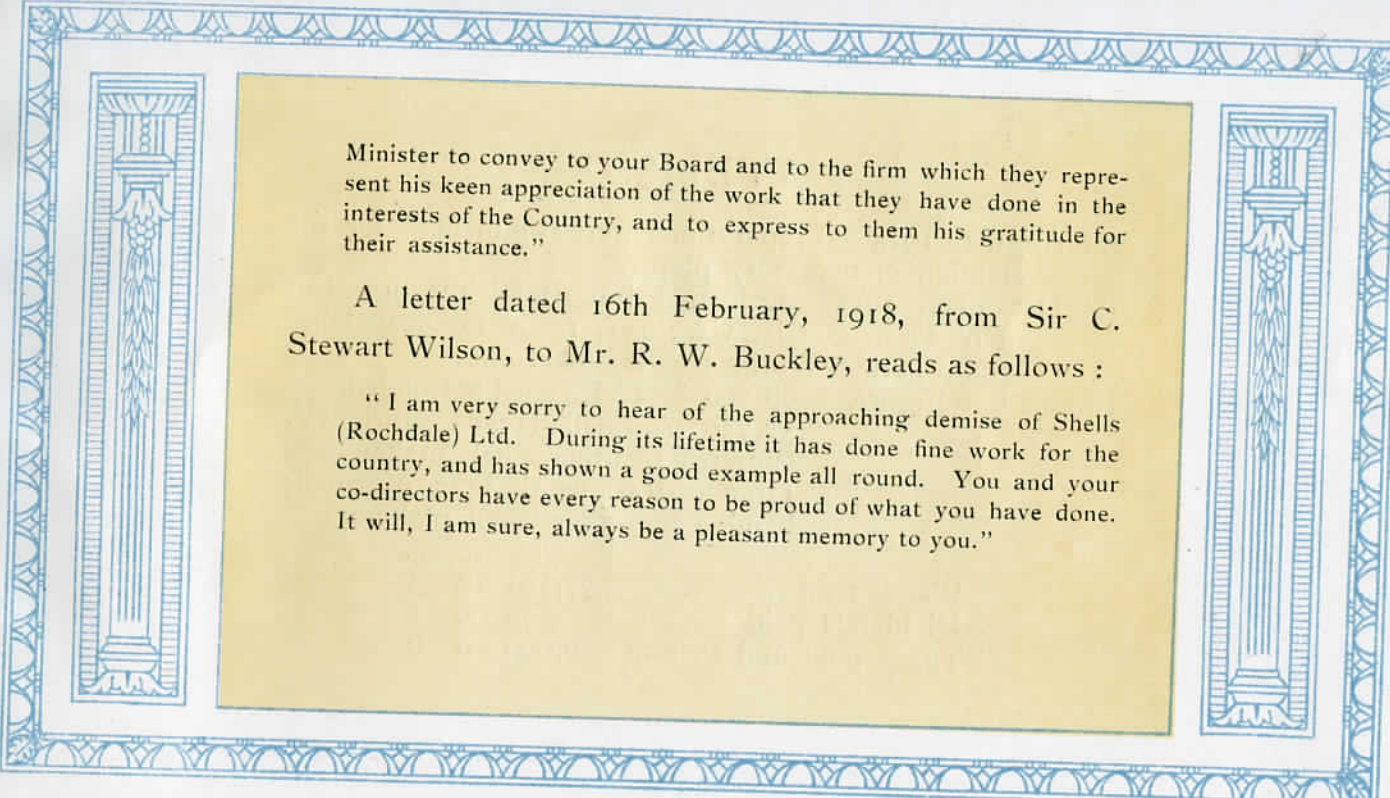
By kind permission of the Library Committee of the Rochdale Corporation a shell suitably inscribed will be housed in the Rochdale Museum as a permanent memento.

The following is an extract from a letter dated 20th February, 1918, from the Hon. H. D. McLaren, Director of Area Organisation :—

“I confess I feel great regret in having to suggest the termination of the work undertaken by your Company, inasmuch as it has been so markedly successful in the production of Shell and at so small a cost to the Ministry, as a consequence of the fact that under the arrangement you very patriotically made practically no profit was retained by the organisers of the scheme. I am directed by the



Entrance to Shop.



Minister to convey to your Board and to the firm which they represent his keen appreciation of the work that they have done in the interests of the Country, and to express to them his gratitude for their assistance."

A letter dated 16th February, 1918, from Sir C. Stewart Wilson, to Mr. R. W. Buckley, reads as follows :

"I am very sorry to hear of the approaching demise of Shells (Rochdale) Ltd. During its lifetime it has done fine work for the country, and has shown a good example all round. You and your co-directors have every reason to be proud of what you have done. It will, I am sure, always be a pleasant memory to you."

ITEMS.

1st August, 1915.—Preparations were commenced for the erection of necessary plant.

1st December, 1915.—Delivered into Bond the first Lot of 6" H.E. Shells, viz. : 121, ready for despatch.

31st March, 1918.—Works closed down.

Production Figures.—78,200 6" H.E. Shells Bonded.

52,750 6" Shell Heads Mark IV.
supplied to other Shell makers.

110,000 Various designs of Shells
banded for other Shell makers.

	£	s.	d.
Wages paid	77,101	19	3
Dividends paid	40	0	1
Taxes paid and to pay	20,000	0	0



ROLL OF HONOUR.

J. ALLEN
J. W. BAISTOW
J. BARKER
GEO. BOWERS
A. BROOKS
J. BROWN
J. BUTTERWORTH
J. CHAMBERS
G. A. CLEGG
J. CRICHTON
J. DAWSON
T. DEARDEN

J. FEENEY
G. GARNER
H. HINCHCLIFFE
H. HOWARTH
F. R. HOLT
JAS. HOLT
JOHN HOLT
F. JACKSON
J. E. JACKSON
R. JACKSON
W. KAY
R. LORD

H. MACKAY
T. MILLS
P. RATCHFORD
T. SIMPSON
H. STUBBS
J. TULLY
A. WHITTAKER
J. H. WHITTAKER
W. WHITTAKER
H. WHITWORTH
J. HUTTON



